

LAND NORTH OF SOUTH WOODHAM FERRERS

ESSEX

STAGE THREE MASTERPLAN FRAMEWORK
SUBMISSION

JANUARY 2021

SUBMISSION REPORT

*Shaping places for
future generations*



LAND NORTH OF SOUTH WOODHAM FERRERS

This document sets out initial proposals for land to the north of South Woodham Ferrers, which is proposed for allocation for a new neighbourhood in the new Chelmsford Local Plan. This document has been prepared by the site owners/promoters, in consultation with Chelmsford City Council, as the basis for consultation with stakeholders and the local community.



BroadwayMalyan^{BM}

David Lock Associates
Town Planning and Urban Design



Bellway

CONTENTS

INTRODUCTION	PG. 04
CONTEXT ANALYSIS	PG. 08
SITE ANALYSIS	PG. 24
THE VISION	PG. 42
CREATING THE GREEN GRID	PG. 46
CREATING THE FRAMEWORK MASTERPLAN	PG. 60
SUMMARY AND NEXT STEPS	PG. 84
APPENDIX 1 - INFRASTRUCTURE TO BE DELIVERED	PG. 88

SECTION 1

INTRODUCTION



This section introduces the site, outlines the emerging Chelmsford Local Plan policy for the site and describes the structure of this document.



LAND NORTH OF
SOUTH WOODHAM
FERRERS
ESSEX

INTRODUCTION

STAGE THREE MASTERPLAN

Land to the north of South Woodham Ferrers is allocated for development in the adopted Chelmsford Local Plan, within which it is referred to as Strategic Growth Site (SGS) 10 (known from here on as 'the site').

The Local Plan policy requires a Masterplan to be prepared to guide the future development of the site. Chelmsford City Council has adopted a procedure for preparing masterplans.

This document forms the 'Stage 3' masterplan, submitted for formal consideration by Chelmsford City Council. This masterplan has been updated following extensive engagement ('Stage 0') and technical stakeholder workshops ('Stage 1'). It also incorporates further updates following public consultation ('Stage 2').

This document has been prepared jointly by Broadway Malyan and David Lock Associates on behalf of Countryside Properties (CP), Bellway and Essex County Council (ECC).

Structure of this document

This document is structured as follows:

- **Section 2:** Context analysis
- **Section 3:** Site analysis
- **Section 4:** Creating the green grid
- **Section 5:** Creating the framework masterplan

The Local Plan policy for the site requires it to achieve:

- Around 1,000 new homes of mixed size and type to include affordable housing
- Travelling Showpeople site for 5 serviced plots
- 1,000 sqm of business floorspace
- 1,900 sqm of convenience retail floorspace
- Potential co-location of a new primary school with an early years and childcare nursery (min 2.1 hectares) and one stand-alone early years and childcare nursery (circa 0.13ha); or two new stand-alone early years and childcare nurseries (circa 0.13 ha each)
- Neighbourhood Centre incorporating provision for convenience food retail (1,900sqm), flexible neighbourhood scale business (1,000sqm) and community and healthcare provision
- Integration of flexible workspace facilities
- Development maximising sustainable travel opportunities
- Main vehicular access to the western and central parcels will be from the B1418 with potential for additional access from Burnham Road subject to traffic management measures being agreed by the Local Highway Authority
- Provide new public transport routes / services
- Provide an effective movement strategy within the site
- Provide new and enhanced cycle routes, footpaths, Public Rights of Way and bridleways where appropriate
- Provide additional and / or improved pedestrian and cycle connections to the Town Centre and railway station
- Provide high quality circular routes or connections to the wider Public Rights of Way network

located away from the Crouch Estuary

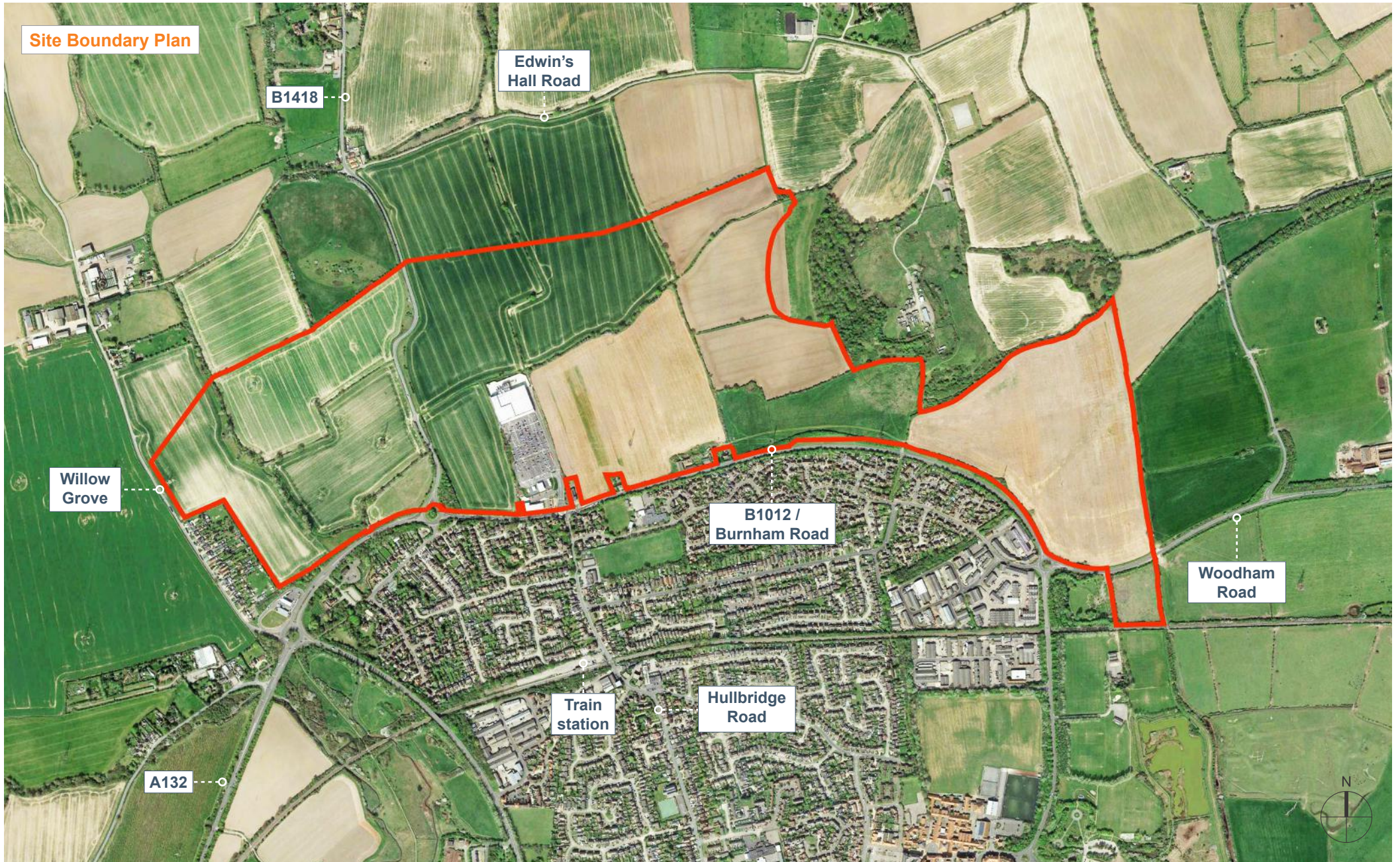
- Provide a dedicated car club for residents and businesses on site and available to the rest of South Woodham Ferrers
- An appropriate landscaped setting for development consisting of suitably dense planting belts and natural buffers to development edges and Local Wildlife Sites
- Provide areas for natural SUDS and flood risk management
- Capacity improvements to the A132 between Rettendon Turnpike and South Woodham Ferrers, including necessary junction improvements
- Multi-user crossings of the B1012 in South Woodham Ferrers which may include a bridge or underpass
- Details of other infrastructure requirements not set out in the policy such as secondary education will be addressed through S106 and CIL.

The site

The site (outlined in red on the opposite page) covers an area of 121.28 ha and is located to the north of the town of South Woodham Ferrers. It stretches from Willow Grove in the west to land around Bushy Hill in the east. The southern edge is largely formed by Burnham Road. The B1418 runs up through the site and northwards towards the settlement of Woodham Ferrers.

The site largely composes agricultural fields and the majority of the western half of the site is relatively flat with the land form rising to the north, beyond the site boundary. The eastern part of the site lies on gently sloping land, again, rising towards the north.

A detailed description of the site and its features is contained later in this report.



SECTION 2

CONTEXT ANALYSIS



This section outlines the strategic and local context of the site, including its relationship with the existing town and its wider landscape setting, including assessment of wider transport links, landscape designations, character and facilities within the town.



LAND NORTH OF
SOUTH WOODHAM
FERRERS
ESSEX

CONTEXT ANALYSIS

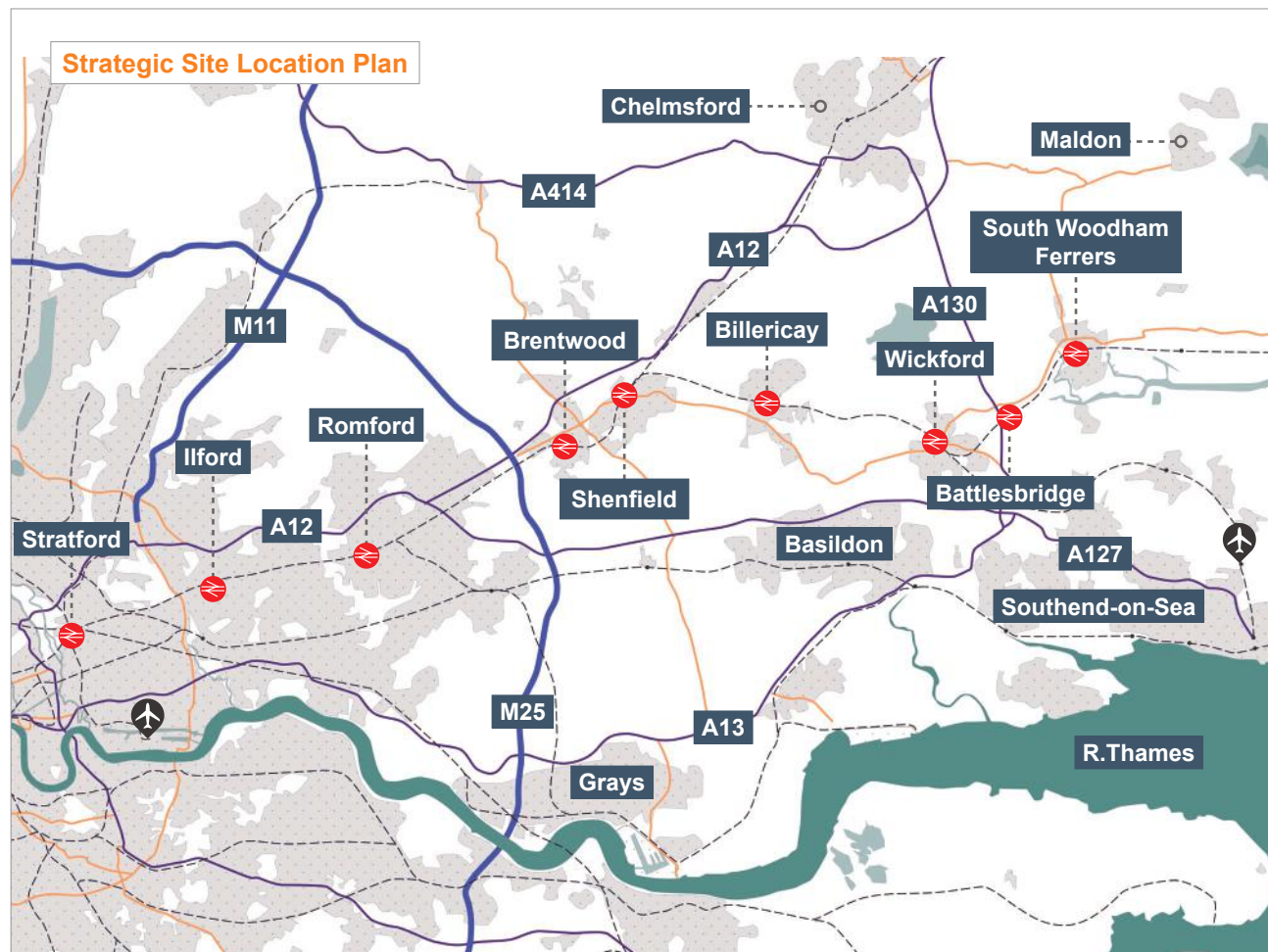
STRATEGIC CONTEXT

The site is situated to the north of the town of South Woodham Ferrers which was developed from the mid 1970's onwards as a riverside country town by Essex County Council. Today it is the second largest town in the Borough with a population of over 16,000 people. It lies within the City of Chelmsford administrative area and is located approximately 17 km to the south-east of the city itself.

In terms of road connections, the A132 connects the town to the A130 and in turn to the A127 and the A12 - both of which are key radial routes into London and connect to the M25 motorway.

South Woodham Ferrers railway station is on the line that connects to Wickford and via Stratford to London Liverpool Street. London (Stratford) is a 40 minute journey. From Wickford there is also a 15 minute journey to Southend Airport.

The setting of South Woodham Ferrers is rural in character and includes a number of smaller villages such as Stow Maries, Woodham Ferrers, Rettendon and Battlesbridge. The River Crouch, immediately to the south of the town, is a key element of its setting. South Woodham Ferrers town centre is within the eastern part of the town. This contains around 100 business units and is anchored by an Asda Supermarket.



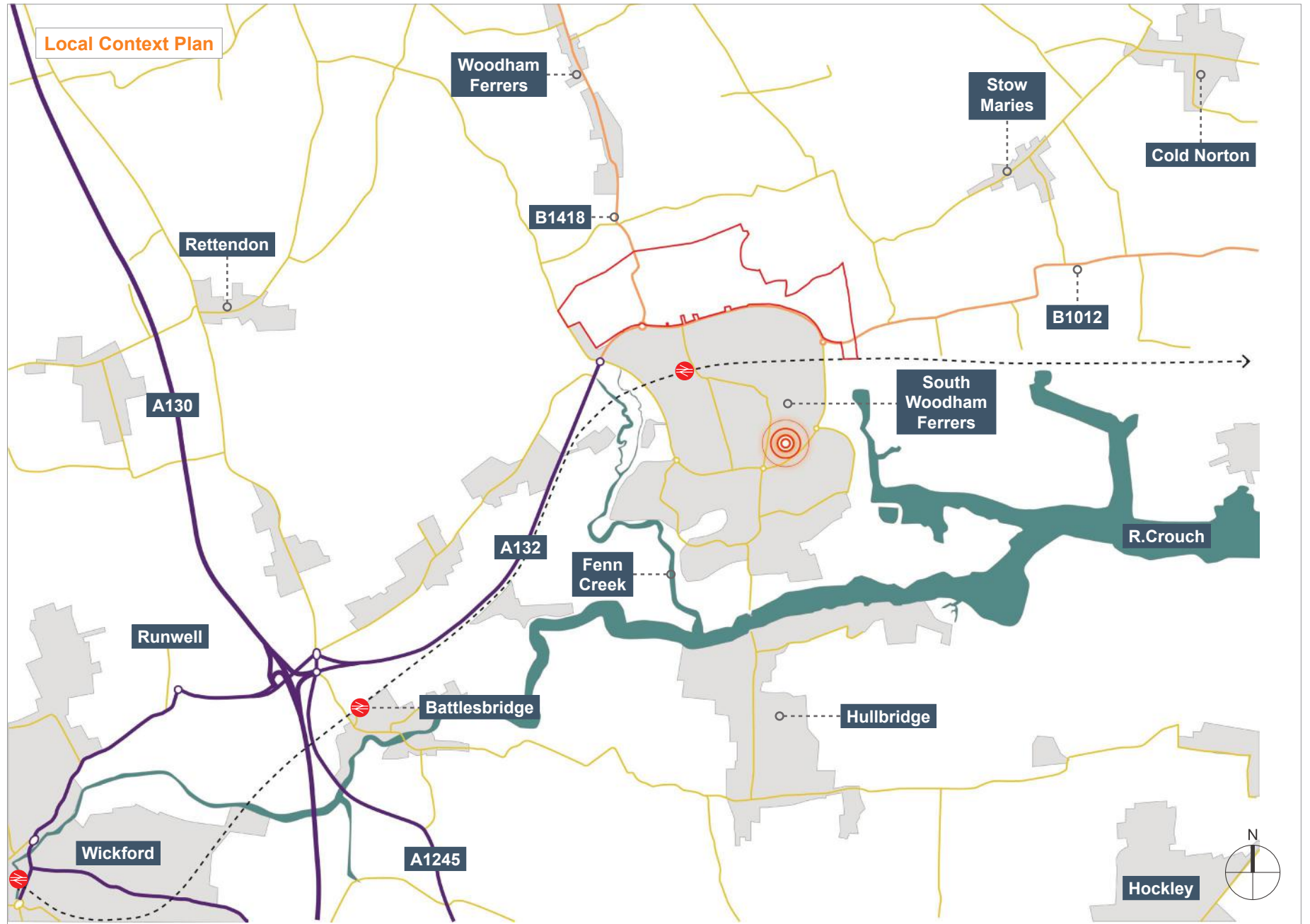
KEY

- | | |
|---------------|------------------------------|
| Site | Airport |
| Urban Area | A Road (Primary) |
| Train Station | A Road (Secondary) or B Road |
| Railway | |



KEY

- Site
- Urban Area
- ⊙ Town Centre
- ⊕ Train Station
- Railway
- A Road
- B Road
- Road



CONTEXT ANALYSIS

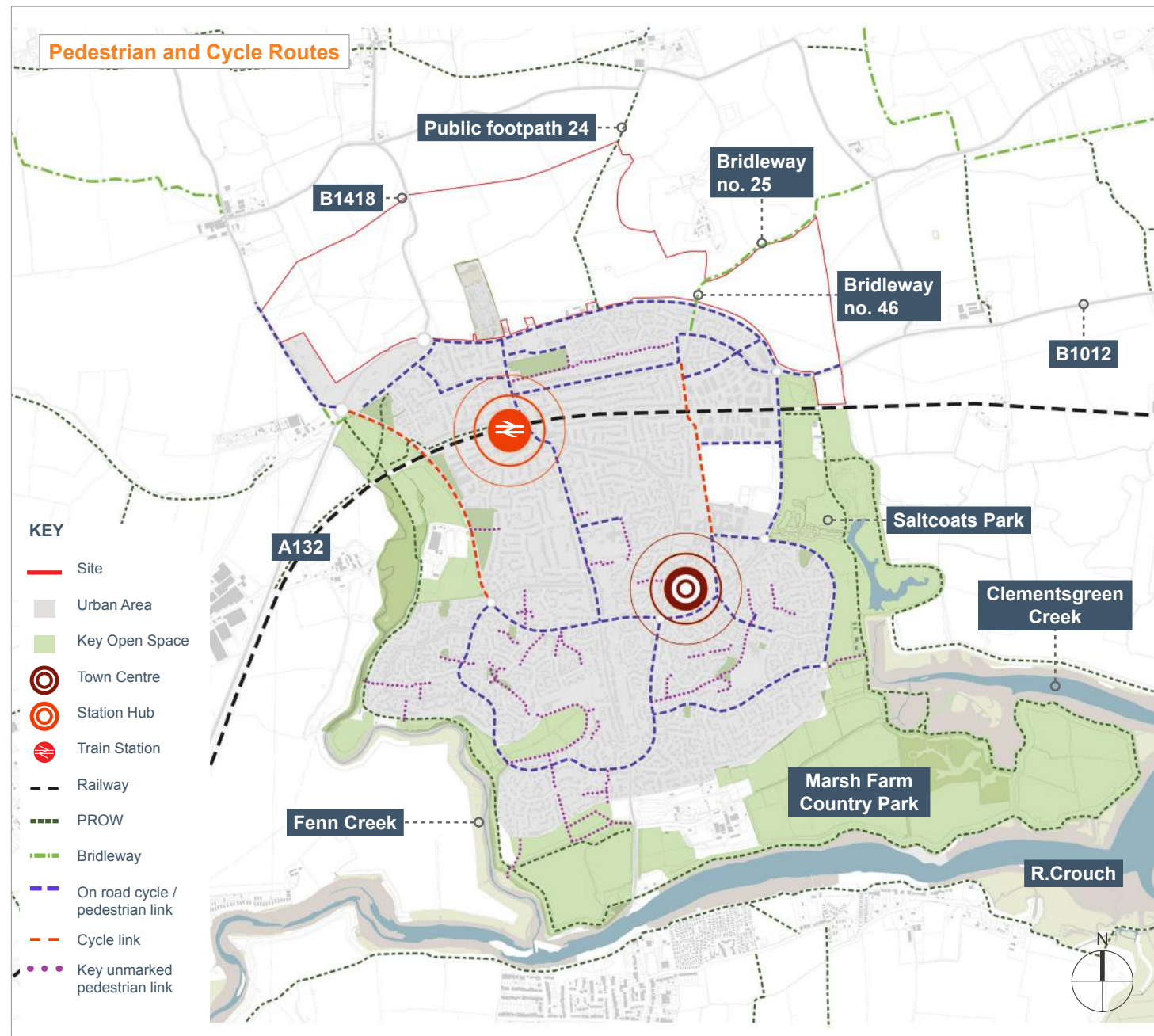
EXISTING PEDESTRIAN AND CYCLE NETWORK

A comprehensive network of walking and cycle routes exist throughout the town, providing convenient links to key destinations and open spaces within South Woodham Ferrers (a more detailed analysis of these connections will be provided later in this document).

