Land Use Budget

The Concept Masterplan (Figure 7.2 overleaf) underpins the design aspiration for Millfield End. The land uses proposed by the Concept Masterplan are as follows:

LAND USE	LAND TAKE	NOTES
Residential	Gross: 17.09ha Net: 15.38ha (+0.0375ha for remaining infrastructure)	500 homes, including potential extra care housing. Net area excludes 10% for principal street infrastructure (Primary Street) and incidental open space.
Sports pavilion	1.4ha	Sports pavilion and pitches combine to create a new community green. Sports pitches of sufficient size to accommodate a
Sports pitches		full-sized adult pitch and two tennis courts.
Equipped Play	0.3125ha	Comprising 1x Neighbourhood Equipped Area for Play (1,000sq.m), 4x Local Equipped Areas for Play (1,600sq.m @ 400sq.m each) & 525sq.m of play trails along footways/ cycleways to create "play on the way".
Remaining POS/ SuDS/Green/Blue Infrastructure	20.81ha	Including various open space typologies, existing and proposed vegetation/trees, existing ditches and proposed drainage features. Includes sufficient open space to deliver a minimum of 10% BNG.
Application Site Boundary	39.65ha	

The Concept Masterplan

The Concept Masterplan for Millfield End underpins the design aspirations for the new neighbourhood. It illustrates the location of the new homes and how the required green infrastructure will be accommodated.





Figure 7.2 The Concept Masterplan.



SPORTS PAVILION AND CAR PARK

NEW LANDSCAPING TO REINFORCE EXISTING VEGETATION ALONG BOUNDARIES WITH EXISTING PROPERTIES

ALTERNATIVE LOCATION FOR EXTRA CARE HOUSING

> PREFERRED LOCATION FOR EXTRA CARE HOUSING

PROPOSED ACCESS FROM NEW ROUNDABOUT ON BEDFORD ROAD

Barford

SUBIC SOODATH FP

PEDESTRIAN CROSSING POINT ON BEDFORD ROAD

PROPOSED ACCESS FROM NEW ROUNDABOUT ON BEDFORD ROAD

7.3 The Regulatory Plan

The Regulatory Plan (Figure 7.3) is the main Design Code control tool. It establishes the framework for the design and development of Millfield End by building upon the design principles established by the Concept Masterplan.

Regulatory Plan Fixes

The Regulatory Plan establishes the following design principles to be adhered to at the planning application stage:

- Broad location and extent of land uses, including children's play areas, surface water drainage features and open space typologies.
- Access and street hierarchy, including pedestrian and cycle access.
- Pedestrian and cycle routes.
- Character Areas.

Whilst the Regulatory Plan sets out an overall framework for Millfield End, it is acknowledged that a degree of flexibility will be required in the design of the detailed proposals. It does not prescribe or set the exact location of any given street type or character area. Rather, it sets indicative zones for the location of the street types and character areas to avoid stifling responsible design innovation.



Site Boundary: 39.65ha

Streetscape Character Frontages



Primary Street (indicative route)



Indicative zones for Secondary Streets



Indicative zones for Lanes

Indicative zones for Green Edges

Green Infrastructure



Natural Play Trail

Children's Play Areas





Proposed basins incorporating permanent bodies of water

Proposed wetland scrapes

Allotments

Orchards

Uses

*

Sports pitches

Changing rooms pavilion

Preferred/alternative care home location



M Street Hierarchy Matrix

The Regulatory Plan establishes the broad location for the following street types:

- Primary Street
- Secondary Streets
- Lanes
- Green Edges

The Street Hierarchy Matrix on the page opposite provides design guidance on the street design and the character of each street type.

	GENERAL CHARACTER	STREET DESIGN	BOUNDARY TREATMENT	ARCHITECTURAL/MATERIALS
PRIMARY STREET	Highest order street type. Tree-lined street with near continuous frontages. Refer to CA1 Primary Street (pages 89 – 92) for more detail.	Minimum 6.1m wide carriageway with tree-lined 2.5m wide verges to both sides. 2.0m wide footway to one side and 3.0m wide footway/cycleway to other side. Provides direct access to homes. Target design speed of 20mph.	Refer to CA1 Primary Street (pages 89 – 92).	Limited palette of materials and colours. Refer to CA1 Primary Street (pages 89 – 92) for more detail.
SECONDARY STREETS	Second highest street type - less formal than the Primary Street but not as informal as the Lones. Subtle variation in building setbacks and building lines to create a subservient character compared to the Primary Street. Mix of dwellings types, including terraced, semi- detached and detached.	 5.5m wide carriageway. 2.0m wide footways to either side of carriageway, or on one side of the carriageway where fewer than 25 homes are served. Target design speed of 15mph. 	Restrained mix of boundary treatments permissible Shrub and hedgerow planting should form an important part of the character. Side garden boundaries: 1.8m high brick walls, with brickwork matching adjoining house.	Broader palette of materials and detailing to support a character subservient to the Primary Street. Architectural character to be underpinned by the Great Barford vernacular.
LANES	Shared surface streets where traffic movements are relatively low. Less formal in character than the higher order streets. Mix of dwelling types, including focal buildings to create a varied townscape.	Overall 7.5 - 7.8m shared surface corridor to include services. Target design speed of 15mph.	Variety of boundary treatments permissible. Formal boundary treatments to mark key buildings. Side garden boundaries: 1.8m high brick walls, with brickwork matching adjoining house.	New homes to strongly draw upon the local vernacular, using a range of building materials and detailing reflective of the Great Barford vernacular, albeit homes to be grouped in a coherent manner.
GREEN EDGES	Informal character typically comprising larger dwelling types overlooking both the peripheral and internal areas of open space. New and existing landscaping will form an important part of the overall character. Refer also to corresponding Character Area - CA2 Green End Interface (pages 93 – 96), CA3 Bedford Road (pages 97 – 100), CA4 Countryside Edges (pages 101 – 104) and CA5 Central Greens (pages 105 – 108).	Adoptable - Overall 7.5 - 7.8m shared surface corridor. Private driveways - 4.25 - 5m Target design speed of 15mph where adoptable and 10mph where private drives.	Emphasis on soft landscaping. Side garden boundaries: 1.8m high brick walls, with brickwork matching adjoining house. Refer to CA 2-5 for more detail (pages 93 - 108).	A variety of forms and an architectural vernacular that reflects/interprets the local characteristics. Refer to CA 2-5 for more detail (pages 93 - 108).

7.4 Access and Movement



Vehicular Access

Access is to be provided via two new roundabout junctions with Bedford Road. It is envisaged that the 30mph speed limit and village gateway will be relocated to the south west of these roundabouts.

The south western roundabout is to be located to coincide with the land under the control of Vistry. The north eastern roundabout is to be located to coincide with the land under the control of Axiom Developments.

The design of these roundabouts, together with the approach from Bedford Road to the south west and the section between the two roundabouts, will need be considered in detail as part of the preparation of the Transport Assessments accompanying the planning applications.



Bus Services Provision

To maximise the attractiveness of buses as a potential mode of travel for future residents of Millfield End, the design of the Primary Street is to be sufficient to accommodate buses. Based on Bedford Borough Council guidance, the carriageway of the Primary Street is to be a minimum of 6.1m wide, with bus stops provided at regular intervals.

This will allow buses operating on the existing Route 905, and potentially other local services, to divert into Millfield End, if agreed with bus providers. Bus diversions will be subject to further discussions with Bedford Borough Council's Public Transport Team and bus operators, including Stagecoach.

Should the decision be made not to divert buses via Millfield End, new bus stops will be provided on Bedford Road along the site frontage. From these bus stops, the majority of the new homes would be within 400m walking distance.

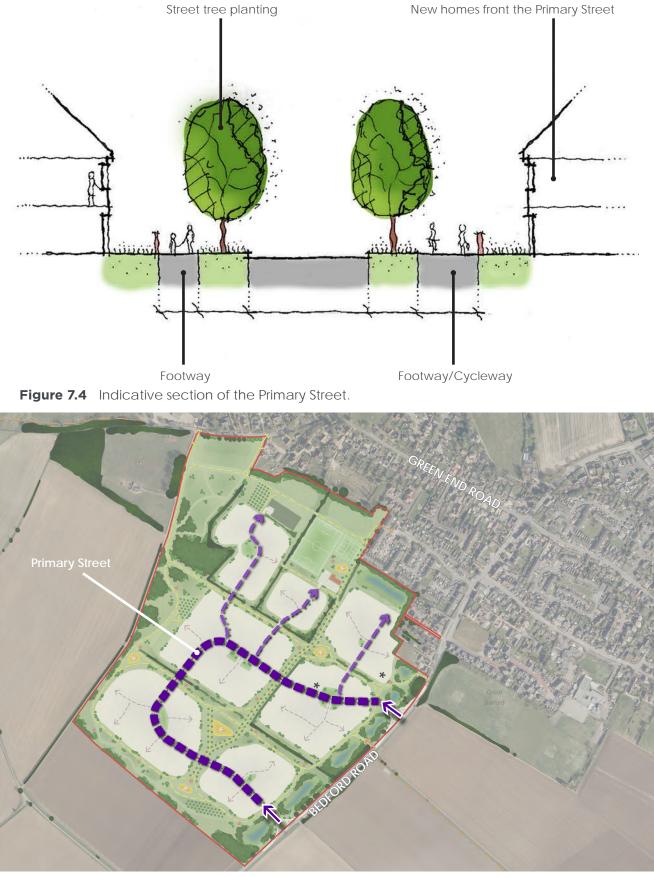


Figure 7.5 Vehicular Access and indicative location of the Primary Street.