These routes link into the wider network of Public Rights of Way and Bridleways surrounding the town. Routes of a more recreational nature run through Marsh Farm Country Park to the south of the town, Fenn Creek to the west and to the north through Saltcoats Park.

Links to the north of the town through the site also exist. Bridleway no. 46 runs from the north of the town through the site, connecting into Bridleway 25. This provides a key link to the east of this site into the surrounding countryside and villages. Public footpath 24 runs across the site providing a pedestrian connection from the edge of the existing town to Woodham Ferrers and Edwin's Hall.

Existing footpath and bridleways to the west of the site provide access into the countryside towards Hyde Hall and the village of Rettendon. There are currently no public rights of access across the western part of the site itself.



PUBLIC TRANSPORT

South Woodham Ferrers is well catered for in terms of its sustainable transport links with the surrounding area.

Bus Services:

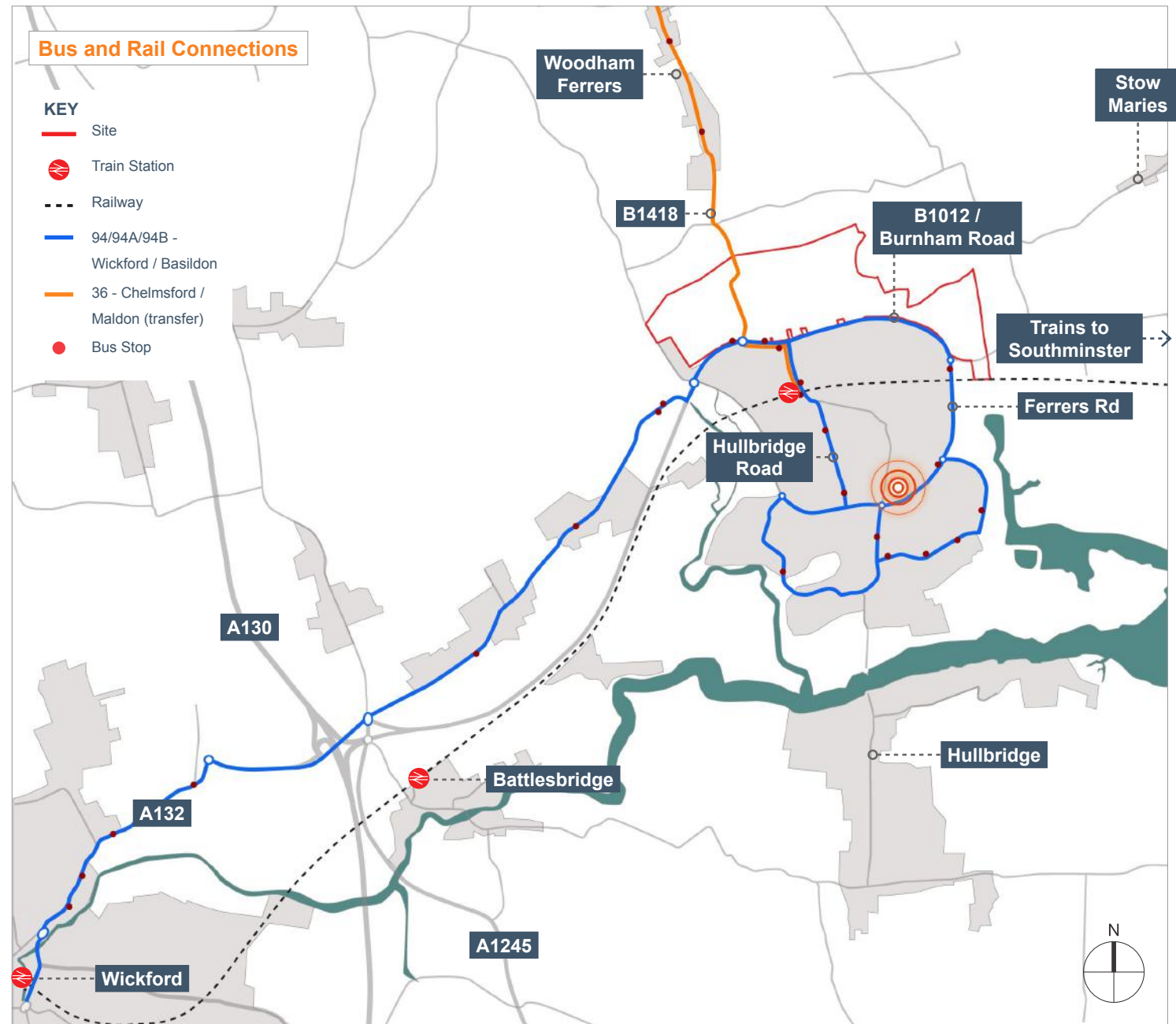
Bus links provide a regular public transport service to key local destinations. Bus service 36 to Chelmsford / Maldon runs every 20-30 minutes while services to Wickford and Basildon (94/94A/94B) run approximately every hour.

Services within the town typically run from the train station and along key spine roads and arterial routes such as Hullbridge Road, Ferrers Road and the B1012.

The site is highly accessible in terms of public transport. It is well located in relation to strategic bus links with both services running to the south of the site along the B1012.

Rail Services:

There are regular train connections through to London (Liverpool Street) via Wickford. These services run every 40-45 minutes with an approximate journey time of 50 minutes. Direct services also run to Burnham-on-Crouch and Southminster, these run every 40-45 minutes with a journey duration of 20 minutes.



CONTEXT ANALYSIS

LAND USES

The town centre is situated in the east of South Woodham Ferrers and is the major retail focal point containing a number of shops and key facilities, anchored by an ASDA superstore alongside bars, restaurants, post office, library leisure centre and doctors' clinic. Further retail facilities are located close to the station and within the south western corner of the town ensuring the majority of the population is within walking distance of such facilities. Community facilities within the town include Town Council buildings, Village Hall and places of worship.

Immediately to the north of this is South Woodham Ferrers's secondary school: William de Ferrers and St Joseph's Catholic Primary School. Additional primary schools are located throughout the town including Collingwood, Elmwood and Woodville with the latter being the closest to the site.

The light industrial areas to the north east / west of the town provide significant areas of employment.

The southern, eastern and western edges of the town comprise of a network of attractive parks and open spaces. A number of leisure and sports facilities are found within these including an animal adventure park and a yacht club. These uses lie adjacent to Marsh Farm Country Park which is located in a wonderful riverside setting along the River Crouch. These are key points of interest within the town which are popular with local residents and visitors. Other key recreational facilities include South Woodham Ferrers Rugby club on the eastern edge and the bowling club in the centre of the town.



The town centre has a strong retail offer



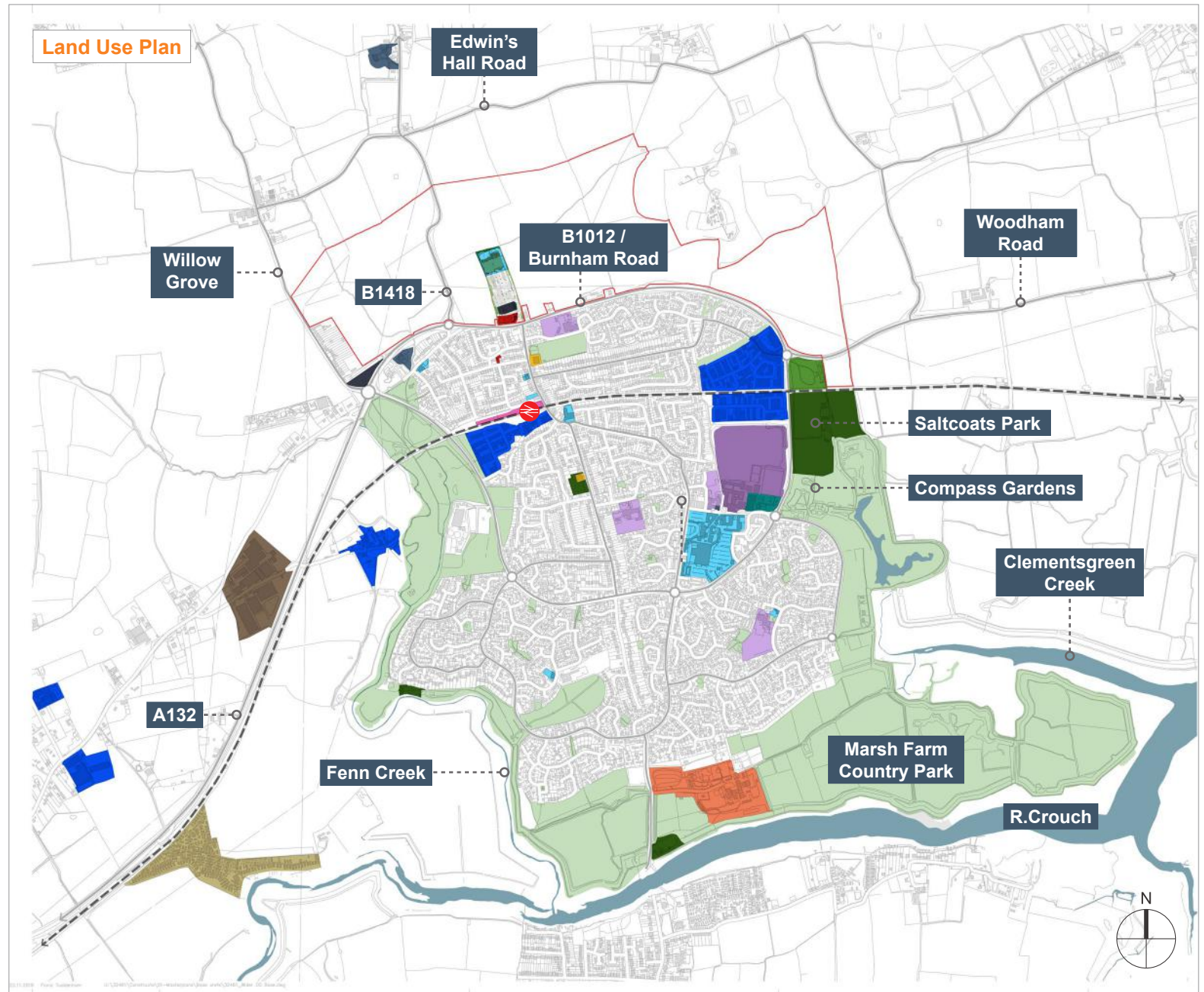
William De Ferrers secondary school



Marsh Farm Country Park

KEY

- Site
- Primary School
- Secondary School
- Civic building
- Retail
- Employment
- Light industrial
- Adventure Park
- Place of Worship
- Train Station
- Petrol Station
- Medical / Health Centre
- Mobile Homes
- Leisure Centre
- Remembrance Gardens
- Sports facilities / Pitches
- Country Park / Open Space



CONTEXT ANALYSIS

URBAN ANALYSIS

The adjacent plan analyses the structural elements such as movement corridors, edges (real or perceived boundaries), landmarks (identifiable features) and nodes (destinations or activity areas) which give settlements their distinctive character.

Morphology:

South Woodham Ferrers is a nucleated settlement with a clear and defined urban edge. This compact arrangement has been influenced by surrounding environmental constraints including steeper topography to the north and areas of floodplain and bodies of water to the east, west and south.

Key nodes and landmarks:

The town centre is the primary economic and social node with additional smaller retail services and the village hall located in close proximity to the train station. The network of green spaces surrounding the site to the west, south and east including Saltcoats Park, Marsh Farm Country Park / Adventure Park and the River Crouch are also key points of interest and recreation within the town which are popular with local residents and visitors.

Edges:

The town is notable for the lack of any sizeable green space within the urban area which gives South Woodham Ferrers a distinctly urban feel.

In contrast, its edges largely comprise attractive natural green spaces, parks and outdoor sports facilities. These are easily accessed through a network of public cycle / pedestrian links connecting into the surrounding countryside.

Despite the adjoining attractive rising landscape, the northern edge of the town comprises a generally blank frontage due to the arrangement of existing built form with back gardens facing onto Burnham Road (B1012). Burnham Road currently has limited opportunities for crossing and therefore forms both a real and perceived barrier to pedestrian movement.

Movement / Routes:

Burnham Road (B1012) currently encloses the town along its northern edge with three roundabouts along this stretch of road serving as the primary vehicular entry points into the town.

There is a clear road hierarchy running through the town with Ferrers Road, Inchbonnie Road and Hullbridge Road serving as key movement corridors for pedestrians and vehicular users, with residential streets and cul-de-sacs branching off these primary routes.

The railway line, running east-west through the northern part of the town, creates a physical barrier to movement and is the most notable cause of severance within the town.



Back gardens facing onto key vehicular routes



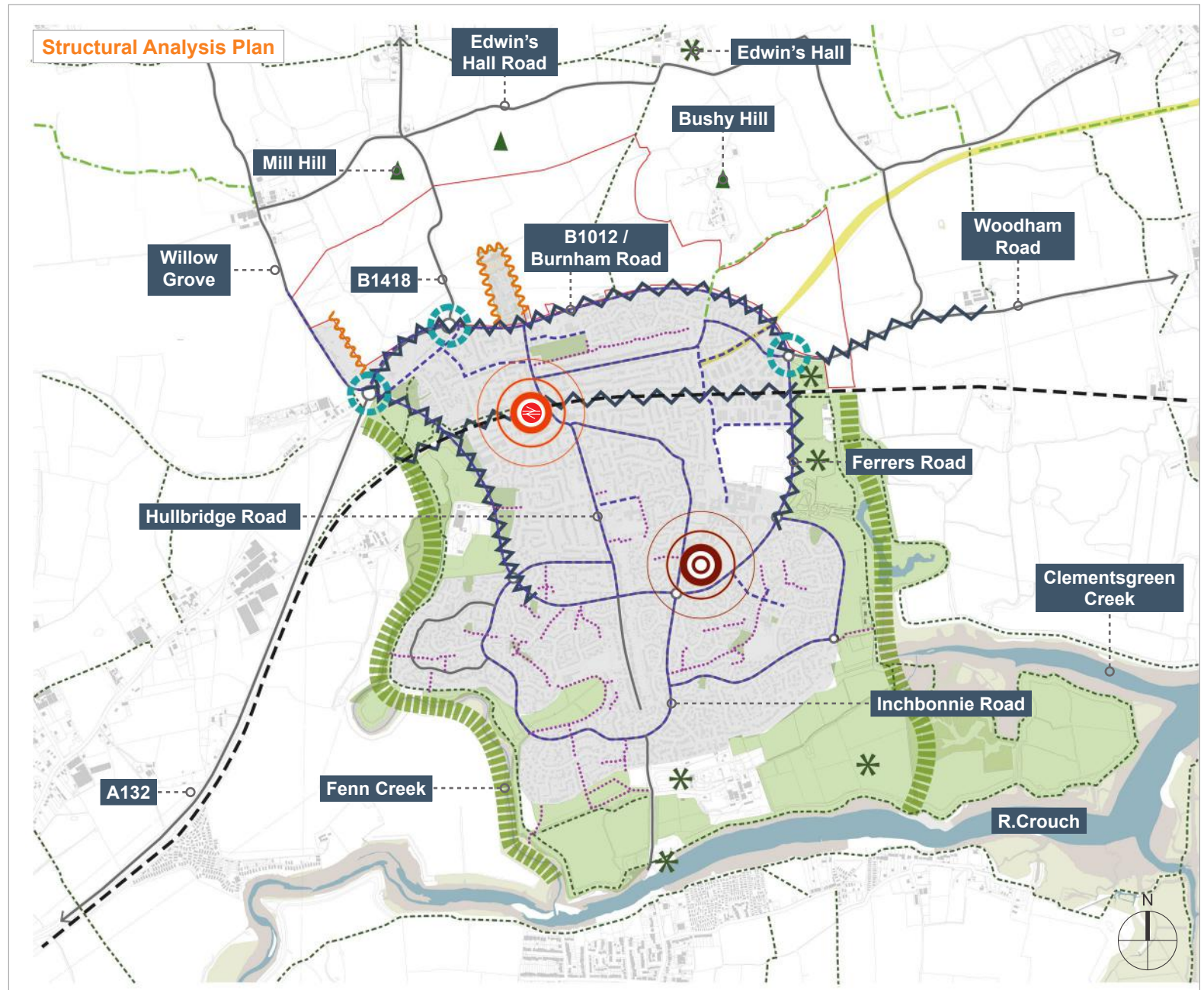
The B1012 creates severance issues along the northern boundary of the town



The open countryside surrounding the town forms a distinctive green edge

KEY

- Site
- Urban Area
- Key Open Space
- ▲ High Point
- ⊙ Town Centre
- ⊙ Station Hub
- ⊙ Train Station
- Railway
- ✱ Key Landmark / Attraction
- ⊙ Key Roundabout
- Key Vehicular Route
- ⋈ Edge / Barrier to Movement
- ~ Sensitive built edge (within site)
- Green Edge
- PROW
- Bridleway
- Key Pedestrian / Cycle Link
- Unmarked Pedestrian Link
- Disused railway



CONTEXT ANALYSIS

| HERITAGE ASSETS

The area surrounding the site contains a number of historical assets. From formative churches dating back as far as the 13th century to a small Copyhold, these all play a role in defining the character of the area.

Woodham Ferrers is a historical settlement to the north of South Woodham Ferrers and is home to a number of listed buildings. The most notable building is the grade I Church of St Mary.

To the east of Woodham Ferrers sits Edwin's Hall, a grade II* moated house. This well defined house, built of red brick with black brick diaper work, is situated at the end of Public Footpath 24, on the crest of a hill looking back towards South Woodham Ferrers.

Ilgars Manor is a grade II listed property situated to the north-west of the site. This again highlights the construction methods and representative proportions commonly found in mid 17th century timber framed houses.

Shaw Farm lies on the north-western edge of South Woodham Ferrers. It is a timber framed farmhouse of 17th century origin now operating as a public house and is grade II listed.

Wellinditch Farm lies to the north east of the town. It comprises a farmhouse, traditional barn and modern outbuildings and like Shaw Farm, dates from the 17th century. It is grade II listed.

Hamberts Farm, a farmhouse and associated group of traditional and modern farm buildings within an agricultural setting to the north, adjoins the northern edge of South Woodham Ferrers facing Burnham Road. The buildings can be considered as undesignated heritage assets.

South-east of the town, a medieval saltern (Scheduled Monument) is situated on the edge of the Country Park.

The Chelmsford Local Plan Heritage Assessments Technical Note (March 2017) sets out to inform the consideration of development options to ensure that heritage significance is considered in accordance with local and national policy. It identifies a number of principles for the site which can be summarised as follows:

Existing heritage assets

Development should maintain a buffer to designated heritage assets to protect their setting. Key views of historic buildings and features, where these exist, should be maintained. Where development is close to existing heritage assets, careful design should minimise harm and seek to mitigate impacts on their setting.

Existing landscape assets

Existing mature trees, woodlands and field boundaries should be retained, creating a landscape framework for new development. Development should avoid encroachment onto hilltops and hillsides.

Existing local character

Development patterns, built and landscape character should reflect the local vernacular, particularly in sensitive locations such as development edges.

The emerging proposals for the site will promote these principles and respond carefully to existing assets of heritage significance.



Church of St Mary Woodham Ferrers



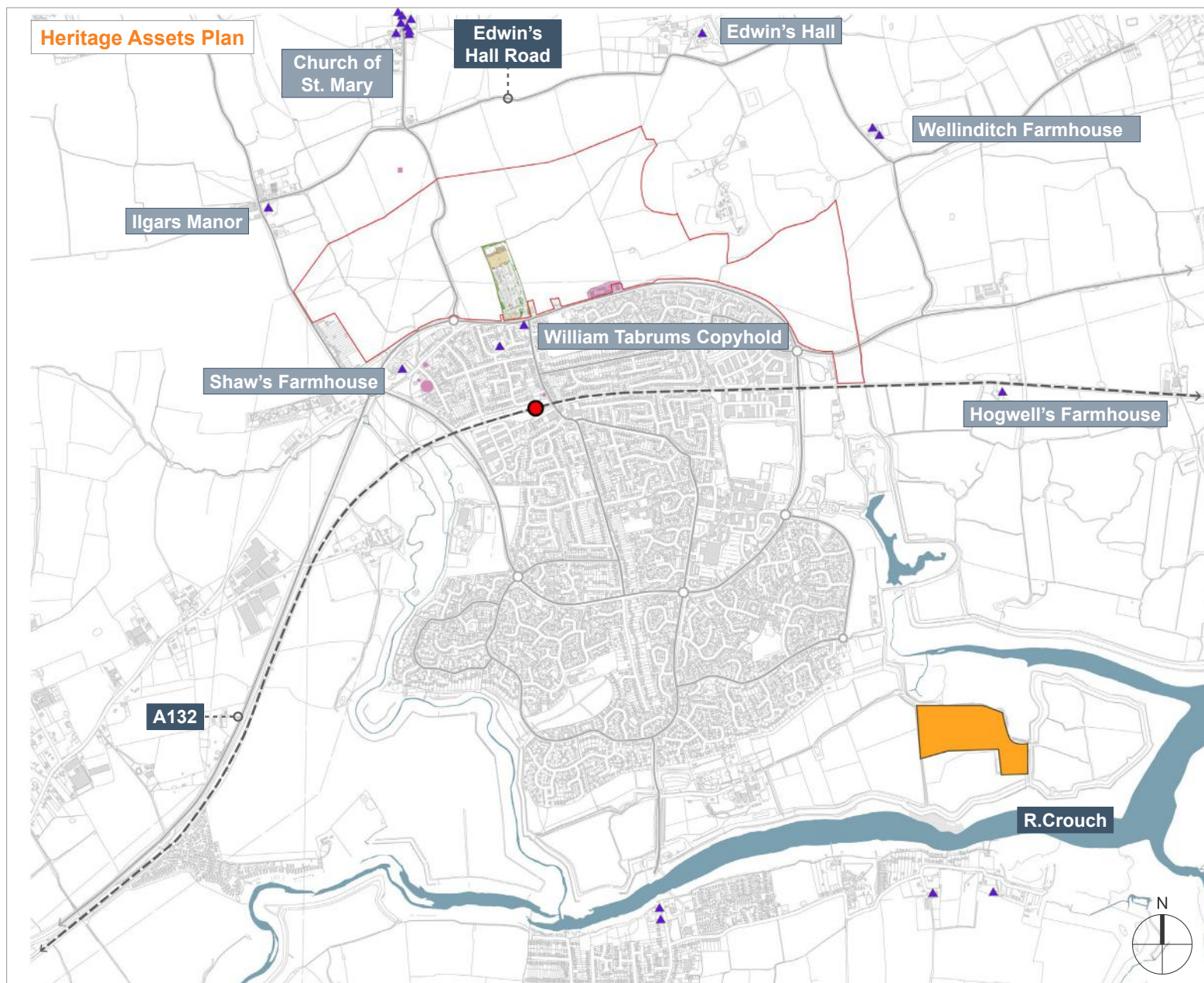
Edwin's Hall, South Woodham Ferrers



Ilgars Manor along Willow Grove

KEY

- Site
- ▲ Listed Building
- Non-Designated Heritage Assets
- Scheduled Monument - Medieval Saltern
Adjacent to Hawbush Creek



CONTEXT ANALYSIS

ECOLOGICAL DESIGNATIONS

South Woodham Ferrers lies on the northern edge of the Crouch Estuary. This estuarine landscape is highly valued for its ecological significance and is an important wintering site for migratory birds including Dark Bellied Brent Geese, being protected as RAMSAR, Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI). There are areas that are also designated as Special Areas of Conservation (SAC). These areas lie predominantly to the south of the town, however, the land around Fenn Creek to the west and the land around Saltcoats Park to the east is also highly valued for its ecological significance.

The northern edge of the town is, however, not the subject of any such designation, with the exception of the Bushy Hill Local Wildlife Site (LWS) which comprises a mosaic of acid grassland, scrub and old broad-leaved woodland. The southern tip of the Bushy Hill LWS is situated within a species poor cattle pasture, with a series of terraced slumps, important for scarce invertebrates. The LWS formerly extended eastwards, however the condition of this area has deteriorated due to lack of grassland management and a return to arable agriculture in some areas.



View of the River Crouch from the northern bank.



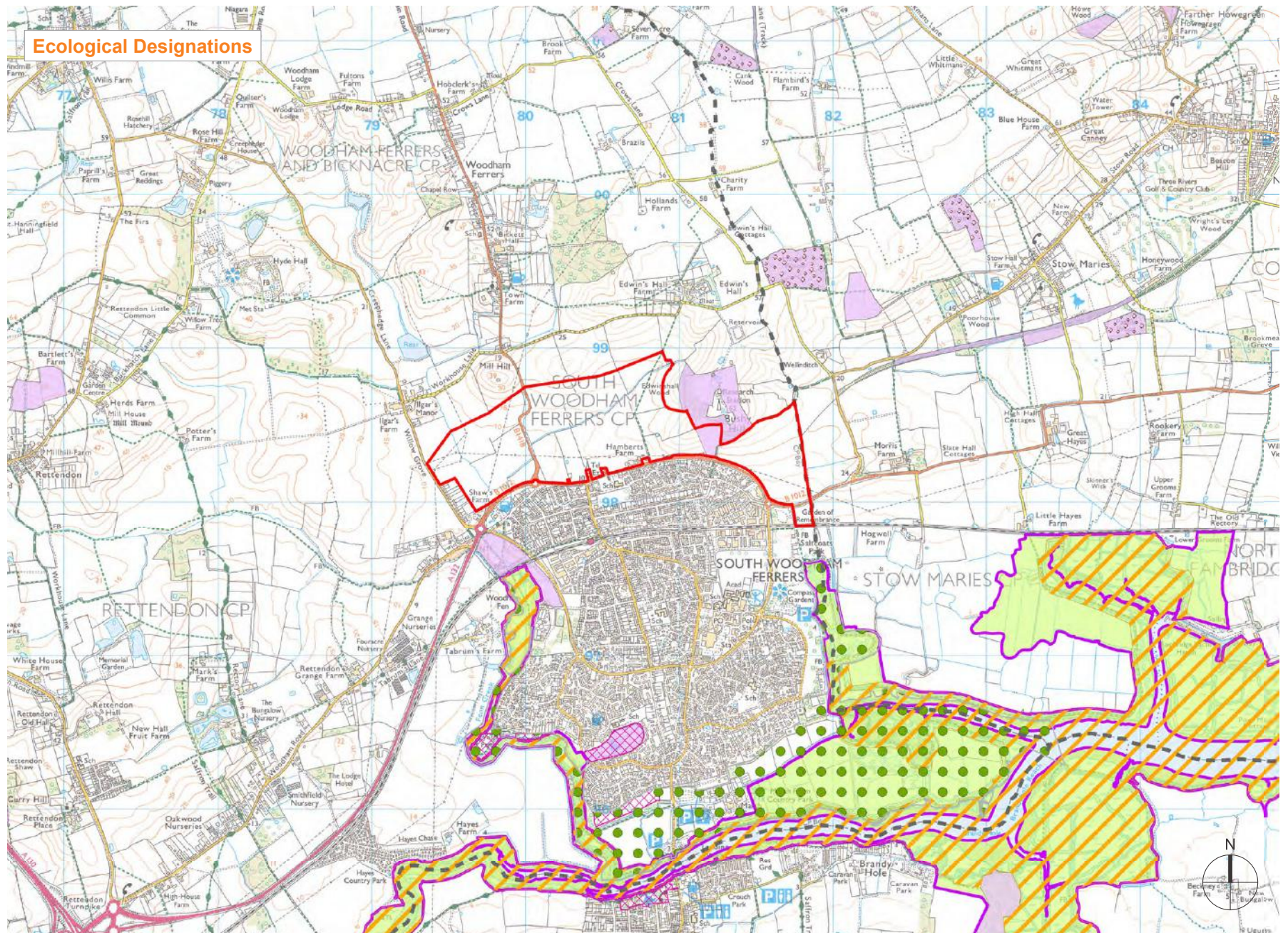
View towards the eastern boundary of the site and Bushy Hill

KEY

- Site
- District Boundary
- Local Wildlife Sites

Natural England

- Ancient Woodland
- Sites of Special Scientific Interests (SSSI) / Special Protection Areas (SPA) / RAMSAR Areas
- Local Nature Reserves
- Country Parks
- /// Special Area of Conservation



CONTEXT ANALYSIS

LANDSCAPE CHARACTER

The site lies within Chelmsford City Council F12 East Hanningfield Wooded Farmland Landscape Character Area (LCA) . This character area encompasses gently rolling/ undulating wooded farmland to the north of South Woodham Ferrers and south of Chelmsford.

Field boundaries are noted to be predominantly well stocked with mature trees, although it cites a presence of simple wooden post fences and evidence of boundary loss and hedgerow gapping. Whilst it describes a sense of enclosure associated with the network of treelined lanes and patches of mature deciduous/ mixed woodland, it does also note the presence of open views across the Crouch River valley (and drained estuarine marsh) that provide a sense of place, open and framed views to wooded horizons (including those within adjoining LCAs) and open views to the urban edges of South Woodham Ferrers. It further describes the sense of tranquillity as being disturbed to the south of the area by activity associated with South Woodham Ferrers and A130/A132 road corridors.

The lower lying land to the west, south and east of the town falls within the D9 Fambridge Drained Estuarine Marsh Landscape Character Area. The site and its immediate environs do not share characteristics of this LCA.

The character area is assessed as having a relatively high sensitivity to change.



View north from the B1012 looking toward Woodham Ferrers



Looking east over Bushy Hill and Edwinshall Wood



View east across the western edge of the site from Willow Grove

KEY

- Site
- District Boundary

National Landscape Character

© Natural England 2018

- National Character Area

Regional Landscape Character

© Essex County Council

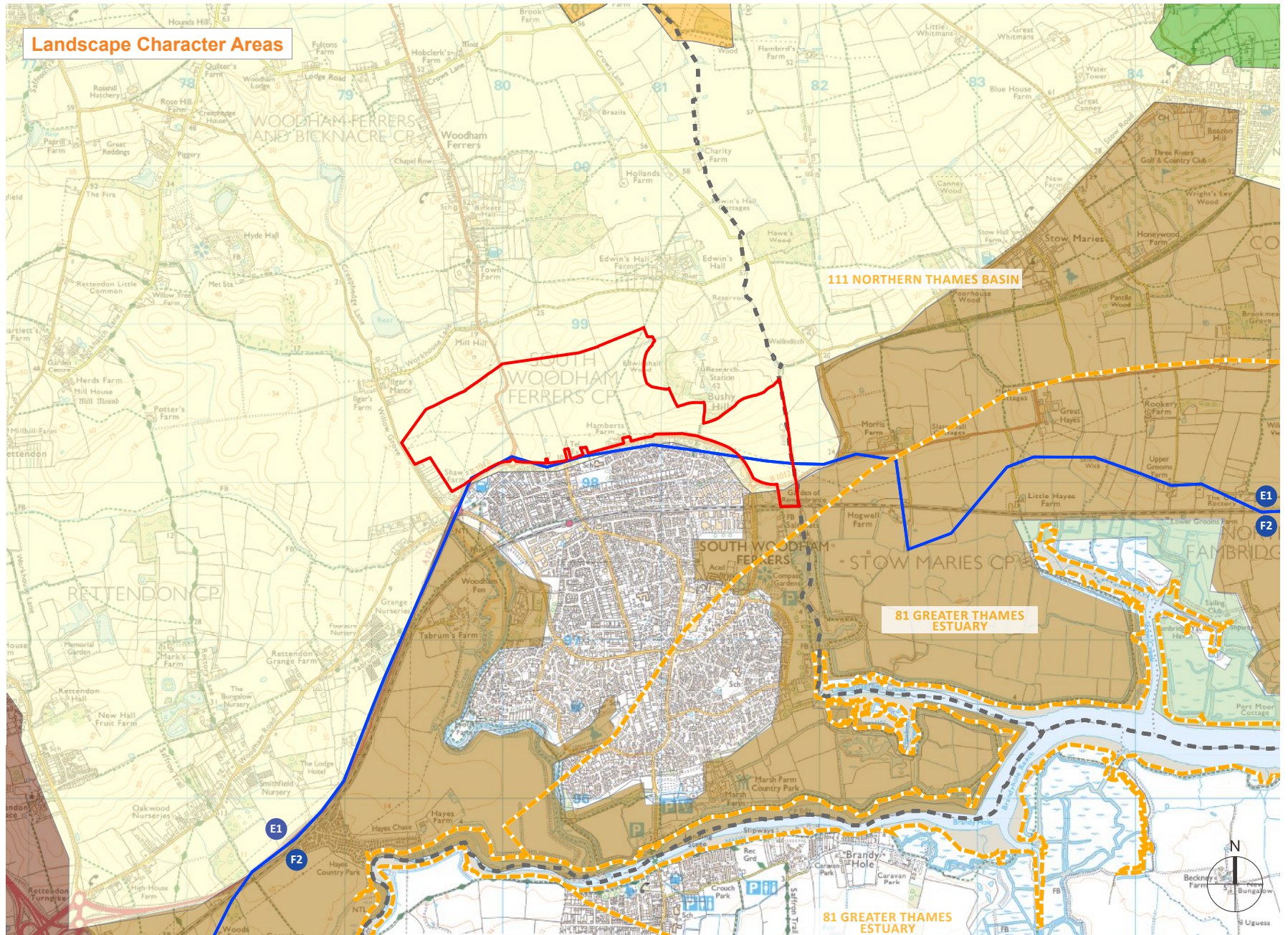
- E1 South Essex Farmlands

- F2 Crouch & Roach Farmlands

District Character Areas

© Chelmsford and Maldon Districts

- C4 - Fleet Estuarine Marsh / Mudflats
- D9 - Fambridge Drained Estuarine Marsh
- E2 - Tillingham and Latchingdon Coastal Farmland
- F6 - Woodham Wooded Farmland
- F11 - South Hanningfield Wooded Farmland
- F12 - East Hanningfield Wooded Farmland



SECTION 3

SITE ANALYSIS



The site appraisal undertaken has identified a number of key features which have informed the initial concept and masterplan for the site.



LAND NORTH OF
SOUTH WOODHAM
FERRERS
ESSEX

SITE ANALYSIS

LAND OWNERSHIP

The site is made up of four land ownerships.

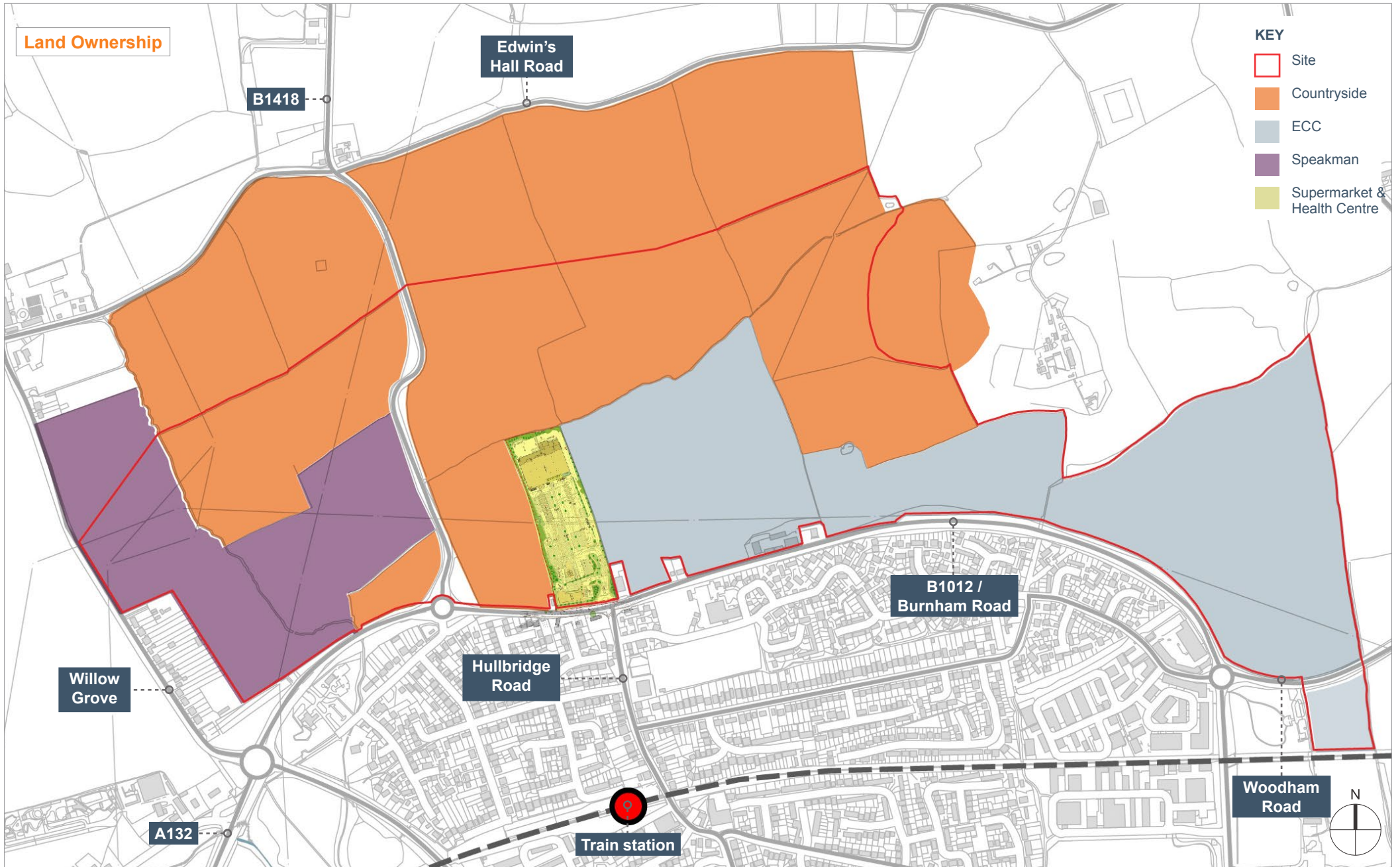
Land shown in orange on the plan opposite is under option with Countryside Properties, whilst land to the west of this (outlined in purple on the plan opposite) is under option with Bellway.

The land to the east and south-east, stretching to the eastern boundary of the site (shown in light blue on the plan opposite), is within Essex County Council's ownership.

During 2019, a new development was completed at the centre of the site (as identified on the plan opposite in yellow). This comprises a large new Sainsburys supermarket with associated petrol filling station, and the Crouch Vale medical centre. This is currently the only major development on the site.



Drainage ditch which forms the boundary between ECC and Countryside land.



SITE ANALYSIS

| ACCESS AND MOVEMENT

The southern boundary of the site is defined by the B1012 Burnham Road. This continues south-westwards, beyond the town, becoming the A132 and forming the main vehicular access route to and from South Woodham Ferrers. The B1012 continues east from the town along Woodham Road, either side of which the easternmost parts of the site are located.

The western boundary of the site is defined by Willow Grove, an unclassified local road that leads to Hyde Hall and East Hanningfield. Within the western part of the site, the B1418 leads northwards from Burnham Road towards Woodham Ferrers and Bicknacre.

The key vehicular route from the site into the town is Hullbridge Road, which leads directly to the railway station and then into the wider town.

A network of cycle routes exists within and around the town, generally on street but with some off road and bridleway routes. However dedicated cycle routes around the northern edge of the town, along Burnham Road or within the site, are currently absent.

There is a well-developed network of Public Rights of Way in the local area, with a pedestrian route around the southern side of the town through Marsh Farm Country Park. From the site, pedestrian and cycle linkages into South Woodham Ferrers can be made across Burnham Road south-westwards via Old Wickford Road, south towards the railway station via Hullbridge Road, south towards the town centre via Bridleway 46, and south towards Saltcoats Park via Ferrers Road.

There are two Public Rights of Way which cross the site. Footpath 24 runs north from Burnham Road adjoining Hamberts Farm toward Edwin's Hall, from which connections with the wider network can be made. Bridleway 46 provides access south to the town centre and links with bridleway 25 which runs east, skirting the south-eastern part of Bushy Hill, before joining Woodham Road.