Pedestrian and Cycle Access

The following pedestrian and cycle access points could be provided to Millfield End to maximise connectivity with the wider context:

- One pedestrian access point from Chapel Field.
- Two pedestrian and cycle access points from Green End Road.
- One pedestrian and cycle access point from Bedford Road.
- One pedestrian access point from Bedford Road to coincide with public footpath 21 opposite.
- Pedestrian and cycle access associated with vehicular access points from Bedford Road.



Pedestrian and cycle access



Pedestrian access

M Pedestrian and Cycle Routes

The new pedestrian routes running through the open spaces are to be 2.0m wide surfaced paths. In accordance with LTN1/20, the width of the new pedestrian/cycle routes will be determined by the projected peak hour cycle flow rates. This will be determined at the planning application stage.

'Share with Care' signs will be used along all of the pedestrian/cycle routes to indicate them as shared routes. In accordance with LTN1/20, such signs must not be used along the public highway as they are not prescribed traffic signs.

In terms of wider cycle linkages to Bedford, it is noted that Bedford Borough Council's emerging 2040 Local Plan contains an aspiration for a long distance cycle route between Wyboston / Little Barford and Bedford. This includes connections to potential employment allocations at the A421 at Renhold. Whilst the development of Millfield End cannot deliver this route in isolation, the intention is that the permeable nature of the onsite cycle routes could potentially form part of a longer distance route in the future, thus helping to facilitate the aspirations of the Local Plan. General design principles for pedestrian and pedestrians/cycle routes:

- In accordance with LTN1/20, the busier pedestrian/cycle routes may need to be 5.0m wide. To accord with the segregation requirements of LTN1/20, these routes are to incorporate a surface texture that clearly indicates separate surfaces intended for cycle and pedestrian use. The surface of the 5.0m wide routes will be fully level. A raised strip (trapezoidal in cross section), or some other textured material, will be used so that it may be readily detectable by visually impaired people.
- To be surfaced to allow year-round use and be usable by wheelchair users and people with pushchairs.
- Access controls that require the cyclist to dismount are to be avoided. Instead, good sightlines and path marking will be used to so that cyclists clearly understand the need to take care and give way to pedestrians and other traffic at the points the routes intersect the public highway.
- They will be appropriately lit to assist in offering a good degree of personal security. Towards the peripheral areas of the Site, and where the routes pass alongside tree belts and hedgerows, low level lighting on bollards or solar LED studs will be used to balance the needs of personal safety and impact on wildlife.





Figure 7.9 Area of detailed consideration of pedestrian/cycle improvements on Bedford Road.



Figure 7.10 Area for consideration for new crossing points on Bedford Road.

Future Role of Bedford Road

Millfield End presents the opportunity to create a safer and more attractive street environment along Bedford Road that encourages walking and cycling, and reduces vehicular trips within the village for both Millfield End and existing residents. Of particular significance are trips to the north and east to local facilities such as the existing school, church, shops, and pubs.

Discussions have been held with Bedford Borough Council's highway officers regarding the potential removal of right turn lanes and hatching within the centre of the carriageway on Bedford Road to provide additional space within the highway which could be used to improve pedestrian facilities and potentially provide facilities for cyclists. Bedford Borough Council has indicated initial support for this approach.

The existing parking restrictions on Bedford Road in the vicinity of the existing retail units will also be reviewed in line with the aspiration to return it to its original function as a local road.

The extent of Bedford Road to be considered in detail is shown in Figure 7.9.

There is an existing signal-controlled pedestrian crossing on Bedford Road approximately 60m south west of the Bedford Road / Green End Road / Roxton Road / High Street crossroads, and a pedestrian refuge island approximately 40m south west of Chapel Field. The provision of crossing points on Bedford Road between Millfield End and Silver Street will be reviewed with amended and/or additional crossings provided. Both controlled and uncontrolled crossing points will be considered. The exact positions are to be determined, but the purpose is to improve the level of connectivity between Millfield End and existing local facilities, including the school and shops.

The likely locations of new crossing points will be in the area shown in the Figure 7.10. It is likely that as a minimum of one controlled crossing will be provided, potentially with additional uncontrolled crossing points.

Based upon the above, the Transport Assessment/s accompanying subsequent planning applications will provide further detail of how Bedford Road will be improved to create a safer and more attractive street environment.









M 7.5 Residential Parameters

Housing Mix and Tenure

Millfield End will deliver 500 homes, which will include the provision of extra care housing in line with the requirements of Policy H1 of the Neighbourhood Plan. Also in accordance with Policy H1, a mix of housing types and tenures that suit the needs of the local community are to be provided, a proportion of which are to include 1 bedroom homes for both affordable and market homes. In accordance with Policy 58S of the Bedford Borough Local Plan, 30% of the homes are to be provided as affordable housing. It is likely that many of the 1 bedroom homes will be provided as part of the extra care housing. Affordable homes are to be distributed evenly across Millfield End and limited to groups of no more than 15. The development will be tenure blind.

Millfield End is to include plots for self-build and custom housing. The number of plots is be agreed at the planning application stage.

Locational Considerations

The Millfield End Concept Masterplan recognises that when creating a new place, it's not about creating it for buildings, it's about creating it for people. Therefore, creating a sense of community has been a priority through the application of a landscape-led approach. The landscape-led approach has resulted in a masterplan whereby the creation of a connected network of green infrastructure based upon existing vegetation and landscape features forms the framework within which the new homes will sit.

Coupled with the need to maintain a swathe of open space alongside the Green End Conservation Area, create well-landscaped edges alongside the countryside and the Bedford Road frontage, and provide a new community green as a key interface between the existing and new homes, this approach means that all the new homes will be located within easy reach of open spaces where residents and visitors alike can meet, where children can play and where wildlife can flourish. Furthermore, health and wellbeing benefits will also be maximised and Millfield End will become a new destination in its own right.

Sustainable Building Design

In accordance with Policy D2 of the Great Barford Neighbourhood Plan, the design of Millfield End's new homes will include sustainable design and construction features. At the detailed design stage, Millfield End's new homes are to comply with and where possible exceed the local and national standards for sustainable development. This includes mitigating and adapting to climate change, increasing local resource efficiency, minimising carbon emissions, and promoting decentralised and renewable or low carbon energy.

The detailed layout of the development will encourage the sustainable and safe management of waste in each individual household, whilst minimising visual and pollution impacts. The use of recycled materials in the construction of the development and consideration of the Circular Economy will be supported.



Extra Care Housing

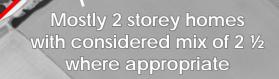
In accordance with Policy H1 of the Neighbourhood Plan, a proportion of the new homes are to be provided as extra-care accommodation. The extra care housing is to be designed for people who require help and support with daily living, while retaining the privacy of their own property. They can either be provided as apartments or bungalows, or a mix of both. The apartments should be accommodated in a carefully designed building/s, which draws upon the local vernacular in an appropriate manner.

The exact land take of the extra care housing will be dependent on the exact mix of accommodation to be provided.

The Concept Masterplan proposes a preferred location for the extra care housing adjacent to the Primary Street, where a bus stop can be located so that residents benefit from connections to nearby towns and villages provided by the bus services. This location also ensures that extra care housing is located at the heart of Millfield End where residents will benefit from easy access to two new footways/ cycleways and the nearby community green. The Concept Masterplan also indicates an alternative location close to Bedford Road. This alternative location would be suitable for the extra care housing should the decision be made not to divert buses via Millfield End (see also Section 7.4), with new bus stops instead be provided on Bedford Road along the site frontage.

The preferred location for the extra care housing would see it located within the CA1 Primary Street character area, whilst the alternative location would see it located within the CA3 Bedford Road character area. Therefore, the design of the extra care housing is to complement that of the character area it is located within, recognising that a degree of flexibility is required due to the specialised nature and requirements of extra care housing, particularly with regards to building footprints. The design principles for the extra care housing are:

- Scale and massing should positively contribute to coding requirements of the corresponding character area.
- Boundaries to accord with requirements of the corresponding character area.
- Siting should not adversely affect neighbouring homes.
- Car parking area should incorporate tree planting to break up spaces.
- Should act as a reference point within the neighbourhood, positively contributing to a strong sense of place and aiding wayfinding.
- Outdoor spaces should be designed to maximise sensory and seasonal interest.
- If located in CA1 Primary Street, bus stops are to be located close to the main entrance.



BEDFORDR

GREEN END ROAD

Maximum 2 storey homes

-

Building Heights

The Building Heights Plan sets out the following:

- Building heights are predominantly 2 and 2¹/₂ storeys.
- Maximum of 2 storey homes closest to the existing settlement edge in order to respect the setting of the Green End Conservation Area and the amenity of nearby existing homes.
- Mostly 2 storey homes are to be used along the north western, south western and south eastern boundaries to create an appropriate transition with the countryside beyond. However, the considered use of 2½ storey homes will allow for variation in height, adding interest and articulation to the roofscape.