Bridleway no.46 provides links into South Woodham Ferrers from the site



Public footpath 24 looking south from Edwin's Hall Road



SITE ANALYSIS

TOPOGRAPHY AND VIEWS

The site lies on the boundary of two landscape character areas, both defined by distinct landforms. One is rolling Essex farmland and the other is a low lying estuarine landscape. The site slopes down toward the town, with high ground along Edwin's Hall Road and around Mill Hill and Bushy Hill. It forms the backdrop to the town in some views from the south.

The topography of the Site is in two parts. The western and central areas west of Bushy Hill are relatively flat, dropping from around 18m AOD in the centre of the site to 8m AOD in the southwest corner. To the north and east of this area the land rises steeply, often more than 1:15, to the higher ground along Edwin's Hall Road and east to Bushy Hill. The top of Mill Hill is approximately 40m AOD, Bushy Hill and Edwin's Hall Road are both around 60m AOD. A valley formation and stream is evident through this central part of the site, rising in Edwinshall Wood and draining south westwards toward Fenn Creek.

The eastern part of the site falls from Bushy Hill towards Woodham Road at approximately 25m. Again gradients of over 1:15 are reached in places.

The series of viewpoints identified offer an overview of the views into the site and beyond from publicly accessible routes. The views are shown on the following two pages. A description of each is provided here:

View 1: This view is taken from the western boundary of the site and portrays the character of the land west of the B1418, showing a relatively flat landform with the constraints of the pylons. Glimpses of the site beyond are visible through the field boundaries.

View 2: The view is taken at the bottom of Mill Hill from the B1418 looking across the site with glimpsed views of South Woodham Ferrers beyond. It portrays the character of the site when approached from the north and the visual connection between the proposed site and the town.

View 3: A view from the north-east, approximately 300m from the site boundary, illustrates the character of the central part of the site, between Bushy Hill and the B1418. This view also emphasises the undulating landform and its role in screening the site.

View 4: An expansive view taken from the north-east corner approximately 250m from the site boundary portrays the context of the site. Bushy Hill on the left-hand-side and Mill Hill on the right frame the view, screening parts of the site beyond. The densely vegetated corridor along the route of the brook is clearly visible and crosses through the heart of the site. This view also shows the visual relationship of the site with South Woodham Ferrers.

Views 5 and 6: Views from Woodham Road east of the site portray the character of the eastern-most field within the site boundary. They show that the majority of the site is screened from eastern views by Bushy Hill, the only part visible is the eastern most field.

View 7: Taken from Crouch Estuary, this viewpoint represents the distant views of the site from the open landscape south-east of the site, due to distance, topography, and vegetation, only the eastern-most field is visible.

View 8: This view from the junction of Burnham Road with Woodham Road illustrates the limited visibility of the site along Burnham Road. In most locations, only glimpsed views are afforded through the existing vegetation.

View 9: This view looks across Burnham Road up Bridleway 46. From this location, either side of the bridleway, the site is screened from Burnham Road by the existing planting and topography.

View 10: This view looks across Burnham Road up Public Footpath 24, beside Hamberts Farm. Glimpsed views of the site are afforded through the existing vegetation.

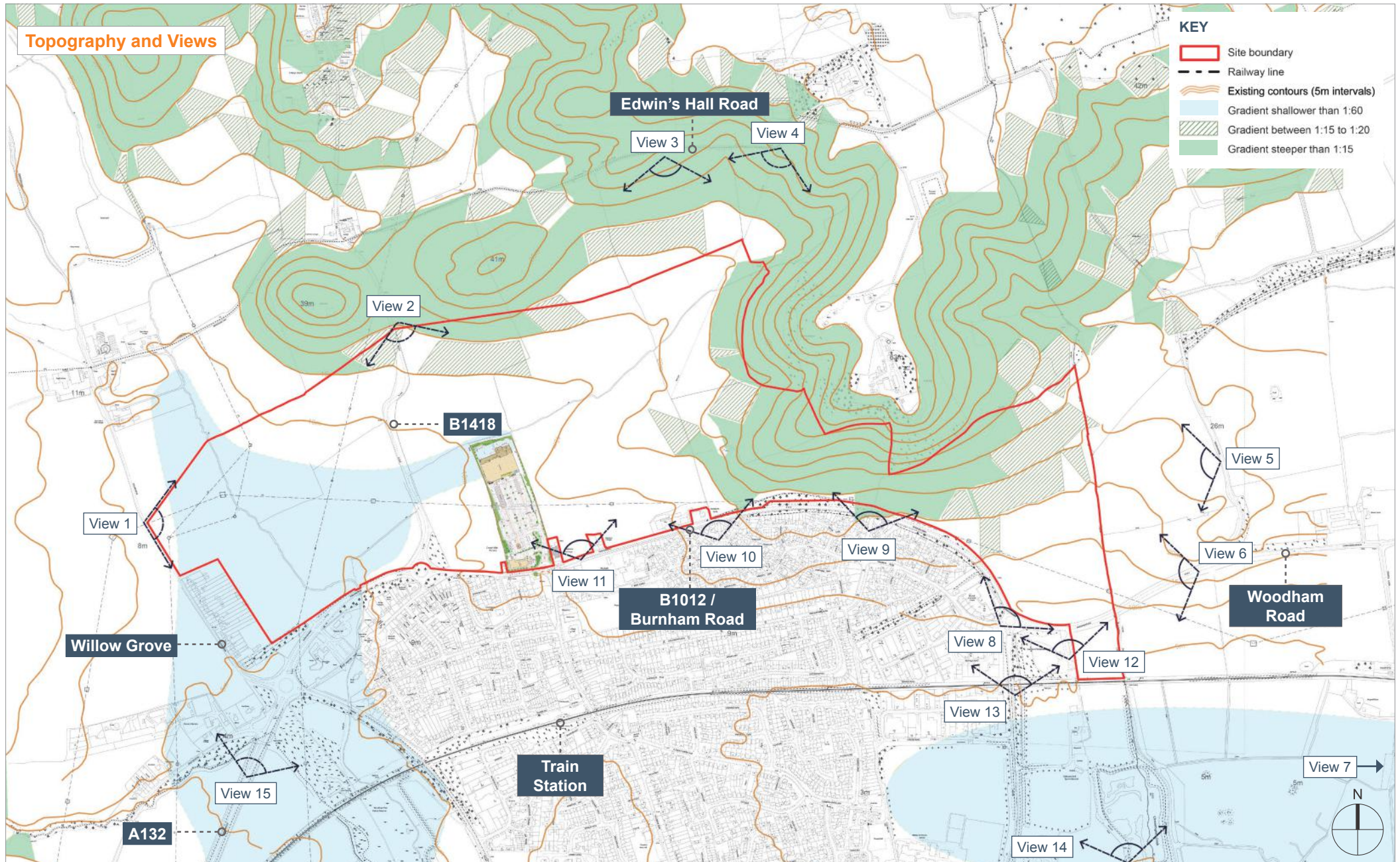
View 11: This view is taken approximately midway along Burnham Road and shows a wide opening in the field hedge and vegetation creating a rare opportunity for a long distance view across the site to the higher ground and countryside beyond. This visual connection makes this a key viewpoint.

View 12: This view shows the eastern part of the site from the Memorial Garden south of Woodham Road.

View 13: This view from the railway bridge on Ferrers Road shows part of the eastern most field, framed by existing trees along Ferrers Road.

View 14: This is a more distant view of the eastern part of the site from Compass Gardens.

View 15: This is a more distant view from Burnham Road to the south-west, with a glimpse of the higher ground to the north of the site above the tree line which screens the site itself.



SITE ANALYSIS



View 1: from the site's western boundary



View 2: from the B1418



View 3: from the north-east



View 4: from the north-east



View 5: from Woodham Road



View 6: from Woodham Road



View 7: from the Crouch Estuary



View 8: from Burnham Road



View 9: from Burnham Road



View 10: from Burnham Road



View 11: from Burnham Road



View 12: from the Memorial Garden south of Woodham Road



View 13: from Ferrers Road



View 14: from Compass Gardens



View 15: from Burnham Road

SITE ANALYSIS

| NATURAL ENVIRONMENT

The Bushy Hill Local Wildlife Site lies adjacent to the site on Bushy Hill, including Edwinshall Wood, an area of potentially ancient broadleaved woodland, and is protected by a Tree Preservation Order. The Local Wildlife Site extends southwards into part of the site to the north of Burnham Road, comprising an area of acid grassland, with a series of terraced slumps, important for scarce invertebrates.

The majority of the site is in arable agricultural use. The area around Mill Hill comprises an area of semi improved grassland. Within the remainder of the site there is a well-developed network of hedgerows, with a field pattern that is still recognisable in part from the 1881 Ordnance Survey map. Some lengths of hedgerow have been lost over time, occasionally marked by trees. Most hedgerows are predominantly comprised of Hawthorn and Blackthorn.

Two watercourses run through the site towards Fenn Creek, to the south-west. There is one pond on site, and one adjacent to the boundary. There are numerous ponds in the surrounding area, especially to the north and east of the site.

There are some good quality broadleaved trees within the site particularly along the central watercourse and the watercourse north of Shaw's Farm in the west of the site. A belt of relatively recent mixed planting is evident on the south edge of the site, associated with the construction of Burnham Road. Other trees are associated with field boundaries.

The hedgerows, watercourses, and field margins provide ecological connectivity through the site and into the wider landscape.

Ecological Surveys have been undertaken on site during 2017 and 2018 to identify the important habitat features. These features are identified on the plan opposite. Species found to be using the site include Reptiles, Bats, Breeding and wintering birds, Badger, and Great Crested Newt.



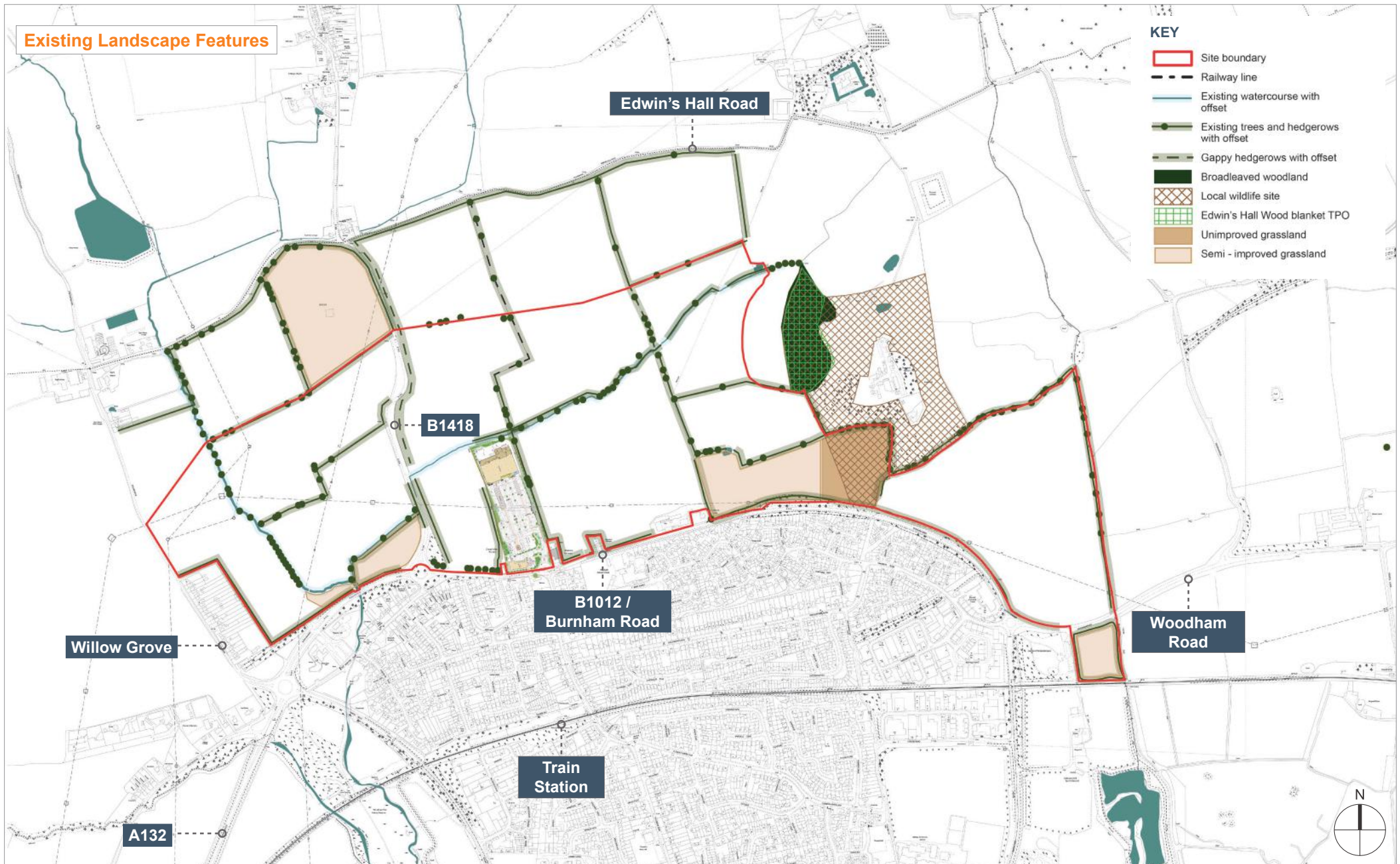
View west across site from the edge of Edwinshall Wood



Woodland margin along the edge of Edwinshall Wood



Mature trees within hedgerows and field margins



SITE ANALYSIS

| FLOODING AND SURFACE WATER DRAINAGE

The existing topography of the site falls in general from the east to the west with steep falls from approximately 50m AOD on the north eastern boundary to approximately 10m AOD at the B1418. The site to the west of the B1418 is relatively flat and low lying in comparison to the eastern side.

An ordinary watercourse crosses the site flowing from north east to south west through the site before passing below the B1418. This picks up a number of tributaries across the site before connecting into the watercourse which flows from north to south along the western section of the site.

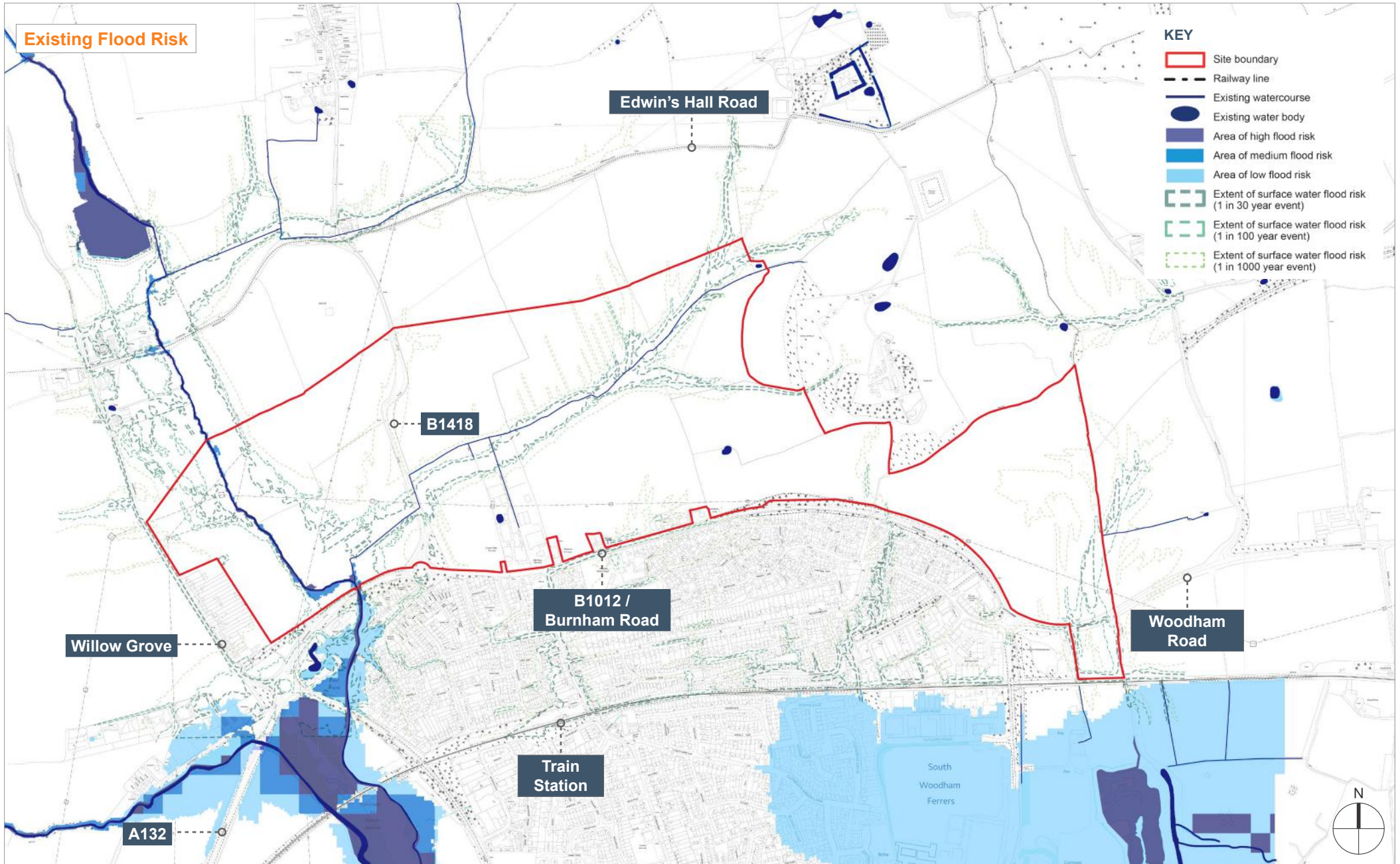
The Environment Agency (EA) Flood Maps for planning show the majority of the site falls within Flood Zone 1, which has a low probability of flooding. The site lies partially in Zone 2 (land having between a 1 in 100 and 1 in 1000 annual probability of river flooding) and Zone 3 (land having a 1 in 100 or greater annual probability of flooding) along the line of the watercourses in the south western section of the site.

The site is identified on the EA flood maps as being at risk from flooding from surface water. Discussions with the Lead Local Flood Authority have confirmed that the 1 in 1000 year surface water flood risk zone is not a constraint on proposed development. Development within the 1 in 100 or 1 in 30 year surface water flood risk zones will need careful consideration. Appropriate routing of overland flows will be included in the design to ensure surface water drainage is appropriately managed.

The site is not situated within a groundwater source protection zone and there are no abstraction points within 0.5km of the site.



Existing drainage ditch within site



SITE ANALYSIS

| UTILITIES

A number of utilities run across the site, both over ground and underground. The most notable utility crossing the site comprises the overhead power lines. These are 132kV and require a 30m stand-off in relation to residential use. The main overhead power line affecting the site runs in an east-west direction closely following the southern boundary onto Burnham Road. Further overhead power lines criss-cross the site on the western side. It is assumed that, at this stage in the design process, these overhead power lines will remain in place with the masterplan incorporating them into the overall design.

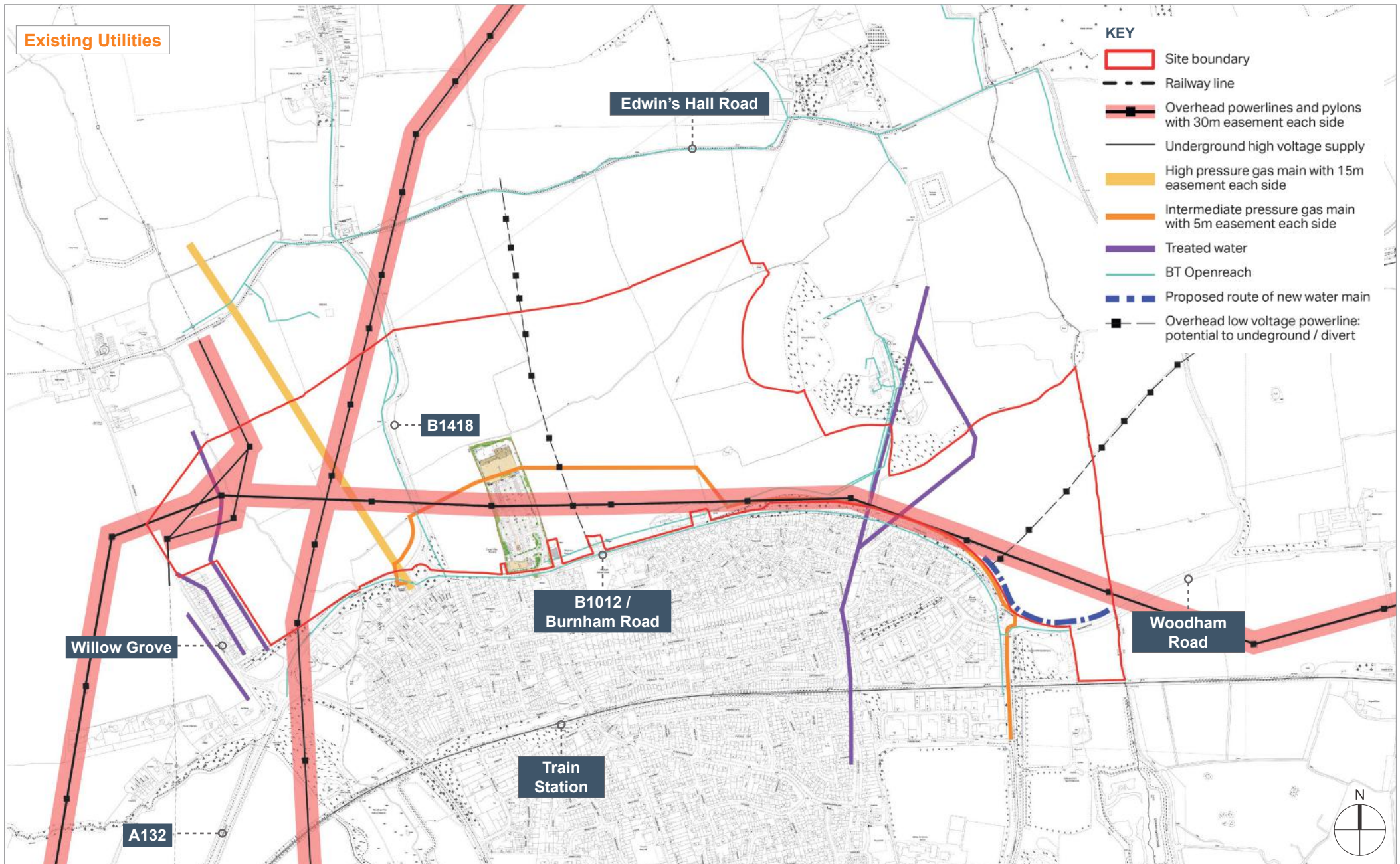
There are further low voltage power lines on the site, but these have been omitted as they can be placed underground.

A high pressure gas main runs underground in a south east – north west direction across the site. It originates from a point to the east of the junction between Old Wickford Road and Burnham Road. This has its own easement of 15m. An intermediate gas main, also originating from the same point, runs in an east-west direction across the site through the central areas. It crosses the new supermarket development site, just to the south of the new retail unit before heading back towards Burnham Road and then following the route alignment towards the south. Again, this has an easement of 5m.

Other utilities include a number of treated water and water distribution pipelines in the east and west of the site.

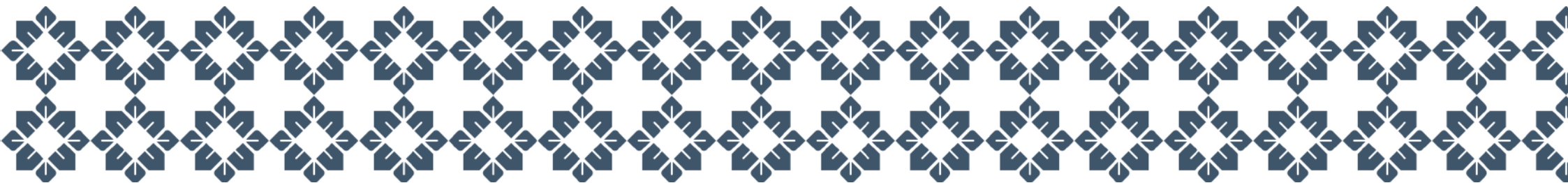


Overhead powerlines within the site



SECTION 4

THE VISION



This section describes the Vision for Land North of South Woodham Ferrers, identifying the key aims and objectives for the site



LAND NORTH OF
SOUTH WOODHAM
FERRERS
ESSEX

THE VISION

Land to the north of South Woodham Ferrers will become the next new chapter in the town's evolution and growth.

Our Vision is to create a high quality, sustainable and inclusive new neighbourhood that, once completed, will have the 'feel' and function of an integral part of the town, but with its own character and identity.

The new neighbourhood will sit within a **high quality and varied green infrastructure** framework that respects the existing landscape context



The new neighbourhood will be a **healthy place** that offers spaces for outdoor activity as well as quality walking and cycling routes both within the site and to the surrounding countryside



The new neighbourhood will be **fully integrated with the adjoining community** and well connected to key services and facilities in the town



The new neighbourhood will have a **strong sense of place and community**, focused around a central, accessible and mixed use local hub



The new neighbourhood will cater for a **cross section of society**, offering market and affordable housing as well as a location for travelling show people

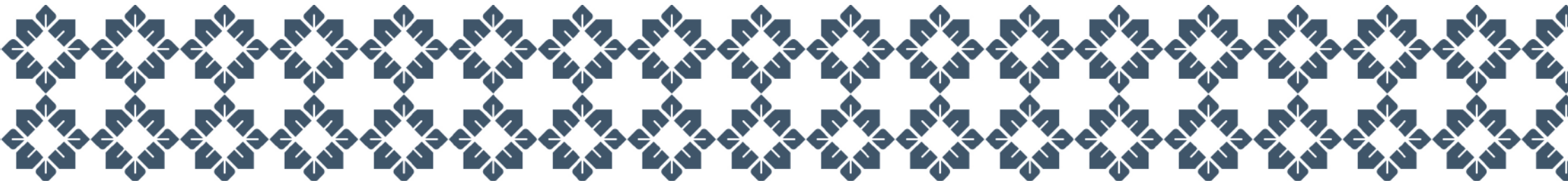


The new neighbourhood will be an **attractive and characterful** place and a new northern gateway into the town



SECTION 5

CREATING THE GREEN GRID



This section outlines the key strategies which together enable the creation of the 'Green Grid', the landscape led framework which provides the structure for the proposed masterplan



LAND NORTH OF
SOUTH WOODHAM
FERRERS
ESSEX

DRAINAGE STRATEGY

| DRAINAGE

In accordance with Planning Practice Guidance the proposed development will aim to keep more vulnerable development, such as residential, in areas identified as being within Flood Zone 1. Where development is adjacent to Flood Zone 2 and 3, appropriate checks will be undertaken to ensure that the development is at an appropriate level above the adjacent Flood Level and that safe access and egress can be achieved.

The site is also subjected to Pluvial/Surface Water Flooding Risk. The ordinary watercourse that crosses the site with a North-East to South-West direction has a total contributing catchment of approximately 170ha. The total area of the central area of development, to the east of the B1418 and to the west of Bushy Hill, is approximately 38ha, amounting to 22% in relation to the total ordinary watercourse catchment.

The drainage strategy is in accordance with the Essex County Council SUDS Design Guide and will manage rainfall at source by providing five attenuation ponds, mimicking the natural drainage regime and limiting discharge from the developed areas to the equivalent 1 in 1 year greenfield run off rate. This will significantly reduce the pluvial flows for the catchment and reduce the pluvial risk. The drainage strategy will mimic the natural flows for the site and attenuation features will be placed within existing pluvial flood risk areas, sized appropriately to manage pluvial flows.

To further protect the development and manage the pluvial flows, a network of swales around the boundary of the site will be provided to not only protect the site from overland flow but also to preserve the existing drainage regime. The swales will be of adequate capacity to convey the 1 in 100 years Greenfield Runoff including a 40% allowance for climate change.

The eastern part of the development, north of Woodham Road and to the south of Bushy Hill, is drained via 2 attenuation ponds, applying a source control approach. There are known local issues in this area which originate from a small catchment and where possible the development will seek to address these through the new SUDS scheme. Swales will not only provide protection from overland flow flooding the site but mimic the current drainage regime of the wider area.

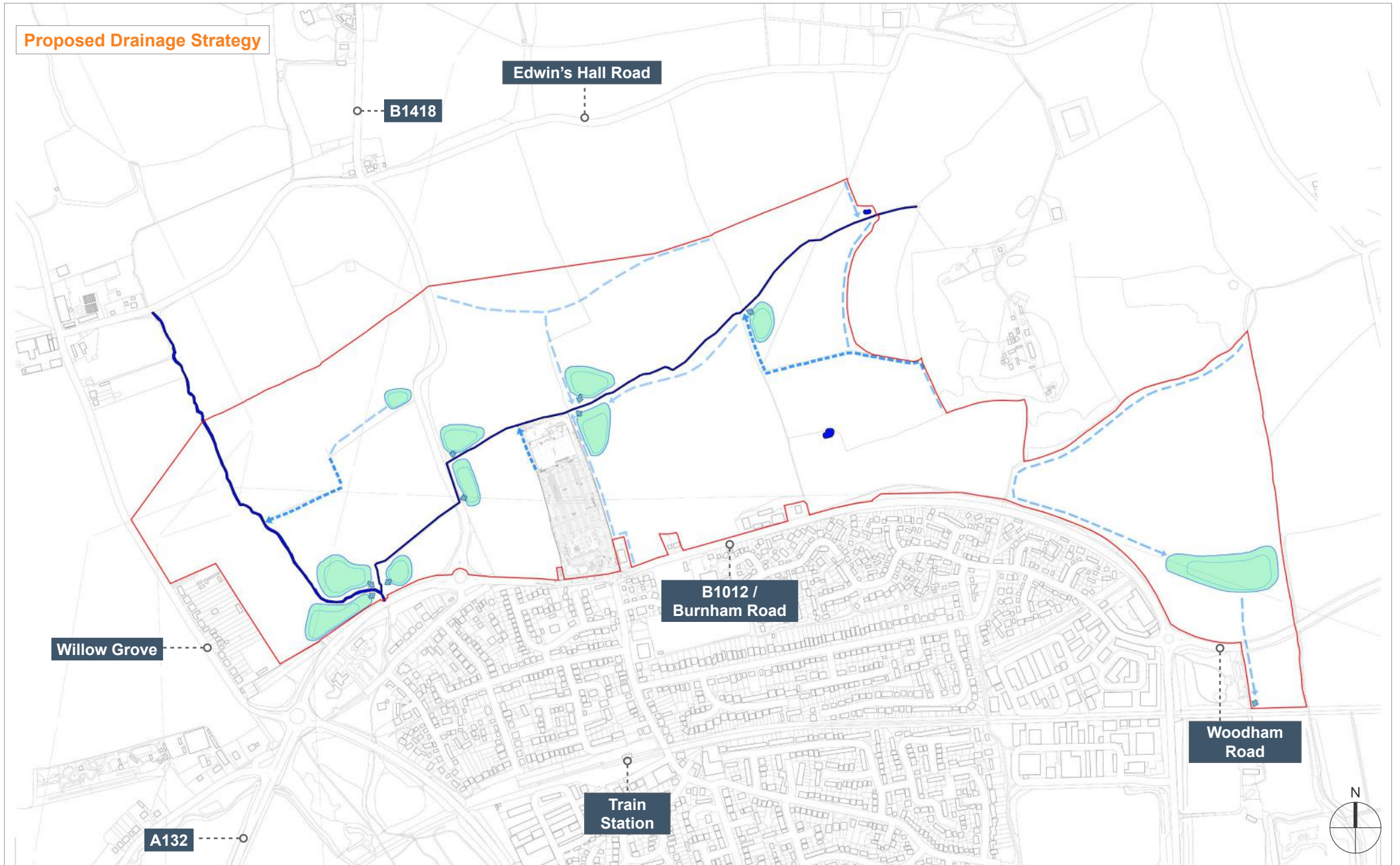
For the western part of the development, pertaining the plot west of the B1418, an attenuation pond is provided in accordance to the aforementioned design rationale, discharging to the existing ditch. Most of the contributing catchment to the existing ditch originates from the development land promoting betterment to the Pluvial Flooding issues downstream since the development will limit the discharge to the equivalent 1in1 year greenfield runoff.

In order to ensure no disruption to the current drainage regime and also to safeguard the development from overland flows, a series of swales is provided with the main watercourse as the ultimate receptor. The swales will be sized according to the contributing catchment ensuring their conveyance capacity. Furthermore, controls could be put in place to control velocities in the swales, promote sedimentation and attenuation if required in the detailed design stage.

The drainage strategy for the individual development parcels will include, where possible and applicable, permeable paving and open swales for the provision of highway drainage to promote attenuation and treatment.

Through the implementation of the new drainage system, flows of water into the existing system will be slowed which could see an improvement on the existing drainage.





ECOLOGY STRATEGY

ECOLOGY

Ecological Surveys undertaken on site in 2017 and 2018 identified the Bushy Hill Local Wildlife Site, grasslands, ponds, watercourse, and hedgerow and tree habitats as important for foraging and roosting bats, Great Crested Newt, reptiles, foraging and breeding birds, and Badger.

The intrinsic value that habitats including mature trees, ditches, hedgerows and ponds have with regards to biodiversity has been key in the design of the masterplan with a focus on a living landscape that benefits all. As such, habitats of importance will be retained, protected and enhanced within the scheme to provide improved habitat for protected species in the long term.

The existing stream, mature trees and hedgerows are retained and a grassland buffer will be established along ditches and hedgerows to improve the quality of the habitat provided there for invertebrates, reptiles, amphibians and foraging bats.

Although some existing grassland will be lost as a result of the development, additional acidic grassland and wildflower rich meadows areas will be created around the Bushy Hill Local Wildlife Site to enhance the wildlife habitat. This site will be further enhanced with the creation of new ponds, providing additional breeding habitat for Great Crested Newts, reptiles, and breeding and wintering birds and the replanting of gappy hedgerows to provide multi-functional wildlife corridors for mammals, amphibians and reptiles.

The drainage strategy has been designed to complement existing ecological features to provide a Blue / Green corridor through the site and to ensure habitat connectivity between these features for protected species and providing a multifunctional open space for residents and wildlife, thus reducing recreational pressure on local designated sites. In addition, an increase in ponds will provide a net gain in breeding habitat locally available to Great Crested Newts.

The site will be designed to provide at least 10% biodiversity net gain, which will be detailed and secured through future planning applications. A lasting management regime will be established to ensure that the habitats are maintained in optimum condition for protected species. The grassland areas will be managed as wildflower meadows with scrub patches, providing habitats that are in decline within the existing agricultural landscape. At least one new tree will be planted for every new resident.



View east across site towards Edwinshall Wood



View west across site from the edge of Edwinshall Wood

-  Site boundary
-  Existing watercourse
-  Existing water body
-  Existing trees
-  Existing hedgerow
-  Existing local wildlife site
-  Grassland habitat
-  Proposed new hedgerow
-  Proposed SUDS feature
-  Stream corridor habitat



LANDSCAPE STRATEGY

LANDSCAPE

Parkland arc

The site forms part of the missing link in the arc of parkland and public space around the town. A band of publicly accessible space and/or routes around the site's northern edge would complete the parkland ring.

Areas of local importance in the landscape

The parkland arc would link the four areas of particular local importance in the landscape; namely Fenn Creek, Mill Hill, Bushy Hill and Saltcoats Park. Of these areas Mill Hill, Bushy Hill and the connecting ridgeline are visually significant. Key views of these areas from the edge of the town and the surrounding landscape should be protected and enhanced.

The northern edge of the site was the subject of much analysis in the Northern Boundary Study submitted in determining the extent of the allocation. It is recognised that the form of development proposed and the open spaces created must be sympathetic to this sensitive edge. Building heights would be restricted so as not to be visible over the ridgeline to the north.

The eastern edge of the site is also visually sensitive and will form part of the new gateway into the town. The field boundary is straight so care must be taken to create a sinuous edge to the built form, stepping back in places and punctuated with small open spaces and tree planting.

The Bushy Hill Local Wildlife Site (LWS) forms the green heart to the site. There are opportunities to create pedestrian and cycle links through its lower parts to connect the two parts of the site. This must be carefully done to avoid compromising the LWS.

Central green spine

The central water course and treeline forms a strong green spine running through the centre of the site. Similarly, the western watercourse would be retained as the backbone of a strong green infrastructure network. Both retained spines would be enhanced with links to other interconnected open spaces, forming a green infrastructure network that permeates the site. Open spaces would be multi-functional, incorporating amenity space, opportunities for play, SUDS and water management, and biodiversity benefits where possible.

Landscape routes

The proposed landscape routes between the existing town / new development and the wider countryside are formed around existing Public Rights of Way or as connections between areas of particular importance in the landscape, for example the link between Burnham Road and Mill Hill.

North-western edge

The large area of flat ground to the north west of the site near Ilgars Manor contains fewer field boundaries and would be suitable for the provision of formal sports facilities, including the potential relocation of the rugby club. This use forms a soft buffer to the Ilgars Farm complex and a gentle transition to the open countryside beyond. Any pitches here would be unlit.

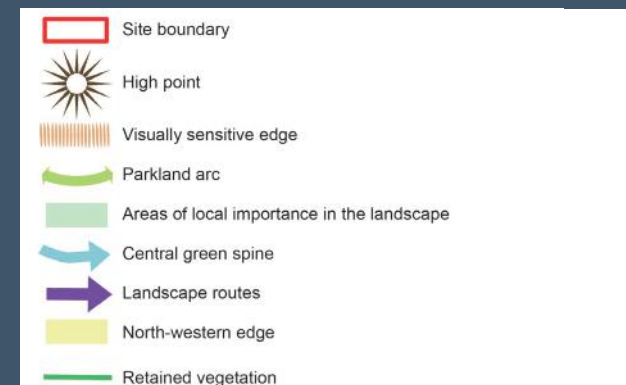
Retained vegetation

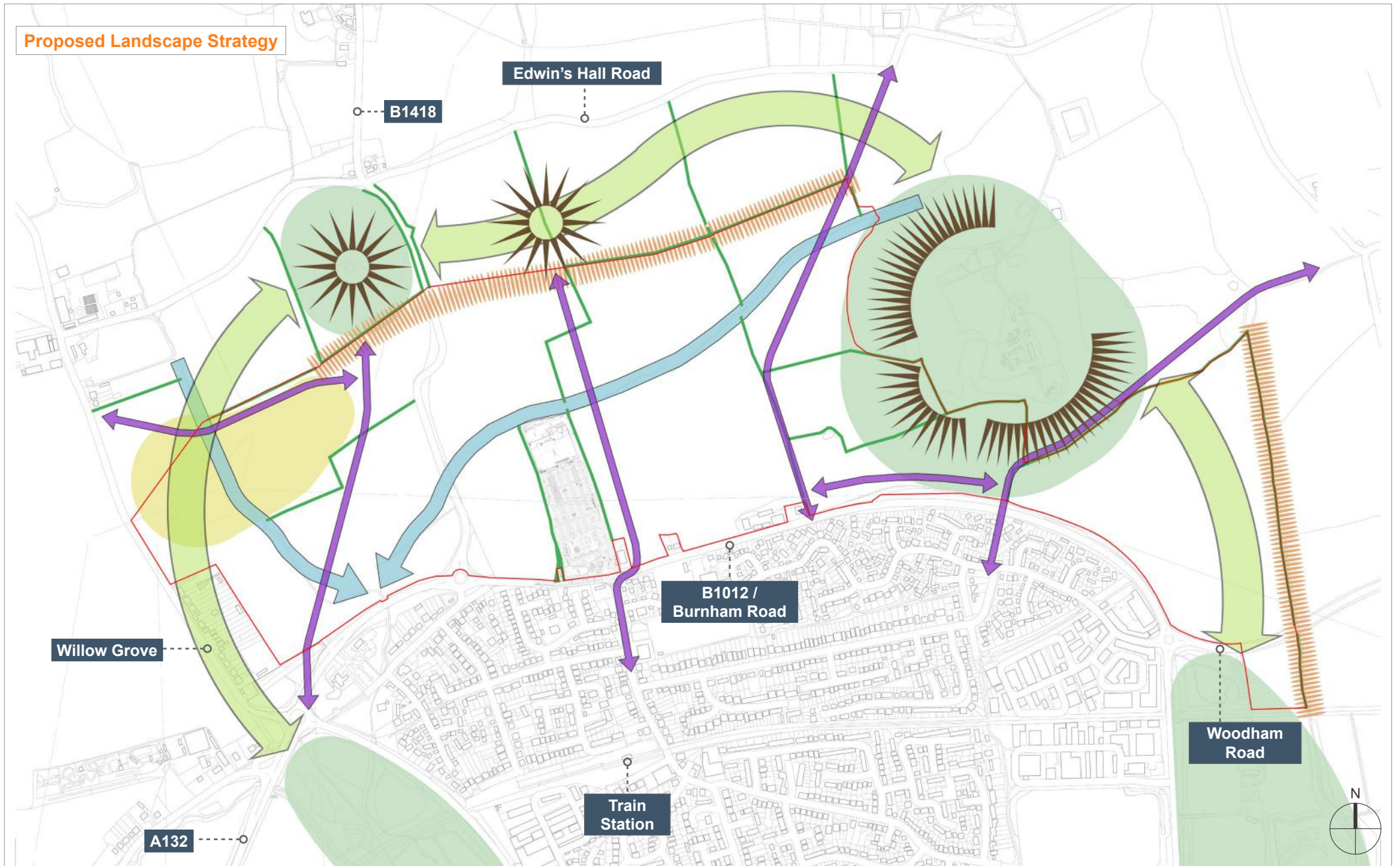
The majority of the existing trees and hedgerows would be retained and incorporated into the wider green infrastructure network. Particularly good quality trees identified in the arboricultural survey would be celebrated as the focal points of open spaces, on key views or as features in their own right.