The use of an increase in storey heights could be used where it would be appropriate to aid legibility and provide articulation within the street scene, or to define the following key elements of Millfield End:

- Landmark buildings forming the Bedford Road gateways.
- Key buildings along the Primary Street to provide a varying roofscape.
- Key buildings terminating vistas and views along the streets and open space corridors.

7.6 Green Infrastructure

In accordance with Policy AD28 of the Bedford Borough Council Allocations and Designations Local Plan 2013, Millfield End is to provide the open space typologies as shown below.

OPEN SPACE TYPOLOGY	STANDARD (HA/1,000 POPULATION)	MIN. REQUIREMENTS FOR POS PROVISION FOR 500 HOMES/1,250 POPULATION (HA) ¹
Parks & Gardens	0.5ha per 1,000 people	0.625
Accessible Natural Green Space	0.5ha per 1,000 people	0.625
Equipped/Natural Play Areas	0.25ha per 1,000 people	0.3125
Informal & Amenity Green Space	0.5ha per 1,000 people	0.625
Outdoor Sports Space		
Synthetic Turf Pitches	0.052ha per 1,000 people	0.065
Grass Pitches	1.016ha per 1,000 people	1.27
Bowls/tennis	0.052ha per ,1000 people	0.065
• Total	1.12ha per 1,000 people	1.4
Allotments	0.35ha per 1,000 people	0.4375
Total outdoor open space	3.22ha per 1,000 people	4.025

¹ Population calculated at 2.5 persons per household.



OPEN SPACE TYPOLOGY	MIN. REQUIREMENTS (HA)	TOTAL GI PROVIDED (HA)
Parks & Gardens	0.625	2.92
Accessible Natural Green Space	0.625	11.41
Equipped/Natural Play Areas	0.3125	0.3125
Informal & Amenity Green Space	0.625	5.74
Outdoor Sports Space	1.4	1.4
Allotments (and community orchard)	0.4375	0.74
Total outdoor open space	4.025	22.52

The Concept Masterplan accommodates over 22 hectares of green infrastructure across all open space typologies, which meets and exceeds the overall quantity requirements of Policy AD28, as shown on the tables opposite and above, and Figure 7.14 below.



Parks & Gardens

Strategy

This open space typology comprises areas that provide accessible and high quality opportunities for informal recreation. They will typically accommodate Millfield End's children's play areas, with the spaces providing complimentary areas for children to play. These spaces will be landscaped to have an informal parkland character to complement the wider landscaped characteristics of Millfield End's peripheral open spaces and green corridors.

The two southernmost areas of this typology correspond with CA5: Central Greens (pages 107-110).



- Informal parkland character comprising a mix of amenity grass and swathes of species rich meadow.
- Mix of mown grass and hoggin self binding gravel (or similar) paths will complement the informal parkland character.
- Existing trees and hedgerows to be retained and supplemented with new landscaping to create the informal parkland character.
- In key locations, new landscaping will allow for views to countryside beyond.
- Signposts are to be used assist with waymarking.
- Seating areas located along the pedestrian/cycle routes are to provide places to sit, rest and chat.
- Will include a series of pocket parks located along the green corridors to create defined outdoor spaces that will be a celebration of colour, providing focal points for people to meet.



Figure 7.15 Parks and Gardens.

Accessible Natural Green Space

Strategy

In accordance with Bedford Borough Council's Open Space SPD, accessible natural green space covers the areas of Millfield End to be managed primarily for wildlife value, but which are also open to public use and enjoyment. These areas include the new areas of woodland, meadow and SuDS features.

- Areas of woodland to be located on more elevated parts of Millfield End to help create a treed backdrop to the new neighbourhood.
- In other areas spaces to comprise swathes of species rich meadow.
- Mix of mown grass and hoggin self binding gravel (or similar) paths will complement the informal character.
- Existing trees and hedgerows to be retained and supplemented with new landscaping.
- Timber benches and picnic tables will encourage passive enjoyment of the spaces.
- Interpretation boards will describe the ecology and habitats present.



Figure 7.16 Accessible Natural Green Space.







Equipped/Natural Play Areas

Strategy

A number of children's play areas are to be located throughout Millfield End. Within the green infrastructure, a total of 4no. Local Equipped Areas for Play (LEAP) and 1no. Neighbourhood Equipped Area for Play (NEAP) will be provided. The LEAPs will have an activity zone of 400sq.m each and the NEAP an activity zone of 1,000sq.m. This will equate to a total of 2,600sq.m of equipped play areas. The play areas will provide facilities for local catchments throughout Millfield End, with the NEAP providing a large, focal area associated with the open space it sits within.

The balance of 525sq.m of required equipped play space is to be provided as informal, naturalistic features located along the new footway and cycleway network to create a series of incidental 'play on the way' features providing interest and encouraging use of the pedestrian and cycle network. Some of these play on the way features will be located on the routes to the existing areas of Great Barford to help make car-free trips more fun for children making them want to walk or cycle to the village school.

- Play equipment is to consist of a mix of styles and activities, but will provide interesting and stimulating environments for children.
- Some traditional equipment is to be provided in certain areas with a more formal character, but will be constructed of timber to fit with the overall character of Millfield End.
- Other areas will contain more informal features such as logs for jumping or boulders for scrambling, to be in keeping with the more informal landscape character of some of the public open spaces.
- All play areas will be designed to offer disabled children the same play opportunities as other children.
- Play areas to include appropriate fencing and gates to create a safe play environment, keep dogs from entering the play areas, and to give children a sense that it is their area and separate from the surroundings.





Figure 7.17 Children's Play Provision.

Informal & Amenity Green Space

Strategy

As per the requirements of the Bedford Borough Council Open Space SPD, the informal and amenity green spaces are to be open to free and spontaneous use by the public, but neither laid out or managed for a specific formal function such as a park, playing field or playground, nor managed as natural or semi natural habitat. Specifically, these open spaces are to be designed to allow informal play, passive recreation, and other outdoor requirements.





Figure 7.18 Informal and Amenity Green Space.

- Informally landscaped character comprising a mix of amenity grass and swathes of species rich meadow.
- Mix of mown grass and hoggin self binding gravel (or similar) paths will complement the informal parkland character.
- Existing trees and hedgerows to be retained and supplemented with new landscaping to create the informal parkland character.
- In key locations, new landscaping will allow for views to countryside beyond.
- Signposts will be used to assist with waymarking .
- Seating areas located along the pedestrian/cycle routes are to provide places to sit, rest and chat.



Outdoor Sports Space (Community Green) & Sports Pavilion

Strategy

The sports provision is to be provided in the form of the community green located in the north eastern part of Millfield End, immediately to the west of the existing village edge at Chapel Field. The new pedestrian access point from Chapel Field will ensure the community green is accessible for existing residents of Great Barford, whilst the new network of pedestrian and cycle routes within Millfield End will maximise the community green's accessibility for the new residents.

The community green has been conceived to supplement existing facilities in the village, such as the existing Village Hall and Playing Field, and not to replace them.

It is envisaged that the community green will comprise of a senior football pitch and two tennis courts, together with a children's play area in the form of a LEAP. However, the size of the community green is such that there is flexibility for a range of configurations. The tennis courts are to be a MUGA surface to incorporate a netball use.

The community green will be served by a sports pavilion and a dedicated area for car and cycle parking. The sports pavilion is to be sensitively designed to complement the wider Green End Interface character area (CA2). The car park is to include at least one electric car charging point capable of charging two cars at a time. In accordance with Sports England's Clubhouse Design Guidance Note (2016 Update), the pavilion is to be located at the southern perimeter of the community green so that it can be overlooked by the adjacent homes.



Changing rooms pavilion

The detailed design of the pavilion is to accord with Sports England's Design Guidance Note, and should typically comprise the following:

- Entrance lobby
- Changing rooms
- Showers
- Toilets (including wheelchair accessible toilets) for the public, and separate toilets for changing areas
- Separate changing area for officials
- Club room
- Kitchen
- Electrical meter/boiler room
- Cleaner's store
- Sports equipment, grounds maintenance and waste storage



Figure 7.19 The Community Green.

Allotments & Community Orchard

Strategy

The allotments and a community orchard are to be located adjacent to the north west of the community green, so that together they create a vibrant hub of community activity. Additionally, a further two community orchards will be located along the north western and south western edges of the development.

The allotments are to be demarcated with hedgerows, following the landscape principles for hedgerows set out for Character Area 2: Green End Interface (pages 95-98). The allotments will also include a dedicated parking area and a water supply. The community orchards here will lie adjacent to the north western side of the allotments to create an attractive interface with the adjacent areas of wildflower meadow.

The other two areas of community orchard will sit within the peripheral areas of open space, adjacent to new recreational routes. They will comprise species appropriate to the local area and will provide further opportunities for existing and new residents alike to harvest local produce.

Key Characteristics

Allotments:

- Paths between plots.
- Water supply (potential to use recycled water from surrounding roofs and hard surfaces).
- Parking: provision for a small number of spaces close to the entrance to allotments.
- Lockable, gated access.
- Notice board for community use.

Community Orchards:

- Large standard fruiting trees on rootstock suitable for their species.
- Should be planted in rows no closer than 6m apart.
- Grassland areas within the orchard should be maintained to ensure establishment and sustained growth of the fruit trees whilst providing longer, meadow grass areas for ecological benefits.



Figure 7.20 Allotments and Community Orchards.



M Biodiversity Net Gain

What is biodiversity net gain?

Biodiversity Net Gain (BNG) is an approach to development that leaves biodiversity and habitats in a measurably better state than before the development took place. Under the Environment Act 2021 all new developments will need to deliver a minimum 10% Biodiversity Net Gain across the development.

Strategy

Aspect Ecology are the acting ecological consultants providing advice with regard to the proposed Axiom and Vistry development at Millfield End. Input to the scheme design is centred on sound ecological principles and a conservative approach to achieving in excess of a 10% biodiversity net gain. Given that the site currently comprises a number of intensively managed arable fields and marginal features of relatively poor habitat condition and limited ecological value, a notable opportunity exists to enhance the site for biodiversity. The proposed scheme will deliver a rich landscape of biodiverse habitats, which will contribute to the objectives of the Local Biodiversity Action Plan and integrate green space within the built environment to maximise benefits to wildlife, and deliver a gain in biodiversity in excess of 10%.

Habitats

A proposed 'Ecology Area' (the bulk of public open-space) will be created around the core development areas to maximise ecological benefits. This will be achieved by creating a mosaic of diverse habitats which are sensitively managed for wildlife, including an extensive block of mixed deciduous woodland, traditional orchard (a Priority Habitat), expanses of wildflower grassland set amongst pockets of native speciesrich scrub, tree, and hedgerow planting, as well as ponds. The vast majority of these habitats are currently absent from the site, and their inclusion within the proposals will not only provide opportunities for wildlife, but will function as stepping stones across the wider landscape and link currently fragmented pond and woodland networks.

In addition, opportunities are maximised within the proposed 'Residential Area' in the form of discrete areas of wildflower grassland and flowering amenity lawn, as well as within the core 'Development Area' through the provision abundant street trees, all contributing to the botanical and structural diversity of even the developed areas of the site.

Where practicable, the scheme retains and enhances the sites existing hedgerows, which will be bolstered with additional native species to increase species diversity and improve connectivity. The linking of existing hedgerows with new native species-rich hedgerows throughout the scheme will generate several green corridors to permeate the site's open-space and developed areas, creating green links through the proposed development.



Fauna

The diversity and quality of the proposed habitats will far exceed the current position at the Site, creating a variety of opportunities for wildlife in the form of access to resources, including foraging, nesting and sheltering opportunities. Invertebrates will primarily benefit from the cessation of agricultural intensive management (including the application of pesticides and herbicides, and the frequency of habitat manipulation), in favour of a sensitive management regime to maximise ecological benefits (e.g. by maximizing shrub/tree flowering, fruiting and budding between cuts as forage to birds). Invertebrates will greatly benefit from the diversity and successional availability of seasonal floral resources (particularly of nectar sources to pollinators). The diversity of flower, seed and fruit bearing species and the invertebrates which rely on them will also form a food source to birds, small mammals, reptiles and amphibians.

As the structural interest of the habitats within the Site develops with time, so too will the nesting and sheltering potential of these habitats to support birds, small mammals, amphibians, reptiles and invertebrates. As conduits of colonisation, the proposed green corridors (hedgerows, scrub and tree planting) and stepping stones (woodland and wetland habitat) will facilitate the movement and settlement of wildlife within the site, and to/from habitats within the local landscape. Some species likely to benefit from this includes Song Thrush, Common Linnet, Common Bullfinch and Great Crested Newts, all of which are identified within the Local Biodiversity Action Plan for Bedfordshire.

Summary

Overall, the proposed scheme has been designed around ecological principles and will deliver a network of highly valuable habitats which will benefit a variety of faunal species and species groups. The scale and quality of the proposed habitat provision is such that a 10% gain in biodiversity will be delivered and will be a notable contribution to local fauna and flora.



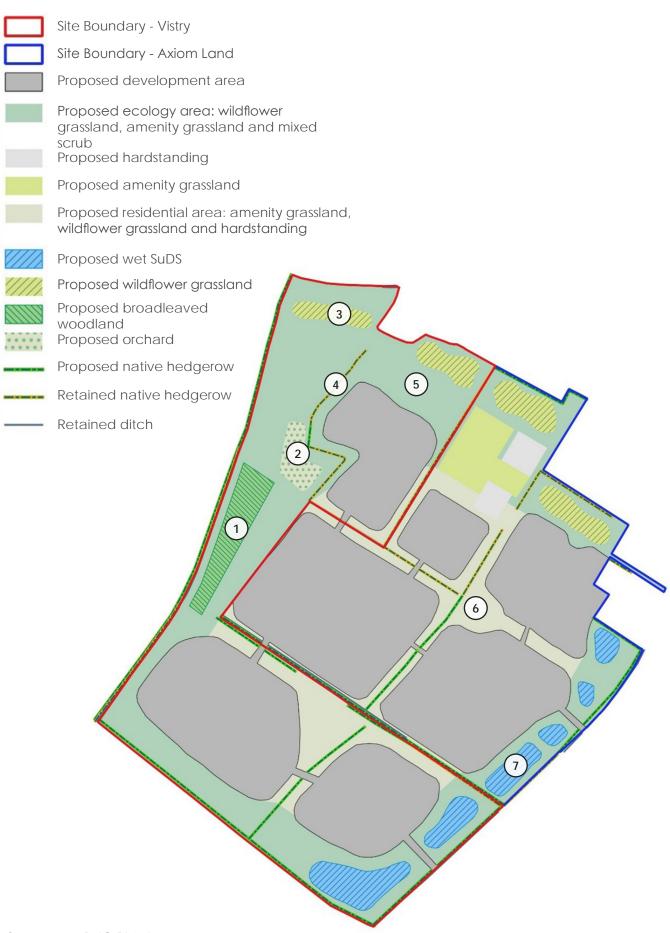


The following section sets out the 7 key principles identified to achieve a net-gain in biodiversity across Millfield End.

- New native and species-rich broadleaved woodland will be created within the proposed ecology area. The woodland will be developed from a diverse tree stock to withstand pressures from disease and climate change, and will provide a valuable source of food and cover to a variety of wildlife. The value of the woodland will be maximised under a sensitive management regime and will form a functional link ('a stepping stone') with other woodland blocks in the wider landscape.
- 2 A new traditional Orchard under-seeded with wildflower grassland will be created within the proposed ecology area at the west of the site adjacent to the proposed woodland and hedgerows to maximise habitat connectivity and local habitat diversity. Traditional Orchard is a Priority Habitat and the creation of new tradition orchard at the site will contribute to LPA objectives to create new traditionally managed orchards in Bedfordshire. Additionally, the community orchard will raise awareness of the biodiversity and heritage value through engagement in fruit-picking.

3 New areas of wildflower grassland will be created within areas of open-space. The areas of wildflower grassland will provide rich and varied nectar sources to pollinating invertebrates, and will also provide muchneeded ground cover (shelter) and source of forage to a variety of birds, reptiles, amphibians and small mammals. A seed mix which includes and / or is supplemented with Corn Buttercup and Cornflower (species listed under the local biodiversity action plan) will be selected, whilst Yellow Rattle (a semi-parasitic species that restricts grass vigour) will also be included to ensure a diverse grassland sward. (4)

- Retained hedgerows are to be bolstered with additional native species and any gaps planted up. Existing hedgerows will also link with proposed native species-rich hedgerows to develop a network of green corridors which permeate the site's developed and openspace areas. This will increase and improve the ecological connectivity of this Priority Habitat within the site compared to the existing position, which is currently dominated by intensively managed arable fields. Increasing the extent and connectivity of hedgerows onsite will also provide new nesting and foraging opportunities for Song Thrush, Common Linnet and Common Bullfinch (species listed under the local biodiversity action plan). The BNG will contribute to the LPA objectives to maintain and where possible expand the network of hedgerows throughout the county in line with the Luton Biodiversity Action Plan with objectives.
- 5 Within the proposed 'ecology areas' a mix of wildflower grassland, scrub and flowering amenity lawn will be created and set amongst the proposed woodland, traditional orchard and hedgerows. This mix of habitats will produce a mosaic of structural and floristic variety within the open space. The diversity of habitats will create notable gains for biodiversity at a landscape level and deliver a range of opportunities for wildlife.
- 6 Within the 'residential areas' a higher proportion of the built environment is expected, though nonetheless opportunities for wildlife have been maximised in the form of wildflower grassland and flowering amenity grassland creation, as well as new hedgerow creation.
- (7) Sustainable Urban Drainage Systems (SUDS) will be created in open space at the east and north of the development, seeded and managed with an appropriate wildflower seed mix. The SUDS will form temporary wetland habitat during periods of high rainfall, thereby providing opportunities for a range of species including for Great Crested Newt (a local biodiversity action plan species and European Protected Species) which are known to be present in the local area. The SUDS will form invaluable wetland habitat, presenting as stepping stone habitats within the site and strengthening habitat connectivity within the wider landscape.