Public rights of way

The existing public rights of way (PROW) network within the site would be retained, and enhanced with links to the wider network and within the site, for example connecting the western and eastern parts of the site through the LWS.

A Habitat Regulations Assessment (HRA) identified a potential increase in recreational pressure on the nearby Crouch and Roach Estuaries (SPA, SAC, Ramsar). Discussions have taken place with Natural England on the HRA and the provision of wider access to the countryside. Potential additional routes for improved access could link to the high ground at Mill Hill to the west, through the site to the west, and to Edwin's Hall Lane and nearby PROW to the north. Access will be provided throughout the site to allow links to the wider PROW network. These HRA routes fall outside the allocation and would be grassed paths on field edges. By creating suitable routes for walkers on the northern side of the site, the pressure for recreational walking on the more sensitive routes around the estuary can be reduced.





PEDESTRIAN AND CYCLE DESIRE ROUTES

| DESIRE ROUTES

Walking and cycling are the priority forms of travel within the development. The pedestrian and cycle access strategy described here has been developed in consultation with Chelmsford City Council. Discussions with Essex County Council Highways officers are ongoing in regard to the nature of use of existing public rights of way, their surfacing and integration into the proposed wider footpath and cycleway network.

Crossing points

A key element within the Pedestrian and Cycle Strategy has been the identification of crossing points across major roads, in particular Burnham Road. These are vital for the creation of pedestrian and cycle linkages from South Woodham Ferrers into and through the site.

These crossing points are shown on the diagram opposite, and proposals for each location are described in greater detail within Section 5 of this document.

Key pedestrian and cycle routes

The diagram also identifies key pedestrian and pedestrian/cycle desire routes within the site, showing how these integrate with existing pedestrian / cycle corridors within South Woodham Ferrers and existing public rights of way through the site.

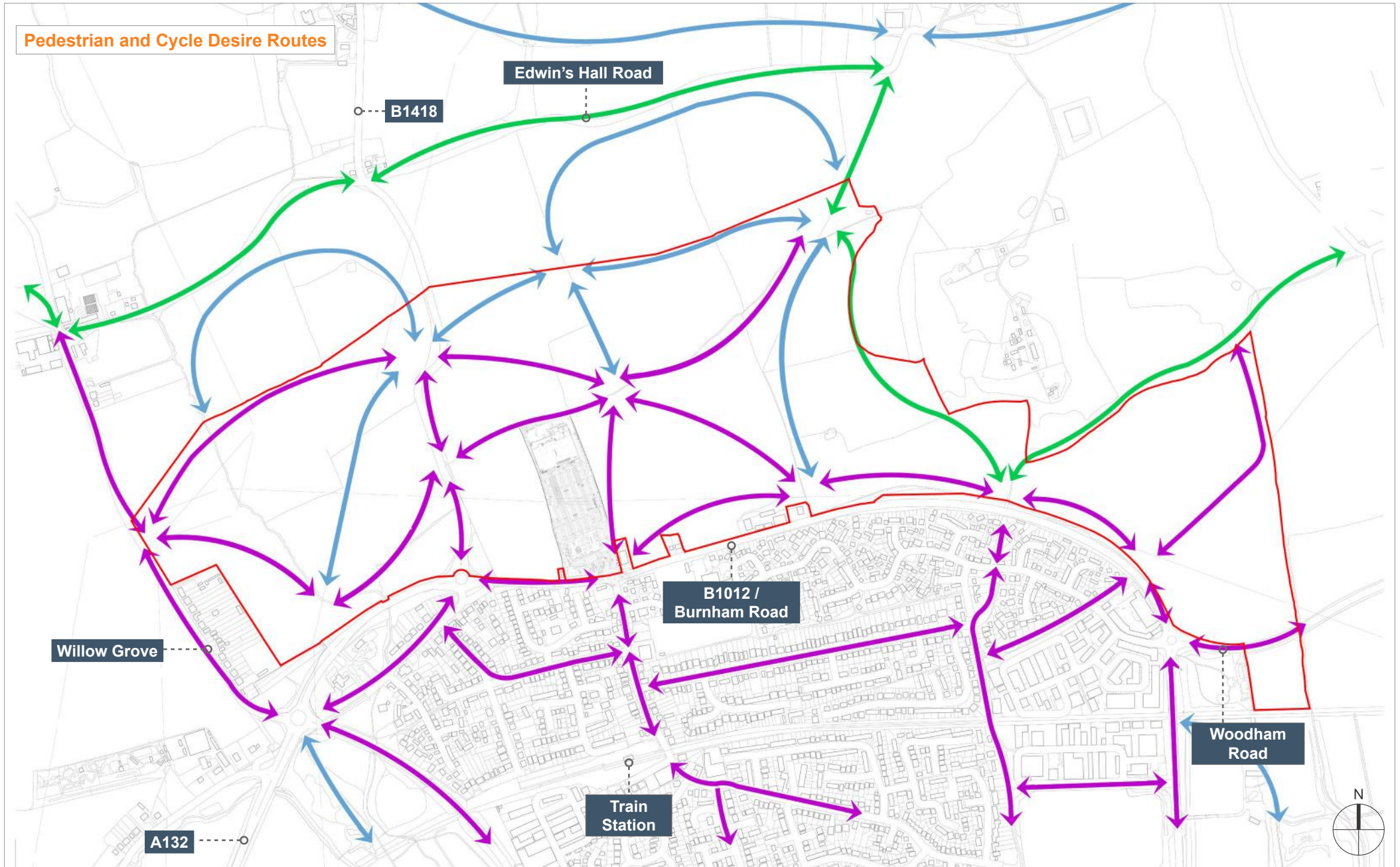
Creating links to public rights of way beyond the site is also a key consideration. In particular, the following routes have been taken into account:

- The network of public footpaths to the north of the site connected by Footpath 24 running through the site;
- Public Bridleway 25, continuing eastwards as Bridleway 17 towards Stow Maries;
- The potential for establishing a new route along the alignment of the former railway line to Maldon, linking via Bridleway 17 with existing Bridleway 24 which follows the former railway line to the east of the site;
- The opportunity to create a pedestrian, cycle and bridleway link partially through the site to provide access from Bridleway 25 towards Bridleway 21 which runs west from Ilgars Manor towards RHS Hyde Hall.

Provision of these routes will enable convenient non-vehicular access to key amenities and destinations within the town, together with increased recreational opportunities within the site and improved linkages to the existing network of public rights of way beyond the site.

The Pedestrian and Cycle Strategy also identified a number of proposed improvements to the existing pedestrian / cycle corridors within South Woodham Ferrers.





THE GREEN GRID

| GREEN GRID

The 'Green Grid' constitutes the spatial framework for the proposed masterplan, providing a comprehensive landscape led structure within which the proposed uses can be distributed.

The 'Green Grid' is generated by combining the strategies for drainage, ecology and landscape, also taking into account the constraints imposed by the various utilities that run through the site, in particular the overhead power lines. The edges of the corridors created by the utility easements will be softened to avoid overly straight linear open spaces.

The 'Green Grid' can be understood as comprising a number of interlinked elements:

Higher Ground

The higher ground including Bushy Hill and the rising land and prominent hilltops to the north, much of which lies beyond the site boundary, establishing the northern edge to the masterplan and providing a landscaped setting of strong character to the masterplan as a whole.

Stream Corridor

The corridor alongside the central tree lined watercourse, creating a strong green spine through the main part of the site, with ecological enhancements and integrating many of the proposed SUDS features

North / South Corridors

These three corridors cross the main part of the site roughly perpendicular to the central stream corridor. The alignment of each corridor is generated by a combination of existing site features and potential opportunities:

The central corridor runs between the Burnham Road / Hullbridge Road junction and the central hilltop to the north of the site. This alignment retains and reinforces the existing visual connection across the site from Hullbridge Road and Burnham Road, and also provides an extension through the site of the existing movement corridor along Hullbridge Road, linking the heart of the new development with the railway station and the heart of the town.

The western corridor runs from the Burnham Road / Willow Grove / Ferraers Road junction towards the western hilltop. This provides the opportunity to create a visual link through the site focused on the hilltop, incorporating pedestrian and cycle access. It also enables the retention of the existing overhead power lines, by following their alignment.








The eastern corridor is aligned on the existing Footpath 24 and the retained hedgerow alongside, creating a further visual and movement connection through the site aligned to important existing site features.

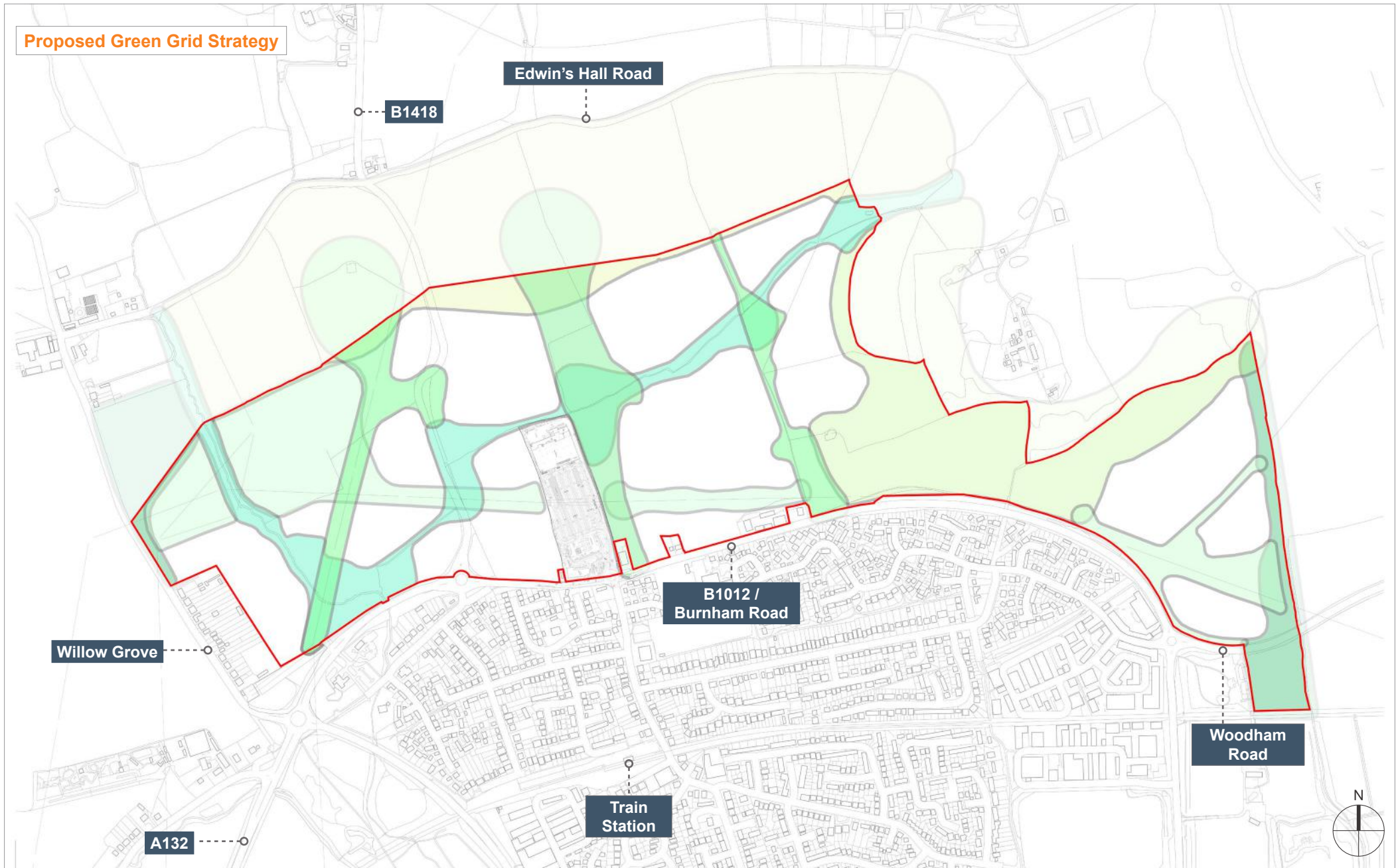
East / West Corridor

This corridor runs intermittently from east to west across the whole site, providing further connectivity across the site parallel to Burnham Road. It also enables the retention of the existing overhead power lines, by following their alignment. This corridor will be meadow and grassland with occasional tree planting where utility constraints allow.

Eastern and Western Edges

These areas define the eastern and western edges of the masterplan. Their landscaped character will respond to their location on the edges of the masterplan and the creation of appropriate relationships with the wider landscape.

-  Site boundary
-  Higher ground around Bushy Hill
-  Higher ground to the north
-  Stream corridor
-  North / south corridors
-  East / west corridor
-  Eastern and western edges



THE GREEN CIRCLE

| GREEN CIRCLE

The Masterplan will make a significant contribution towards the establishment of a 'Green Circle' of interlinked landscaped spaces and routes all around South Woodham Ferrers:

Existing landscaped areas to the south of the site

Fenn Creek, Marsh Farm, Compass Park, Saltcoats Park, Memorial Garden. Adjoining current edges of the town to the west, south and east. Accessible from the town and providing a recreational pedestrian route around the edge of the town.

Radar Hill

Radar Hill (more accurately called Bushy Hill) is prominent visually as a tree lined backdrop to the town. Its lower slopes are located within the site. Other than Bridleway 25 running along its southern edge, it is not currently accessible for public access.

Additional tree planting within the site around the base of Radar Hill will be incorporated, together with enhancements to existing grassland areas. A new recreational route within the site around the western edge of the hill will provide a link between Bridleway 25 and Footpath 24, leading north-eastwards from the site into the surrounding countryside.

Mill Hill

Mill Hill, located adjoining the site to the west of the B1418, is another prominent high point to the north. It is not currently accessible for public access.

On the southern slope of Mill Hill, the existing grassland will be enhanced, with new tree planting creating a form of community woodland on its northern slope. A new permissive pedestrian route will enable public access from the site to the summit, enabling enjoyment of the extensive views available over the town and across the wider Crouch Estuary. An information board could be provided here.

Northern boundary

Where the site's northern boundary is defined by existing hedgerows, these will be retained and enhanced. New buffer planting will be provided elsewhere along this boundary.

The lower north-western part of the site will be excluded from development, with this area incorporating landscaping and formal recreation provision.

New routes will be established along the site's northern boundary to enable public access along this entire edge.

Stream corridor

The existing stream corridor through the centre of the site will be enhanced, with pedestrian and cycle routes enabling access from east to west within the site as well as along its northern edge.

Community open space and Hullbridge Hill

Within the centre of the site, a landscaped corridor will provide a visual and accessible link between Hullbridge Road and 'Hullbridge Hill', located adjoining the site to the north. Within the northern part of this corridor, a community open space will be located, potentially incorporating an informal kickabout area, amenity space with seating and outdoor exercise equipment. A permissive route can also be established east between Hullbridge Hill and Footpath 24.

Eastern boundary and allotments

The establishment of a landscaped buffer along the site's eastern boundary, together with the provision of pedestrian and cycle routes within the site, will enable connection between Radar Hill and Woodham Road.

To the south of Woodham Road, new allotments provision will reinforce the landscape-led character established by the existing parks and gardens here.

-  Landscape buffer
-  Community Open Space
-  Grassland
-  Sports Facilities
-  Stream Corridor
-  New Woodland Planting
-  Allotments
-  Radar Hill
-  Existing woodland
-  Existing landscaped area
-  High ground with view south to the River Crouch
-  Proposed green links
-  Existing green links
-  Developable Area



SECTION 6

CREATING THE FRAMEWORK MASTERPLAN



This section describes the proposed distribution of community and recreational facilities, land uses and development areas within the framework established by the 'Green Grid'



LAND NORTH OF
SOUTH WOODHAM
FERRERS
ESSEX

OPEN SPACE PROVISION

| OPEN SPACE

Despite the various constraints within the site there is scope to provide a well-connected network of multi-functional open spaces and formal provision whilst maintaining the sensitive northern boundary. The open space requirement for the masterplan site sets out a minimum of 5.88 ha for the allocation of 1,000 units.

The precise arrangement of open spaces is to be determined but the general distribution is shown opposite. This will be refined in tandem with the development of the masterplan. This will include the location and arrangement of the formal sports facilities.

Current standards require 4 ha of formal recreation for the allocation of 1,000 units. The large area of flat ground to the north west of the site near Ilgars Manor would be suitable for the provision of the formal playing facilities. This would form a soft buffer to the Ilgars Farm complex and a gentle transition to the open countryside beyond.

The full extent of this area as identified on the diagram opposite measures 12.7 hectares, within which an area of 6.2 hectares is unconstrained for formal recreational use by existing features such as overhead power lines or the stream.

Play spaces would be distributed around the site to give good walkable access to users of all ages. The quantum of space proposed and the content of the play spaces will be compliant with the requirements of the relevant planning policies. Play facilities would be grouped, and form part of larger multi-functional open spaces. Natural play will be encouraged, and the use of natural materials favoured. Opportunities for informal play throughout the site will be maximised, including play trails and trim trails.



Precedent examples of play spaces



-  Site boundary
-  Formal recreation - full extent
-  Formal recreation - unconstrained land
-  Childrens' and Teenagers' play facilities
-  Childrens' play facilities
-  Allotments



FORMAL RECREATION FACILITIES

LOCATION OPTIONS

The location of the formal recreation facilities within the masterplan has been the subject of extensive analysis. Three potential locations were considered, and a proposed location has been determined.

Key location principles

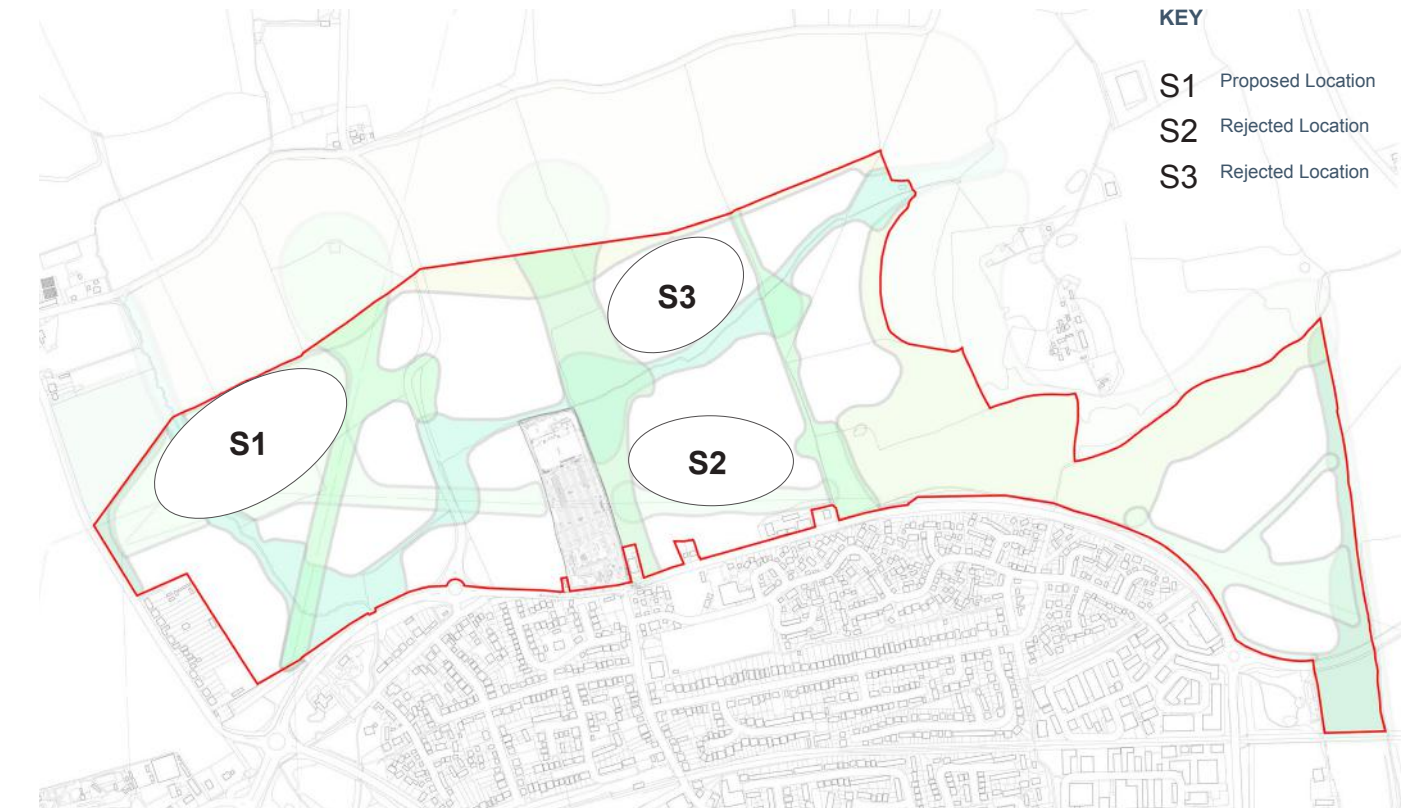
In considering potential locations for the formal recreation facilities, key principles were identified:

- Sufficient land area not constrained by existing site features such as overhead powerlines;
- Land with flat or relatively flat topography;
- Single contiguous location preferred to facilitate efficient management and avoid unnecessary duplication of associated facilities;
- Ease of access and potential for early delivery;
- Does not compromise the wider masterplan.