7.7 Key Character Areas

Five key character areas are to be provided at Millfield End. The following sub-section includes some preliminary suggestions for the architectural and landscape approach to these character areas. The proposed key character areas are:

CA1 Primary Street
CA2 Green End Interface
CA3 Bedford Road
CA4 Countryside Edges
CA5 Central Greens
The proposed key areas will be particularly

critical to the appearance and assimilation of Millfield End. Specific attention is to be paid to the landscape and massing within these areas and how they frame key spaces and streets to ensure their design contributes towards creating a high quality and cohesive development in accordance with the requirements of Policies D1 and H1 of the Neighbourhood Plan.

Throughout this sub-section, words such as 'informal' and 'formal' will be used to describe certain character areas and characteristics of Millfield End. A formal character will be defined by a more uniform style, such as wider streets with grass verges and street planting, and consistent set back distances defining the edges. Informal areas will appear more intimate and relaxed, with narrower streets, more sinuous street alignments, and varying set back distances complemented by a wider range of different styles of buildings. "The identity or character of a place comes from the way that buildings, streets and spaces, landscape and infrastructure combine together and how people experience them. It is not just about the buildings or how a place looks, but how it engages with all of the senses."

Para. 50, NDG 2021







Primary Street

M Key Characteristics

The Primary Street character area runs through the heart of Millfield End between the two vehicular access points from Bedford Road, and provides a link to all the other character areas.

The characteristics of the Primary Street will be influenced by the more historic elements of the High Street, with near continuous frontages made up of varying widths and a mix of 2 and 2½ storey homes.

The tree-lined street will continue and complement the landscaped character of the Bedford Road frontage and that of the green corridors that the Primary Street crosses. The Primary Street will form the widest street at Millfield End, marking its importance in the hierarchy of streets. To create an appropriate sense of enclosure, the homes will be set back behind minimal front gardens.

The new homes along the Primary Street will be underpinned by a limited palette of materials and colours to create a strong uniform character that is easily distinguishable from other parts of Millfield End. The choice of materials will still be underpinned by those traditionally found in Great Barford.

As one travels towards Bedford Road along the Primary Street, outward views will be possible south eastwards across the Ouse Valley. The street trees and new homes will frame these views.

M Landscape Characteristics

Tree-lined street, with fastigiate tree species planted at regular intervals to create a formal character.

To create a high-quality residential frontage, low level ornamental planting will be used to define enclosure between public and private space. A simple palette of shrubs and more structural perennials will retain a sense of consistency, but with colouration and structural plants used to assist with way-marking / reference points for street users.



Character Area 1.

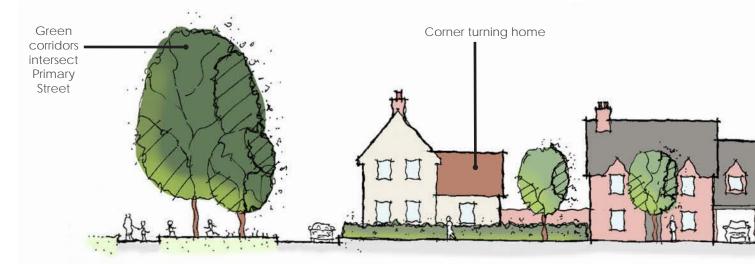


Figure 7.23 Illustrative Elevation (Not to scale).

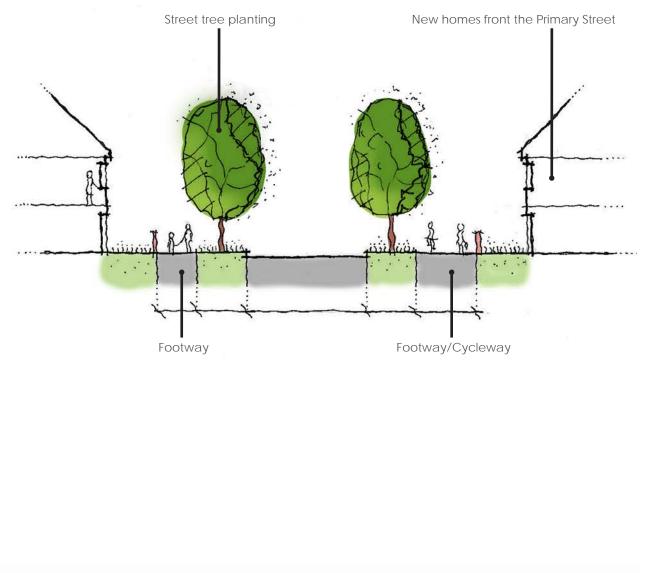


Figure 7.24 Illustrative cross section of the Primary Street (Not to scale).





Primary Street

M Coding

CA1	CODE CATEGORY	DEFINITION		
1	Built Form	Tree-lined street with near continuous frontages. Good sense of enclosure to focal spaces located at junctions along the street.		
2	Building typology	Predominantly link detached, semi-detached and terraced. Corner turning detached homes overlooking open space corridors where they cross The Primary Street.		
3	Building linesStrong building lines with consistent setbacks to help create a more formal character. Setback typically 1.0m–3.0m.			
4	Height2 to 2½ storeys. 2½ storey homes should be used to mark key such as the termination of vistas and to mark key spaces, an interest and articulation to the streetscape.			
5	RoofscapeVarying roof forms to add interest and articulation to the roofscape. I of chimneys and dormer windows will add additional interest.			
6	Building detailGenerally, to be simple and discreet. Key buildings to typically incorporate bay windows and simple door surrounds. Dormer win to front elevations of 2½ storey homes.			
7	Landscape Tree-lined street. Low level ornamental planting to small front gardens.			
8	Street typesPrimary tree-lined street, with secondary streets running off it to other parts of the new neighbourhood.			
9	Boundary treatmentsFront gardens: low brick walls or hedges.Side garden boundaries: 1.8m high brick walls. Brickwork to ma adjoining house and to incorporate articulation.			



Planting Design Principles:

- Fastigiate street-tree species to be formal and uniform habit. Should also be selected to ensure minimal long-term pruning.
- Large feature trees included at key locations.
- A minimum spacing of 10 metres between trees at a consistent rhythm.

Suggested Tree Species:

- Tilia cordata 'Greenspire' (Smallleaved Lime)
- Corylus collurna (Turkish Hazel)

Suggested Shrub Species:

Robust species which provide both boundary treatments to spaces and provide colour and interest through the street.

- Hydrangea sp (Hydrangea Macrophylla)
- Hebe sp (Hebe 'Blue Gem')
- Rock Rose (Cistus purpureus)
- Escallonia (Escallonia 'Pink Elle'
- Hornbeam (Carpinus betulus)
- Hebe (Hebe raikensis)
- Rosemary (Rosmarinus officianalis)
- California lilacs (Ceanothus repens)
- Sage (Salvia officianalis)
- Thyme (Thymus vulgaris)





Green End Interface

M Key Characteristics

This character area is to be designed to sensitively relate with the existing settlement edge at Green End, which includes the Green End Conservation Area. The homes within this lower density area will front a swathe of open space, including the new community green, located between the existing settlement edge and the new homes. To create a character sympathetic and appropriate to its setting, this area is to have a looser, more informal pattern.

When viewed from the north, the character area will have the appearance of three clusters of homes broken up by two green corridors. These green corridors will 'bleed' into the wider areas of Millfield End to the south, following existing hedgerows, linking to the new neighbourhood's wider areas of open space.

The new homes will be a maximum of 2 storeys in height and be carefully designed to respect the traditional local vernacular. Dormer bungalows are to be used in the north westernmost part of the character area closest to the Conservation Area to relate with the existing settlement edge even more sensitively. A mix of locally distinctive materials will help to create an informal character.

M Landscape Characteristics

The interface between the new homes and the open spaces to the north will be defined by new hedgerow and tree planting, which will connect with the existing hedgerows running through the intersecting green corridors. The existing hedgerows will be reinforced with new tree and hedgerow planting. This will also create a soft development transition with the adjacent open spaces, with the green corridors and informal areas of open space having an informal pastoral character where seasonal colour and wildflower / bulb mixes also provide a more diverse edge. The new drainage features located within these areas are to be carefully designed to also have an informal character with shallow slopes that maintains the pastoral characteristics of the wider character area.

The trees will be planted at irregular intervals, and in clusters, to create a more informal character within the adjoining open spaces, including the community green and green corridors. New tree and hedgerow species are to be chosen for their seasonal interest and varying heights/girths.

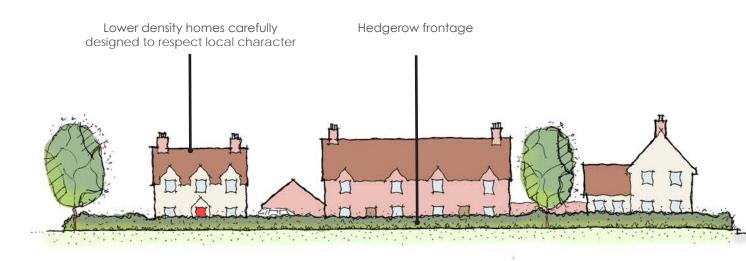


Figure 7.25 Illustrative Elevation (Not to scale).



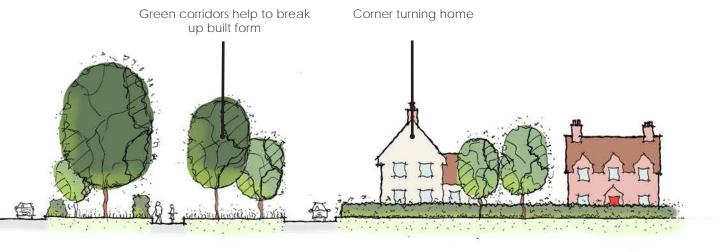




Character Area 2.









Green End Interface

CA2	CODE CATEGORY	DEFINITION		
1	Built Form	Soft, well-landscaped development edge. Small runs of homes ntersected by the well-landscaped open space corridors. Lower densities and more informal character. Greater variation in building footprint shapes and sizes. Larger front gardens encouraged to complement adjacent open spaces.		
2	Building typology	Predominantly detached and semi-detached types. Opportunity to use garages and car ports to reflect rural, ancillary style buildings should be fully explored.		
3	Building lines Informal and staggered.			
4	HeightGenerally, up to 2 storeys. Use of some 1½ storey homes (dormer bungalows) will help to create interest.			
		Varied eaves and ridge heights.		
5	Roofscape	Roofscape broken up by changes in building orientation at corners and use of L-shaped homes with subservient wings to rear, together with the use of chimneys.		
6	Building detail Simple architectural detailing.			
7	Landscape	Informal, irregular planting.		
/		Low hedgerows as boundary treatments.		
8	Street types	Green Edges.		
9	Boundary treatments	Front gardens: low hedges. Side garden boundaries: 1.8m high brick walls. Tree and hedgerow planting along side walls where space allows. Brickwork to match adjoining house and to incorporate articulation.		



Planting Design Principles:

- Structural tree planting to comprise a mix of semi-mature and young species to provide variation in sizing.
- Trees planted at irregular intervals to reinforce informal character.
- Double staggered species rich hedgerow along interface between new homes and open space beyond.
- Orchard to form key part of landscape character.
- Hedges should be used to avoid cars parking informally along grassed edges.
- SuDS features to be designed as dry, naturalistic features which are in keeping with pastoral character of wider open spaces.

Suggested Tree Species:

- Acer campestre
- Alnus glutinosa
- Corylus avellana
- Amelanchier lamarckii 'Robin Hill'
- Sorbus aucuparia 'Cardinal Royal'
- Tilia cordata 'Greenspire'
- Native hedgerow with locally prominent species

Suggested Shrub Species:

- Hydrangea sp (Hydrangea Macrophylla)
- Hebe sp (Hebe 'Blue Gem')
- Rock Rose (Cistus purpureus)
- Escallonia (Escallonia 'Iveyi')
- Hornbeam (Carpinus betulus)
- Hebe (Hebe raikensis)
- Rosemary (Rosmarinus officianalis)
- California lilacs (Ceanothus repens)
- Periwinkle (Vinca minor)





Bedford Road

M Key Characteristics

Meeting a key requirement of Policy H1 of the Neighbourhood Plan, the Bedford Road character area is to be designed to create a rural gateway to Great Barford. The new homes will be set back from Bedford Road behind a generously proportioned area of open space containing existing and new landscaping, a series of drainage ponds and a new pedestrian/ cycle route. To the north east, closest to existing settlement edge, there will be a greater predominance of narrow fronted homes corresponding with more formal arrangements, including where they will be overlooking the north easterly Bedford Road access point. Further to the south west, there is to be a greater predominance of wider fronted homes to create a more informal, lower density character, with mostly L-shaped building to address corners.

Throughout the character area, a varied roofline is to be created by discrete changes to building orientation. The majority of the homes will be 2 storeys in height, although the occasional 21/2 storey home will provide interest and articulation to the roofscape, particular where they overlook the two vehicular access points.

The new homes will be designed to strongly draw upon the local vernacular, using a range of appropriate traditional building materials to create an organic, rural character.

M Landscape Characteristics

The existing trees and hedgerows alongside Bedford Road will be substantially reinforced with new tree and hedgerow planting. This will create a strong, well-landscaped character to the Bedford Road frontage when approaching Great Barford. The new landscaping will be at its widest to the south west to screen views of the new homes fronting the character area in this location. To the north east, the new landscaping will become gradually less dense so that filtered views of the homes are possible as one approaches the existing settlement edge.

Many of the new drainage features located in this character area will have wet bases to create the character of a series of ponds.

The boundaries between the new homes and the open spaces will be defined by new hedgerows and trees, which will complement the strong landscaped character created by the new and existing landscaping alongside Bedford Road. The trees will be planted at irregular intervals, and in clusters, to reinforce the informal, rural character of the frontage. New tree and hedgerow species will be chosen for their seasonal interest and varying heights/girths.

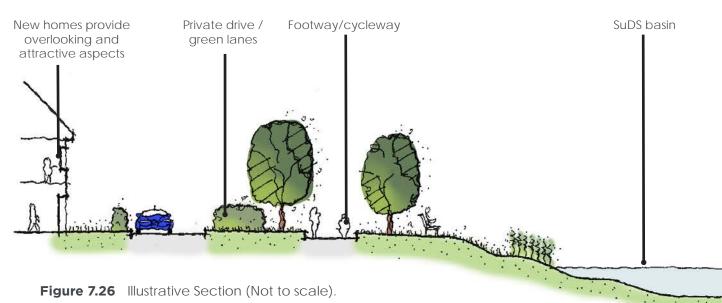


Figure 7.26 Illustrative Section (Not to scale).



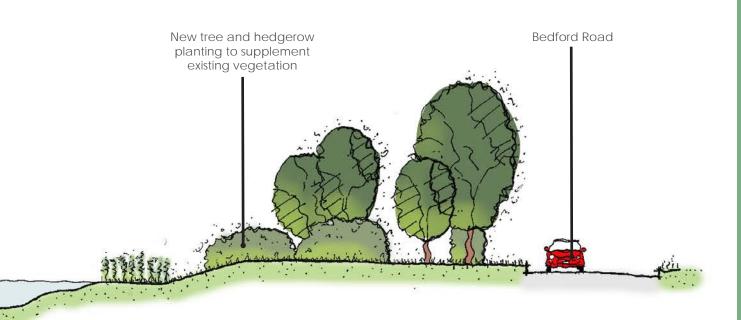




Character Area 3.









Bedford Road

M Coding

CA3	CODE CATEGORY	DEFINITION		
1	Built Form	Soft, well-landscaped development edge to create a rural gateway to Great Barford. More formal arrangement of new homes to north east gradually giving way to more informal arrangements further to the south west marked by a greater variation in building footprint shapes and sizes. Larger front gardens encouraged to complement rural gateway characteristics.		
2	Building typology	Predominantly detached and semi-detached types. Opportunity to use garages and car ports to reflect rural, ancillary style buildings should be fully explored, particularly towards the south west of the character area.		
3	Building linesMore informal and uniform to the north east gradually becoming informal and staggered to the south west.			
4	HeightGenerally, up to 2 storeys. Considered use of 2½ homes to provide articulation and interest.			
		Varied eaves and ridge heights.		
5	Roofscape	Roofscape broken up by changes in building orientation at corners. L-shaped homes with subservient wings to rear will provide additional interest, particularly to the south west.		
6	Building detail Simple architectural detailing.			
	Landscape	Informal, irregular planting gradually becoming thicker towards the south west. To the north east landscape to allow filtered views of new homes from Bedford Road.		
7		Low hedgerows as boundary treatments. New landscaping to complement and reinforce existing trees and hedgerows. Drainage basins to be designed to maximise amenity and biodiversity value. Many of the basins are to have a wet base to create the character of a series of ponds.		
8	Street types	Green Edges.		
		Front gardens: low hedges.		
9	Boundary treatments	Side garden boundaries: 1.8m high brick walls. Tree and hedgerow planting along side walls where space allows. Brickwork to match adjoining house and to incorporate articulation.		









Planting Design Principles:

- Structural tree planting to be planted at semimature sizes and to provide a diverse mix of species including at least one large tree species.
- Existing gaps along Bedford Road boundary to be filled with new trees and hedgerows.
- Low timber bollards or low hedges should be used to avoid cars parking informally along grassed edges.
- SuDS features planting design should take naturalistic form to provide visual and ecological enhancement.
- SuDS features native plant species/ assemblages/communities tolerant of wet and dry conditions should be used.

Suggested Tree Species:

- Acer campestre
- Alnus glutinosa
- Corylus avellana
- Amelanchier lamarckii 'Robin Hill'
- Sorbus aucuparia 'Cardinal Royal'
- Tilia cordata 'Greenspire'
- Native hedgerow with locally prominent species











Suggested Shrub Species:

- Hydrangea sp (Hydrangea Macrophylla)
- Hebe sp (Hebe 'Blue Gem')
- Rock Rose (Cistus purpureus)
- Escallonia (Escallonia 'Iveyi')
- Hornbeam (Carpinus betulus)
- Hebe (Hebe raikensis)
- Rosemary (Rosmarinus officianalis)
- California lilacs (Ceanothus repens)
- Periwinkle (Vinca minor)



Countryside Edges

M Key Characteristics

This character area is to be designed to create attractive, well-landscaped interfaces with Millfield End's countryside edges whereby views of the new homes will be softened, screened and filtered by existing and new areas of woodland, tree and hedgerow planting. This will ensure an appropriate transition is created between Millfield End and the countryside beyond.