Area S1 - Proposed location

This location is the only area within the site which satisfies the key location principles identified above.

It provides a single contiguous area with sufficient unconstrained land to meet policy requirements, incorporating some of the flattest land within the site. Accessibility is good, and the location close to the new B1418 junction would potentially enable early delivery. Its location adjoining key pedestrian / cycle desire routes would enable safe and convenient connectivity to the wider site. Connection over the stream can be made via a footbridge.



Area S2

This area was rejected primarily because of the resulting impact on the wider masterplan.

This area is envisaged as the focal heart of the masterplan, with a local centre, primary school, and associated new homes together creating a strong sense of place and identity within the masterplan as a whole. Locating the formal recreation facilities here would prevent the creation of a focal heart in this central location, with its great connectivity to the existing settlement and its proximity to the supermarket and health centre development immediately to the west.

Area S3

This area was rejected because, due to its topography, it is unable to provide sufficient land area in a single contiguous location.

The topography in this area increases in gradient northwards. The flatter land in the southern part of this area is not of a sufficient size to accommodate the full requirement for formal recreational provision in a single contiguous location.

The location of this area away from Burnham Road or the B1418 would also prevent early delivery.

PROPOSED LOCATION

The diagram here analyses the proposed location for formal recreation facilities in greater detail.

The full extent of this area (within the orange dashed line) measures 12.7 hectares. Combining the two areas within the yellow dashed lines creates an area of 6.2 hectares, within which sports pitches can be laid out in an unconstrained way according to more detailed requirements. Current standards require 4 hectares of formal recreation for the allocation of 1,000 units.

The extent of the unconstrained land has taken into account existing man-made constraints such as the overhead power lines and existing natural features such as the stream. The high pressure gas main and associated easement running roughly north to south through this area is not considered a constraint on formal sports pitch provision, albeit that homes would not be able to be located within 30m of the power lines.

This area can be conveniently accessed from the B1418 via a new junction, with pavilion / changing facilities and associated car parking provided within the eastern part of the area.

It is envisaged that a new pedestrian and cycle link is to be constructed across the existing stream; as well as linking the two areas of unconstrained formal recreation, this link will also form part of the wider pedestrian / cycle route network within and beyond the site, connecting the wider site with wider recreational routes to the north-west such as Bridleway 21 towards RHS Hyde Hall.



DEVELOPMENT AREAS AND LAND USE

| DEVELOPMENT AREAS AND LAND USE

The diagram opposite identifies the potential development areas within the site.

The majority of the development areas within the masterplan are proposed for residential use, incorporating a wide range of dwelling types and tenures across the site as a whole, including self build and specialist residential accommodation.

To enable the creation of a balanced new community, a number of non-residential uses are also proposed within the masterplan. These uses are summarised here.

Potential options for their location are considered later within this document. The preferred locations for these non-residential uses are shown on the proposed framework masterplan.

The extent of potential development areas shown are of sufficient capacity to accommodate all policy requirements.

The extent of potential residential development has taken into account the required offsets in relation to the overhead power lines; no homes are proposed within a 30m easement zone each side of the power lines.

Local Centre

The Local Centre is envisaged as creating a central focus for the new community. It is envisaged that the significant retail and health facility provision currently under construction on the former Crouch Vale Nursery site will provide these specific functions in relation to the proposed new community. However the Local Centre is likely to incorporate complementary services from the tertiary sector (for example a hairdressers) and community uses such as a nursery or community hall / focal building.

Primary School

The masterplan incorporates land for a new primary school, to be delivered by the local education authority, likely to be co-located with an early years and childcare nursery.

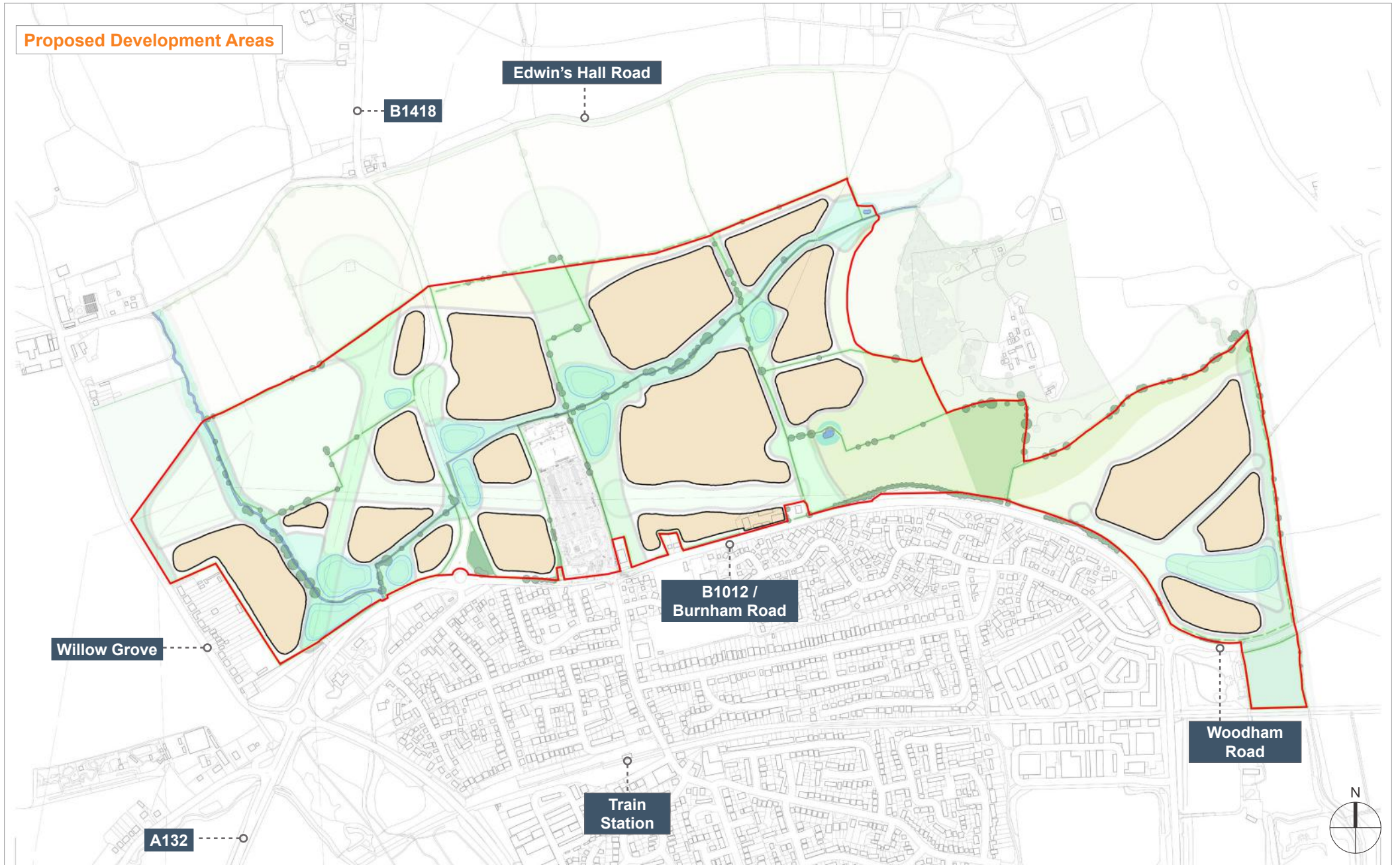
Mixed Use and Employment

Provision of 1000 sqm of business floorspace, which could include a range of unit sizes and types, within a range of use classes, forms part of the proposals. A second early years and childcare nursery is likely to be located within this area, as well as small scale convenience retail to serve this area within the site.

Travelling Showpeople

Emerging policy requires the provision of five serviced plots for travelling showpeople within the masterplan. A key requirement for this is convenient vehicular access from a main road, avoiding lengthy routes within the site.





ACCESS AND MOVEMENT

| ACCESS AND MOVEMENT

Pedestrian and cycle links

Provision for walking and cycling within and to and from the site is a priority. The site can be satisfactorily connected on foot and by cycle to the main facilities within South Woodham Ferrers, including local schools, the railway station, the shopping and employment areas. More details of these connections are shown on page 71.

Integrating the proposed development into the existing settlement is essential. Providing appropriate crossing facilities to Burnham Road and improving the environment for pedestrians and cyclists by reducing vehicle speeds will therefore be important. More details of these crossing facilities are shown on pages 72 and 73. All parties agree that reducing the speed limit on Burnham Road to a maximum of 40mph would be desirable subject to appropriate traffic modelling at the planning application stage to demonstrate that the impact on journey times would be acceptable.

This diagram shows in greater detail how the pedestrian, cycle and bridleway desire routes identified in the previous section of the document are integrated with the 'Green Grid', recreational uses, development areas, and the site's surrounding context.

Vehicular access

The diagram also shows the principles of how vehicular access to the development areas can be achieved throughout the proposed masterplan. Access into the development from the existing highway network is proposed at a number of locations, either through the modification of existing junctions or the creation of new junctions.

Within the site, a hierarchy of streets with a range of typologies will be established, providing appropriate accessibility and reinforcing placemaking, in accordance with local and county-wide guidance.

The Bradwell B proposals, whilst at an early stage, indicate the use of Burnham Road for HGV movements through the construction process. The planning applications for this masterplan and the Bradwell B proposals will identify and assess impacts on the highway and mitigate these accordingly.

Wider highway mitigation

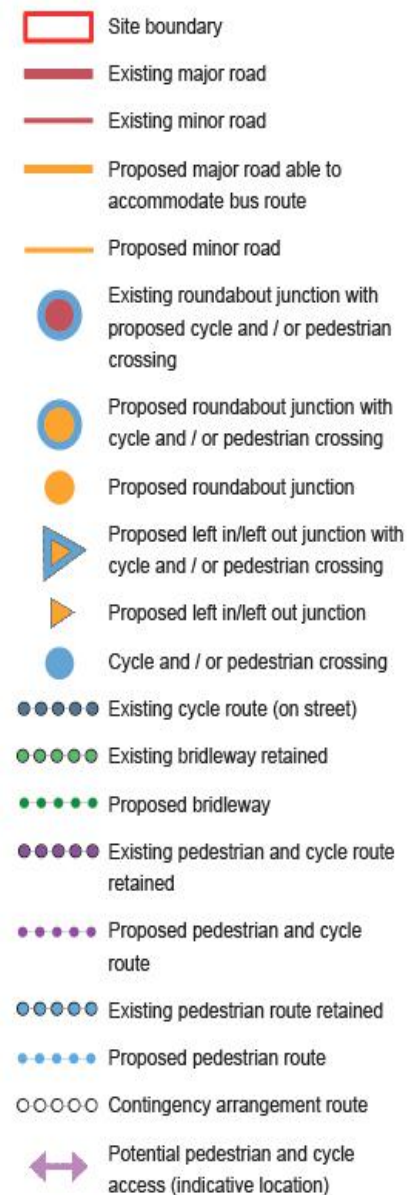
Policy SGS10 requires Improvements to the local and strategic road network as required by the local highways authority. The improvements include capacity improvements to the A132 between Rettendon Turnpike and South Woodham Ferrers, including necessary junction improvements.

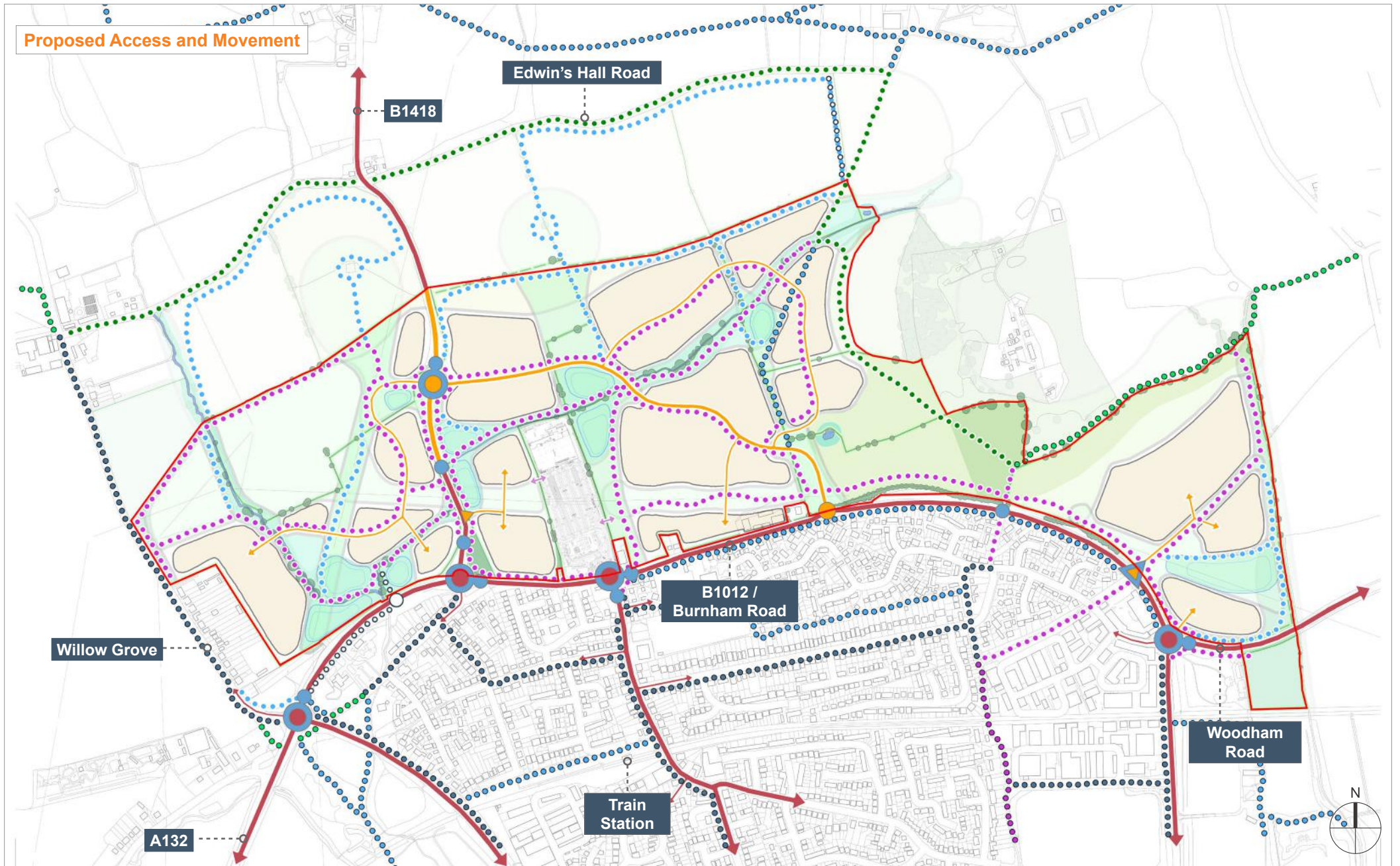
In collaboration with the local highways authority, a number of options are being considered to improve capacity at the Hawk Hill and Rettendon Turnpike Junctions as well as the A130 Northbound slip for the purpose of agreeing a final scheme to be implemented as a result of a Planning Condition attached to a future permission. These options are set out in the infrastructure schedule in Appendix 1 at the end of this document.

Rat running through the town and via Ferrers Road

The capacity of the B1418 / Burnham Road junction is currently a major constraint which causes traffic to block back on Burnham Road to and through the Hulbridge Road junction leading to congestion, which encourages rat running. The proposed improvement to the Burnham Road/B1418 Junction which is subject to ECC testing will add additional lanes on the Burnham Road and the B1418 which will therefore reduce queuing and rat running.

Notwithstanding the above, to provide comfort that the issue of rat running is being addressed, the developers would propose to provide a contribution through the S106 Agreement to cover the implementation costs of a package of traffic calming measures on local roads.





ACCESS AND MOVEMENT

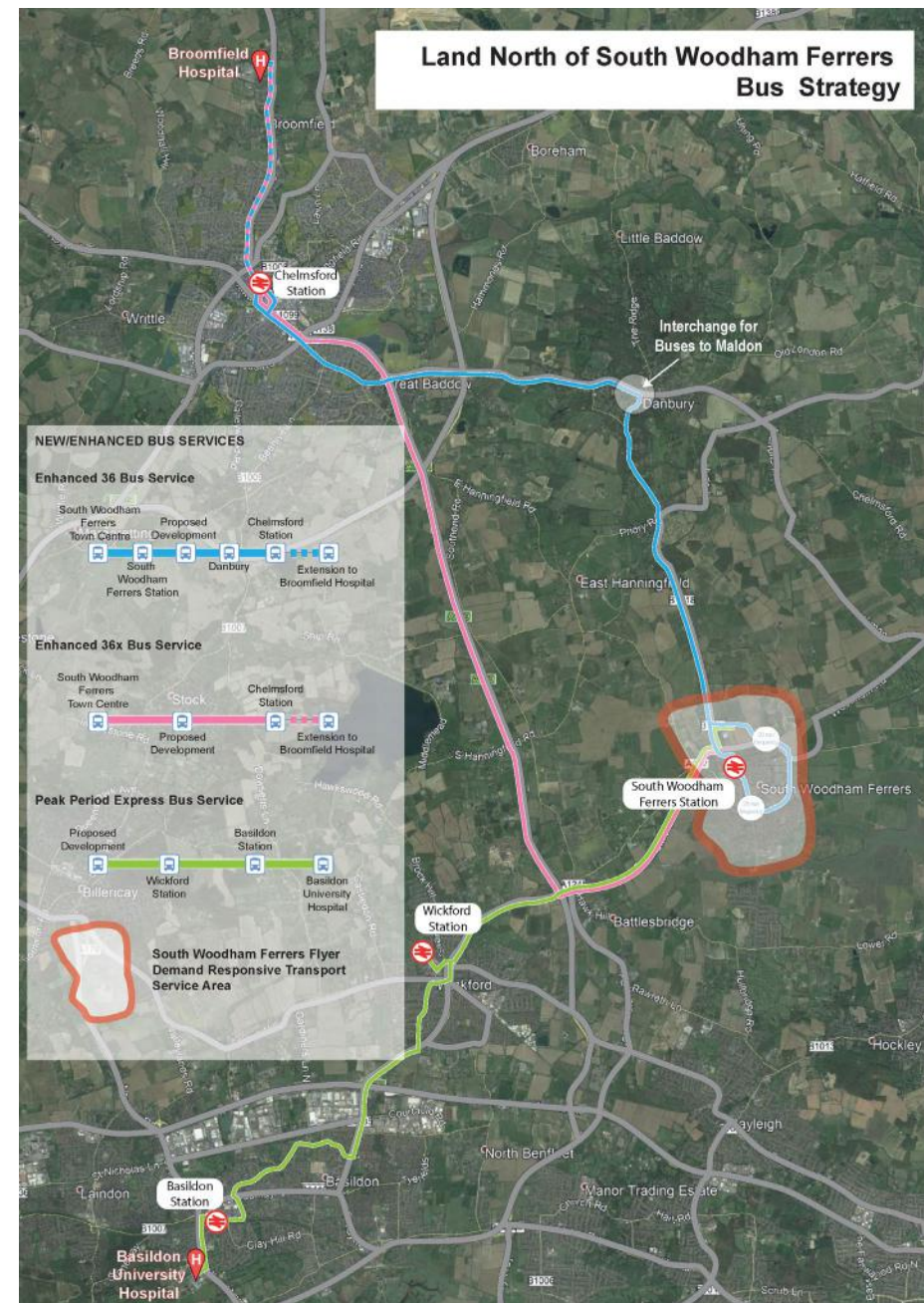
SUSTAINABLE TRANSPORT

As part of the development, the following sustainable transport options are being considered in order to support a shift away from private car use:

- Divert the 36 bus service (or equivalent) through the development providing a clockwise and anti-clockwise service to serve the development and town centre. The masterplan is designed to allow bus services to be routed through the development. Services would be introduced through a phased approach to the introduction of bus services with interim solutions such as taxi-buses considered at the initial occupation prior to a full service becoming viable;
- Increase the frequency to a 20 minute service;
- Enhanced frequency commuter service (36X or equivalent) to Chelmsford benefitting from infrastructure upgrades described above;
- Provision of a Demand Responsive Bus Service for the South Woodham Ferrers Area;
- Peak period service to Wickford and Basildon that could be delivered in two ways: a) as part of a wider network adjustment by ECC using contributions to provide a South Woodham-Wickford-Basildon Service; or b) the use of the Demand Responsive Bus Service to provide a shuttle service;
- Improvements in services to Broomfield Hospital.