The green corridors running through the rest of Millfield End will open out on the countryside edge, creating the interconnected network of open spaces which help to break up the built form, with ample space for new tree planting to help create treed horizons.

The homes within this character area will have a low density character and front onto areas of welllandscaped open space located between the new homes and the countryside beyond. Varied set distances and building orientations will further complement the informal characteristics of the area.

The vast majority of the homes will be a maximum of 2 storeys in height, but some 2½ storey homes are to be used to provide interest and articulation to the roofscape. The design of the new homes should draw upon the traditional rural local vernacular with regards to architectural styles and the choice of materials.

M Landscape Characteristics

The boundaries of the Application Site will be planted with new trees and hedgerows, with the blocks of new woodland planted in selective locations. This will help to create a soft transition with the countryside beyond Millfield End.

A new route for walking and cycling will meander through the open spaces, connecting with the routes running through the adjacent green corridors. New tree and hedgerow planting will flow from the countryside edges into the green corridors to create the feeling of interconnected and seamless open spaces which frame the new homes.

The new trees will be planted at irregular intervals, and in clusters, to create an informal character appropriate to a countryside edge. The new species will be chosen for their seasonal interest and varying sizes.

The northernmost areas of the character area will incorporate new woodland planting to complement the nearby areas of woodland and stands of the trees. This new woodland will also correspond with the more elevated parts of the Site to help create a treed backdrop.



Character Area 4.







Frequent connections to the recreational route allow for "filtered permeability", a useful technique which creates pleasant low traffic environments

New and existing landscaping to screen, soften and filter views of new homes

Seating areas provide places to sit, rest and chat



Figure 7.27 Illustrative Layout of Countryside Edge (Not to scale).



Countryside Edges

CA4	CODE CATEGORY	DEFINITION		
1	Built Form	Soft, well-landscaped development edge to create a rural gateway to Great Barford. More formal arrangement of new homes to north east gradually giving way to more informal arrangements further to the south west marked by a greater variation in building footprint shapes and sizes. Larger front gardens encouraged to complement rural gateway characteristics.		
2	Building typology	Predominantly detached and semi-detached types. Opportunity to use garages and car ports to reflect rural, ancillary style buildings should be fully explored, particularly towards the south west of the character area.		
3	Building linesMore informal and uniform to the north east gradually becoming informal and staggered to the south west.			
4	Height	Generally, up to 2 storeys. Considered use of 2½ homes to provide articulation and interest.		
5	Roofscape	Varied eaves and ridge heights. Roofscape broken up by changes in building orientation at corners. L-shaped homes with subservient wings to rear will provide additional interest, particularly to the south west.		
6	Building detail	Simple architectural detailing.		
7	Landscape	Informal, irregular planting gradually becoming thicker towards the south west. To the north east landscape to allow filtered views of new homes from Bedford Road. Low hedgerows as boundary treatments. New landscaping to		
		complement and reinforce existing trees and hedgerows. Drainage basins to be designed to maximise amenity and biodiversity value. Many of the basins are to have a wet base to create the character of a series of ponds.		
8	Street types	Green Edges.		
9	Boundary treatments	Front gardens: low hedges. Side garden boundaries: 1.8m high brick walls. Tree and hedgerow planting along side walls where space allows. Brickwork to match adjoining house and to incorporate articulation.		









M Plan

Planting Design Principles:

- Structural tree planting to comprise a mix of semi-mature and young planting to provide variation in planting widths and sizing.
- Trees planted at irregular intervals to reinforce informal character.
- A varied palette of species should be included to create variety and interest along the corridor.
- Low timber bollards or low hedges should be used to avoid cars parking informally along grassed edges.

Suggested Tree Species:

- Acer campestre
- Alnus glutinosa
- Corylus avellana
- Amelanchier lamarckii 'Robin Hill'
- Sorbus aucuparia 'Cardinal Royal'
- Tilia cordata 'Greenspire'
- Native hedgerow with locally prominent species.

Suggested Shrub Species:

- Hydrangea sp (Hydrangea Macrophylla)
- Hebe sp (Hebe 'Blue Gem')
- Rock Rose (Cistus purpureus)
- Escallonia (Escallonia 'Iveyi')
- Hornbeam (Carpinus betulus)
- Hebe (Hebe raikensis)
- Rosemary (Rosmarinus officianalis)
- California lilacs (Ceanothus repens)
- Periwinkle (Vinca minor)





Central Greens

M Key Characteristics

The Central Greens character area comprises the two open space areas located within the heart of Millfield End. The two greens are to be multipurpose, informally supervised spaces. They will both comprise predominantly new grassland and a children's play area, overlooked by homes. The two spaces will inherently form community hubs for residents and visitors alike.

Both greens will seamlessly connect with Millfield End's wider network of open spaces, and include new routes for walking and cycling to provide direct active travel connections with the rest of the new neighbourhood.

The new homes overlooking the greens will be designed to have a cohesive character through a uniformity in design and detail, meaning that the character area will be easily recognisable from the greater degree of variation and informality that will be evident towards Millfield End's peripheral areas.

M Landscape Characteristics

The two greens are to be informal and open in design to allow flexibility for a range of open space uses and activities. Sensory and seasonal interest is to be provided through pockets of wildflower grassland and spring bulb planting.

Native hedgerows will define the boundary with the adjacent private drives to delineate public and private space, contribute to verdant street scenes, and provide visual and ecological connectivity to the network of open spaces. Timber bollards should be used around the edges of the two greens, particularly adjacent to the shared street spaces of the green lanes where there are no pavements to restrict vehicular movement and parking.

The play areas are to incorporate natural play features and both greens are to include timber benches.



Character Area 5.











Figure 7.28 Illustrative Layout of Central Greens (Not to scale).



Central Greens

CA5	CODE CATEGORY	DEFINITION		
1	Built FormCohesive, orderly planned character achieved by restrained valueCohesive, orderly planned character achieved by restrained valueof common design features within a limited palette. Homes to be regularly spaced.			
2	Building typology	Mix of mostly detached and semi-detached homes.		
3	Building lines	Consistent set backs. Good sized, well-landscaped front gardens.		
4	Height Generally, up to 2 storeys. Considered use of 2½ homes to provide articulation and interest.			
5	RoofscapePrincipal ridge running parallel with the edge of the greens. Projecting gables to front will add interest to the roofscape.			
6	Building detail Feature front gables to detached homes. Bay windows. Bay windows.			
7	LandscapeInformal parkland character. Also refer to Parks and Gardens typolo on page 79.			
8	Street types	Green Edges.		
9	Boundary treatments	Front gardens: low hedges. Side garden boundaries: 1.8m high brick walls. Tree and hedgerow planting along side walls where space allows. Brickwork to match adjoining house and to incorporate articulation.		





Planting Design Principles:

- Some large tree species along the edges of the greens will provide shade and contribute to the streetscene.
- Medium-sized tree species should be used throughout the remainder of the central greens to provide visual and seasonal interest.
- Existing hedgerows should form an integral part • of the landscape design and be strengthened with new tree and hedgerow planting.

Suggested Tree and Hedge Species:

- Native hedgerow with locally prominent • species
- Box hedgerow (Buxus supervens) .
- Privet hedgerow (Ligustrum ovalifolium) .
- Escallonia hedgerow (Escallonia 'Iveyi) .
- Acer campestre 'Fastigiata'
- Carpinus betulus
- Pyrus calleryana 'Chanticleer'



M 7.8 Car and Cycle Parking

Residential Parking Strategy

Allocated parking will predominantly be provided on plot, within the curtilage, either to the front or side of the homes.

In accordance with Bedford Borough Council's Supplementary Planning Document Parking Standards for Sustainable Communities: Design and Good Practice¹, the following minimum parking standards are to be achieved:

- 1 bedroom home 1 space per home
- 2/3 bedroom home 2 spaces per home
- 4+ bedroom home 3 spaces per home
- Unallocated visitor spaces 0.4 per home

The Parking Standards for Sustainable Communities: Design and Good Practice SPD should be referred to with regards to the required minimum dimensions and standards for garages and car ports to count as parking spaces, together with other standards and dimensions of parking spaces.

Extra Care Housing

The car parking requirements for the extra care housing will be dependant on the type of accommodation to be provided, recognising that it may comprise a mix of independent living accommodation, sheltered housing and accommodation where additional personal care and household assistance may be provided. At the planning application, the level of car parking is to have due regard to Bedford Borough Council's parking SPD. It is also advised the applicant liaises with Bedford Borough Council to agree the required parking provision.

Car parking spaces reserved for disabled people are to be provided in accordance with Bedford Borough Council's parking SPD. These spaces are to be located adjacent to the entrance, be convenient to use and have dimensions that conform to Bedford Borough Council's parking SPD.

The car parking will be broken up by careful landscape design. This is likely to include trees, other planting and varied porous surface materials to avoid expansive, monotonous surfaces.

Community Green

The car parking requirements for the community green will be provided in accordance with Bedford Borough Council's parking SPD, except for the requirements associated with the sports pitch to provided as a maximum standard. Rather, the parking standard for the sports pitch is expressed as a minimum and the designer is strongly encouraged to provide additional spaces to avoid overspill parking onto the adjacent streets within Millfield End and the adjacent existing residential streets. Therefore, the following standards apply:

- Sports pitch minimum of 20 spaces, including 2 disabled spaces.
- Tennis courts 4 spaces per court.

The disabled spaces are to be located adjacent to the changing rooms pavilion, be convenient to use and have dimensions that conform to Bedford Borough Council's parking SPD.

The car parking will be broken up by careful landscape design. This is likely to include trees, other planting and varied porous surface materials to avoid expansive, monotonous surfaces.

Electric Vehicle Charge Points

Electric vehicle charging points are to be provided for every home and within the communal parking areas/s serving the extra care housing.

Cycle and Scooter Parking

Cycle parking for all uses is to be provided in accordance with Bedford Borough Council's parking SPD. Consideration should be given to the provision of some cycle and scooter parking facilities in relation to the children's play areas. It is envisaged that some cycle parking will be provided at the bus stops.

¹ https://www.bedford.gov.uk/planning-and-building-control/planningpolicy/other-planning-policy-documents/parking-standards



	NAME	TYPE	ALLOCATED?	DESCRIPTION	COMMENTS	CHARACTER AREA / STREET TYPE
1	Parallel - within verge	On- street	No	Parking located within the verge.	Used for informal visitor parking. Easily accessible.	CA1
2	Parallel - widened carriageway	On- street	No	Parking located alongside the carriageway.	Used for informal visitor parking. Easily accessible. Maximum row of 2 bays.	CA2/CA3/CA4/ CA5 Secondary Streets/Lanes/ Green Edges
3	Perpendicular	On- plot	Yes, although may be scope to incorporate some visitor spaces.	Parking located perpendicular to the street.	Easily accessible. Maximum rows of 4 bays to be broken up with tree and shrub planting.	Secondary Streets/Lanes
4	Attached/ integral garage	On- plot	Yes	Private garage adjoining or integral part of dwelling, often allowing access directly to house ² .	Garage to be set back minimum of 6m from public domain to allow parking in front. Attached garage may allow for room above.	CA1/CA2/CA3/ CA4/CA5 Secondary Streets/Lanes/ Green Edges
5	Drive through	On- plot	Yes	Parking bays, driveway and/ or garage accessed via a covered car port.	Helps to avoid a car dominated environment, whilst providing secure on- plot parking. Architectural treatment can reflect that of a traditional outbuilding.	CA2/CA3/CA4 Secondary Streets/Lanes/ Green Edges
6	Driveway	On- plot	Yes	Parking bay located next to dwelling.	Can be joined to neighbouring parking bay.	CA1/CA2/CA3/ CA4/CA5 Secondary Streets/Lanes/ Green Edges
7	Detached garage ² and car ports	On- plot	Yes	Private garage located next to dwelling.	Garage to be set back minimum of 6m from public domain to allow parking in front.	CA1/CA2/CA3/ CA4/CA5/ Secondary Streets/Lanes/ Green Edges

² If garages are to be counted as a parking space, please refer to minimum garage sizes set out in Bedford Borough Council's Adopted parking standards for sustainable communities SPD.

7.9 Built Form Character and Building Materials Built Form

The character of the built form within Millfield End should reflect the Great Barford vernacular to ensure the new neighbourhood respects and builds upon the traditional local identity. The local vernacular should inform the massing and form, and use of details, materials, colour and texture to achieve an appropriate built form.

Great Barford's traditional buildings have a strong character. Whilst the new homes should not try to slavishly replicate these traditional buildings so as to be pastiche, the key characteristics should be brought into the design of them. These include well-proportioned, simple building façades with a strong sense of regularity. Many of the homes should also have symmetrical frontages to pick up on a key characteristic of the village.

Millfield End's new homes should be underpinned by a distinctive architectural vocabulary using a restrained palette of materials which are reflective of the local vernacular to reinforce a sense of legibility and coherency through the new development. High quality architecture is encouraged.

There will be a range of dwelling types, sizes and tenures across Millfield End. Whilst there may be differences in terms of detailing, materiality and fenestration, there should be an overall continuity of architectural style through Millfield End, enhancing the sense of place. Critically, the new homes are to be designed to be tenure blind.









Materials

Building materials should be reflective of the traditional Great Barford vernacular, whilst ensuring they are high quality, durable and sustainable. Appropriate materials are as follows:

<u>Walls</u>

Materials will be used to complement the defined character areas using a variety brick choices and render. Occasional weatherboarding will be used to provide added interest and variety to garages and carports to reflect the character of traditional outbuildings.

Stock brick materials are to include the following shades:

- Red
- Gault
- Yellow

Render shades are to include:

- White
- Green
- Light terracotta
- Cream









<u>Roofs</u>

Roofs will be mostly a mixture of plain tiles and slate substitute. Pantiles will be used selectively on garages and car ports where the walls are covered by weatherboarding. Rainwater goods, copings and trims will generally be black and white to complement the wall and roof materials.

Predominant materials include the following:

- Plain clay brown
- Slate substitute
- Pantiles orange

The principles of how materials are to be used in each character area is discussed on pages 91 - 110.





08 | DEVELOPMENT STRATEGY

8.1 Phasing and Delivery Phasing and prerequisites to delivery

The Application Site falls under the control of both Axiom Developments and Vistry, as shown by Figure 8.1.

Axiom and Vistry are working on a cohesive masterplan for the whole site to deliver the 500 dwellings allocated at Millfield End.

The 500 homes will be apportioned with 300 homes on the Axiom controlled land and 200 homes on the Vistry controlled land as agreed in terms of their collaboration.

This collaboration includes the creation of a comprehensive Development Brief and Design Code and Concept Masterplan for the entire Millfield End site. Once the Development Brief and Design Code is endorsed by the community it is likely that planning permission will be secured by separate planning applications submitted by the two developers and these planning applications will be in accordance with the Development Brief and Design Code.

The development of Millfield End will build upon on the continued working partnership between the local community, Great Barford Parish Council, Bedford Borough Council, the landowners and developers, and other key stakeholders to ensure the delivery of a high-quality new development.

There are fundamentals principles to the delivery of homes and infrastructure which will be coordinated between the developers to ensure development by one developer is not inhibited by the other should they come forward at different times.

To achieve a comprehensive and coordinated development, Bedford Borough Council, as Local Planning Authority, will require the provision and coordination of the following as part of the planning application process. Relevant planning conditions and/or obligations will be imposed to secure the timely delivery of this necessary infrastructure. These are:

- Surface water drainage (SuDS) The drainage of the development will require an integrated solution and implementation will need to be coordinated between the landowners/developers. A site-wide Flood Risk Assessment and drainage strategy for the whole of Millfield End will be required to be submitted in support of the planning applications.
- Delivery of the community green The delivery of open space and recreation facilities will be timed to meet the needs of existing and new residents.
- Site Access Bedford Borough Council (BBC) have confirmed that a maximum of 300 homes can be delivered from a single point of access. An access and movement strategy for the whole site will be agreed between the developers and Bedford Borough Council.
- **Connectivity within Millfield End** The development will be required to ensure that pedestrian, cycle and vehicular linkages between the two application areas are constructed up to the boundaries to ensure that they are not subject to a "ransom" position.
- Education Contributions towards the expansion of existing educational provision, including secondary school provision, will be in accordance with BBC's CIL requirements and site specific s106 agreement.

Management and maintenance of public open space

The developer is required to design and implement Millfield End's public open space to adoptable standards.

The public open space is to be either transferred to Bedford Borough Council or by agreement, to Great Barford Parish Council once it is in an adoptable condition, after an agreed period of maintenance. Alternatively, a private management company or community land trust is to be set up to manage and maintain the public open space. The most appropriate form of future management for Millfield End will be determined through the future planning applications.

Infrastructure

The essential on-site infrastructure that must be provided requires a co-ordinated programme. The following facilities are considered essential:

- Community green and other open space areas and children's play areas – planning applications will be expected to deliver these facilities in conjunction with associated housing.
- Affordable Housing Provision will be commensurate with the scale of development proposed and in accordance with the policies of Bedford Borough Council.

Planning Obligations / Community Infrastructure Levy

The Community Infrastructure Levy (CIL) is a levy that local authorities can choose to charge on most new built development in their area in order to raise funding to carry out infrastructure projects. The CIL Charging Schedule was brought into effect in Bedford Borough on 1 April 2014. It applies to a range of new development, including that for new homes. As the Great Barford Neighbourhood Plan is adopted, the Parish Council will receive 25% of Community Infrastructure (CIL) receipts to spend on local neighbourhood items from the Community Infrastructure Levy Regulation 123 list. Great Barford is located in Rural Area 3, meaning that new homes have a CIL charge of £100 per sq.m plus indexation of floorspace created. Current indexation 2023 for Rural Area 3 (Great Barford) is £149 per sq.m

This is in addition to site specific local mitigation identified under future planning applications that will require contributions and or obligations for mitigation at a local level.

Under the CIL Regulations CIL payments must be increased or decreased (index linked) to reflect changes in the costs of delivering infrastructure between the year that CIL was introduced to the year that planning permission is granted.



Figure 8.1 Application Site showing land under control of the two developers.