A number of measures to encouraged reduced use of the car will also be considered through future planning applications, which may include:

- The provision of a Smarter Choices Campaign for the wider area promoting sustainable travel;
- The implementation of a Better Points Scheme where residents car earn rewards for their 'green' travel choices to be extended to include South Woodham Ferrers;
- Provision of up to one years' free bus travel on local and proposed bus services for up to four persons in each household;
- Provision of a cycle training/cycle maintenance course on site for all residents;
- Provision of Travel Packs for all residents to include sustainable travel information;
- Car club provision for residents and businesses on site and available to the rest of South Woodham Ferrers.



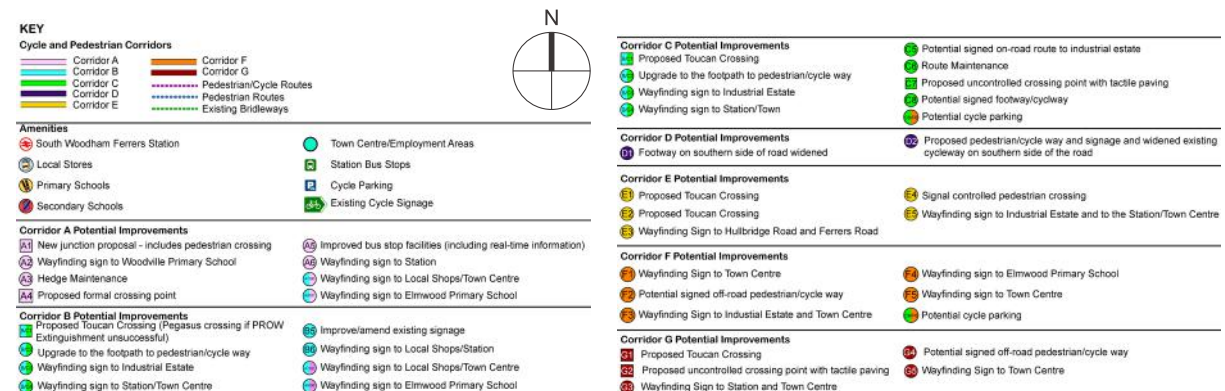
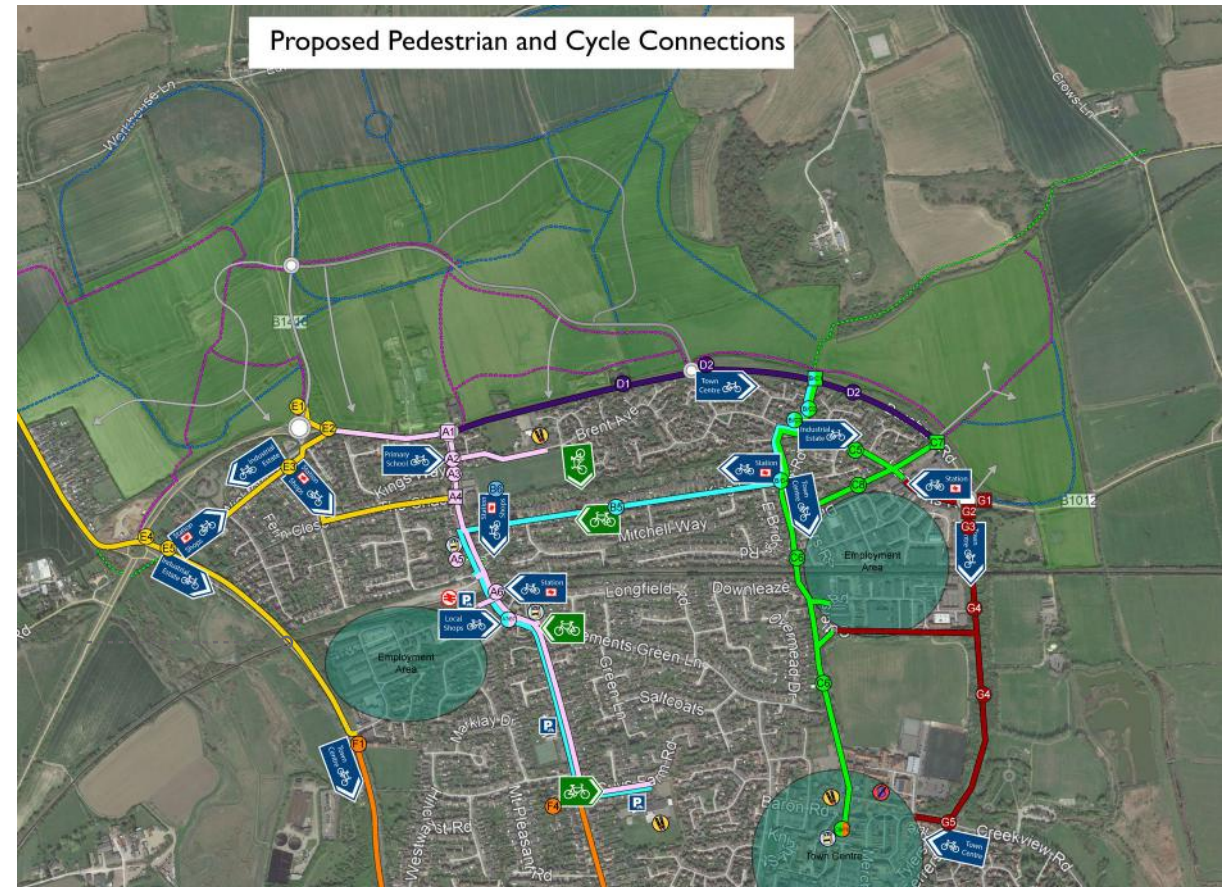
PEDESTRIAN AND CYCLE LINKS

The vision for the masterplan identifies integration with the existing town as a key component for the delivery of new development. As well as providing a high quality movement and access network within the masterplan, there is an opportunity to enhance the pedestrian and cycle network within the existing town to make it a more attractive alternative to car use.

A pedestrian access strategy has been developed that has explored the key routes that could be used from the site over the Burnham Road and into key destinations such as the town centre, and interventions that may be possible to support the enhancement of the network.

Approval has been granted for a signalised crossing to serve the planned supermarket and healthcare development (application reference 14/00830/FUL), together with an informal crossing on the west side of the junction and a zebra crossing on Hullbridge Road. Opportunities exist for further crossings within land controlled by the promoters or within the highway boundary. There is a preference for the extinguishment of Bridleway 46 to become a cycle route, with a crossing on to Burnham Road designed for cyclists. Extinguishment of PROWs is a separate matter to planning. Additional pedestrian and cycle linkages between the supermarket and healthcare development and the wider site may be possible subject to technical and land ownership considerations.

A new brideway connection is proposed to connect routes in the east to the west.



ACCESS AND MOVEMENT

BURNHAM ROAD CROSSING POINTS

A key objective of the masterplan is to provide safe crossing points on the Burnham Road to encourage walking and cycling along with the reduction of the speed limit on Burnham Road to 40mph to prioritise pedestrians. A range of crossing options have been considered, and the proposed crossing points are identified on the drawing opposite and described below. Discussions are ongoing with Essex County Council Highways about preferred and alternative design solutions, and further survey work will be required to inform decisions to be made on final designs (including a Transport Assessment to be submitted as part of any future planning application for the site).

Crossing 1 - Existing Burnham Road / Ferrers Road / Willow Grove Roundabout

There is an opportunity to provide a staggered signal controlled pedestrian crossing at the Burnham Road / Ferrers Road / Willow Grove roundabout with footways to be extended on both sides of the Burnham Road. A connection from the masterplan can be provided to the application boundary for that part of the site. A contingency route is shown incorporating an alternative crossing location in the event that this does not prove possible.

Crossings 2 and 7 - Existing Burnham Road / B1418 / Old Wickford Road Roundabout

Capacity improvements at the Burnham Road / B1418 junction will allow for toucan crossings to be provided on Burnham Road (crossing 2) and the B1418 (crossing 7) forming part of a cycle route towards the railway station and commercial areas. Discussions are taking place with Essex County Council regarding the most appropriate design to achieve these capacity improvements.

Crossing 3 - Existing Burnham Road / Hullbridge Road Roundabout

The masterplan can upgrade the recently implemented signalised crossing on Burnham Road, provided as part of the Sainsburys development, to a toucan crossing. This provides a pedestrian and

cycle route towards the railway station.

Crossing 4 - Existing Bridleway no.46 crossing point

A toucan crossing is proposed here if the existing bridleway is successfully extinguished, to allow for strategic connections to the town's cycle network linking to the town centre and railway station, along with a new footway / cycleway along the frontage of the site. If the bridleway is not extinguished, a Pegasus crossing would be required. An alternative option of a footbridge has been considered in this location, but this is not considered appropriate as the change in levels would discourage its use, the structure would adversely impact existing residents living either side of the existing bridleway.

Crossing 5 - New Junction on Burnham Road North of Hamberts Road

A left in left out junction is proposed here, along with a new footway / cycleway on the frontage of Burnham Road that links to pedestrian and cycle routes within the development. An uncontrolled crossing over the Burnham Road with tactile paving would be located here, aligning with the route of the former South Woodham Ferrers to Maldon railway.

Crossing 6 - Existing Burnham Road / Woodham Road / Ferrers Road / Hamberts Road Roundabout

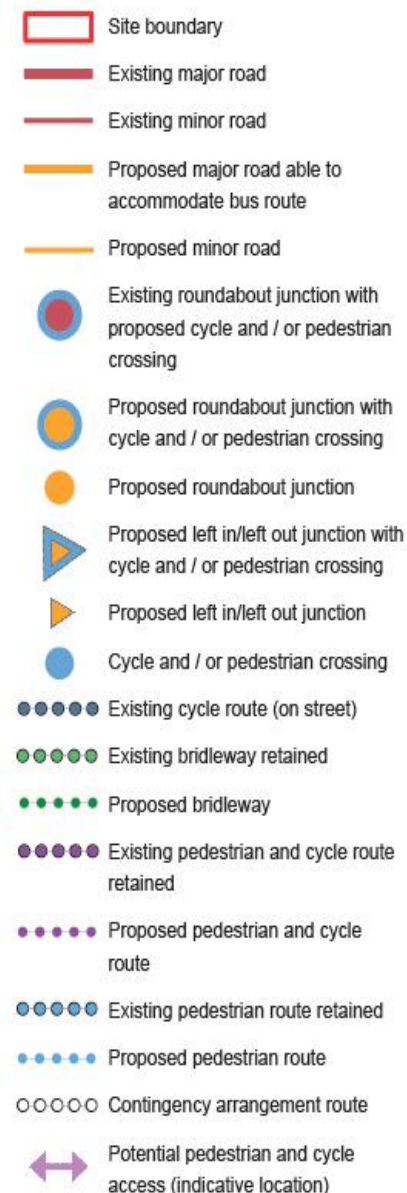
An enlarged roundabout junction is proposed here to allow separate connections to the proposed mixed use area. The enlargement of the roundabout will also include a controlled crossing.

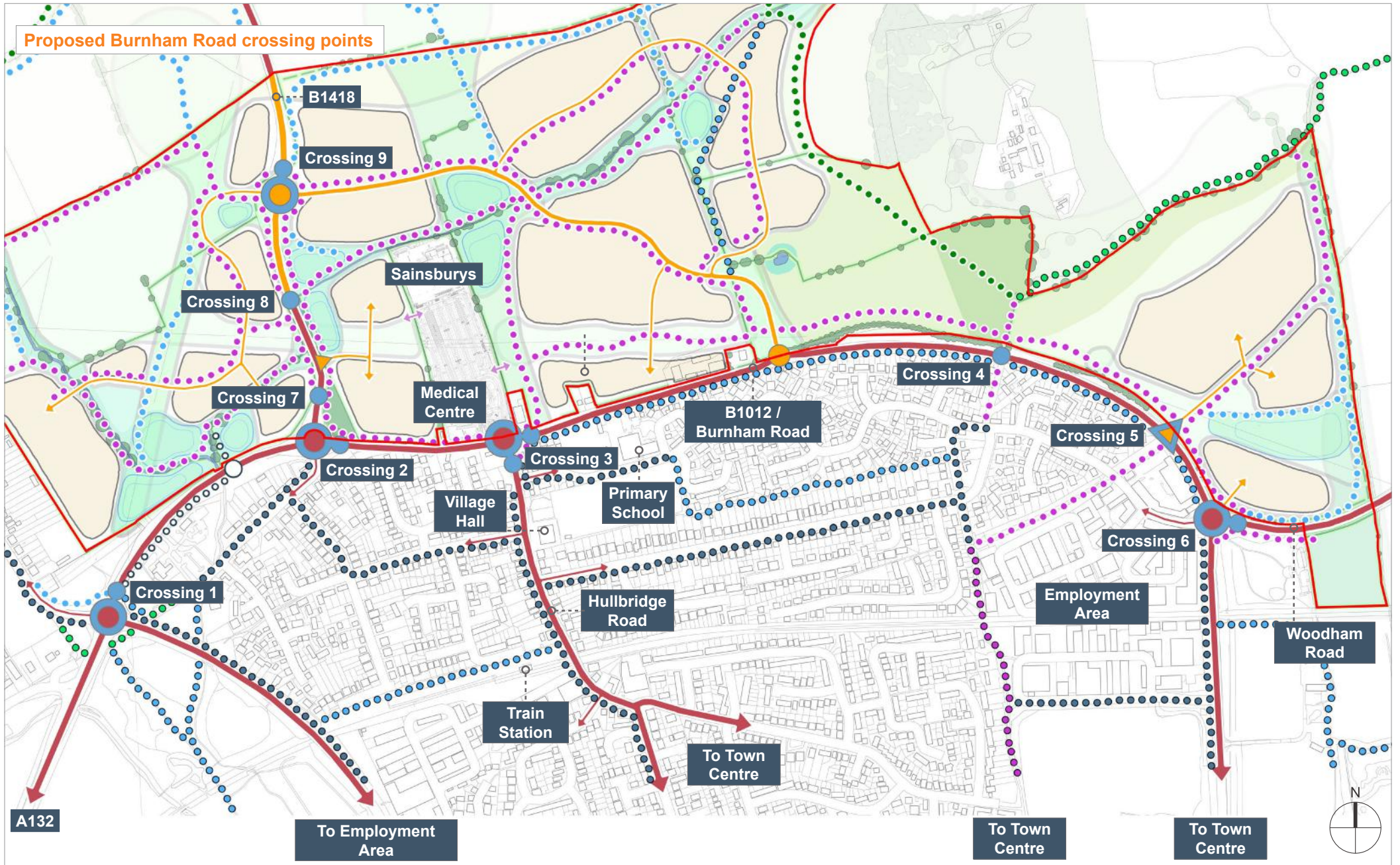
Crossing 8 - B1418

A controlled crossing here connects routes to the east and west of the B1418.

Crossing 9 - B1418

A crossing to the north of the new roundabout access junction on the B1418 connects routes between the eastern and western development parcels.





LAND USE LOCATION OPTIONS

LOCAL CENTRE

The Local Centre is envisaged as comprising a central focus for the new community. It is likely to incorporate complementary services from the tertiary sector (for example a hairdressers) and community uses such as a nursery or community hall / focal building.

Key location principles

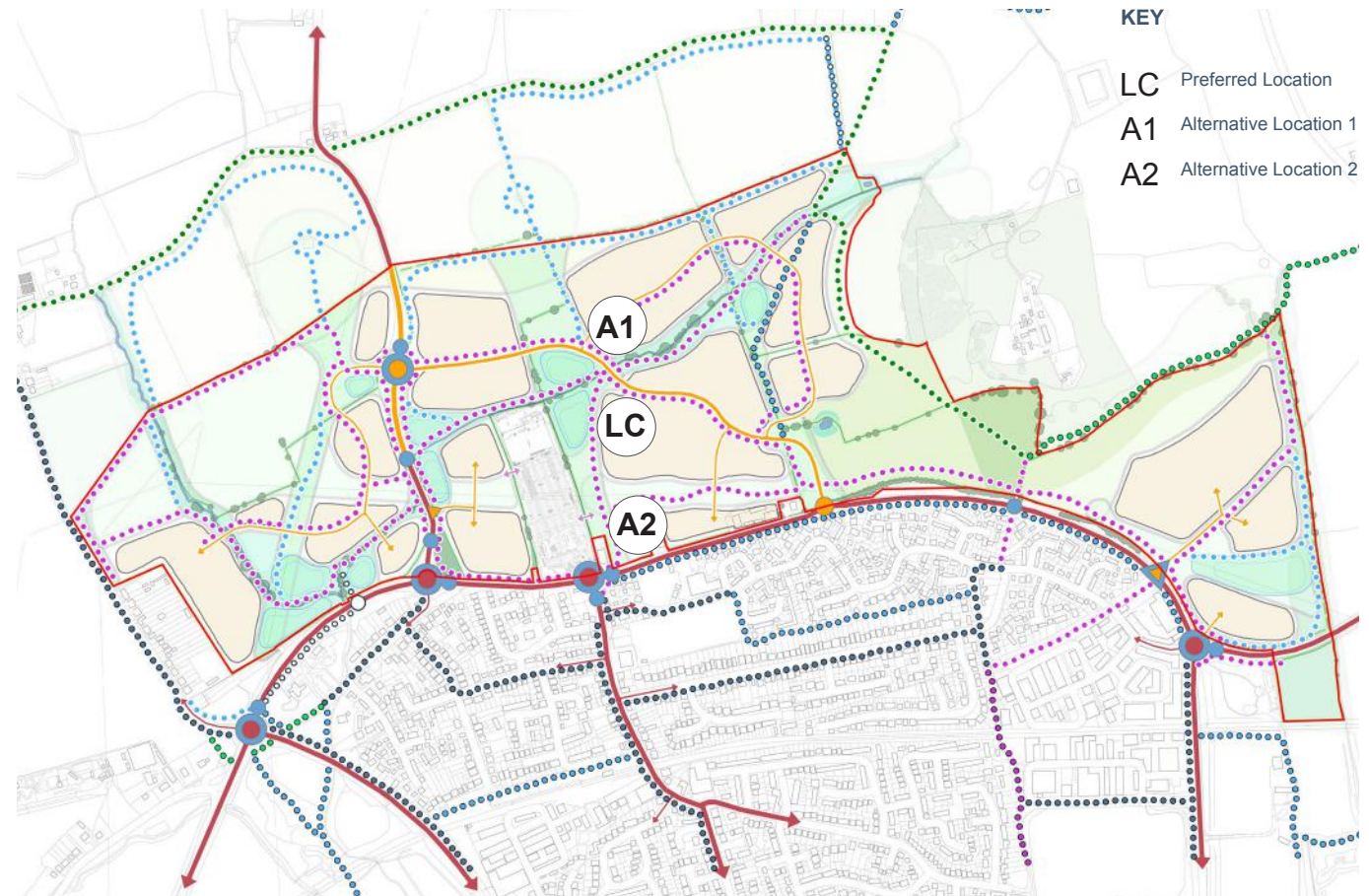
In considering potential locations for the local centre, key principles were identified:

- Central location within the masterplan;
- Proximity to the new retail and health facilities on the former nursery site;
- Relatively flat topography to enable co-location with the primary school;
- Ease of pedestrian and cycle access, ideally via the central north / south corridor;
- Ease of vehicular access, ideally via the spine street.

Preferred location

The identified preferred location is that which best meets the key location principles identified above.

Well connected via the central north / south corridor, the east / west stream corridor and the spine street, a local centre here would become a central focus for the new community, especially when co-located with the primary school.



Alternative location 1

This alternative location is the only other location within the masterplan that would meet all the key location principles.

However its location further to the north makes it less central in relation to the wider site and takes it further away from the new retail and health facilities.

Alternative location 2

This alternative location would give the local centre greater proximity to the new retail and health facilities. However it is less central within the development, and would require more convoluted vehicular access or the creation of an additional vehicular access off Burnham Road. The existing overhead power lines to the north also prevent co-location with the primary school.

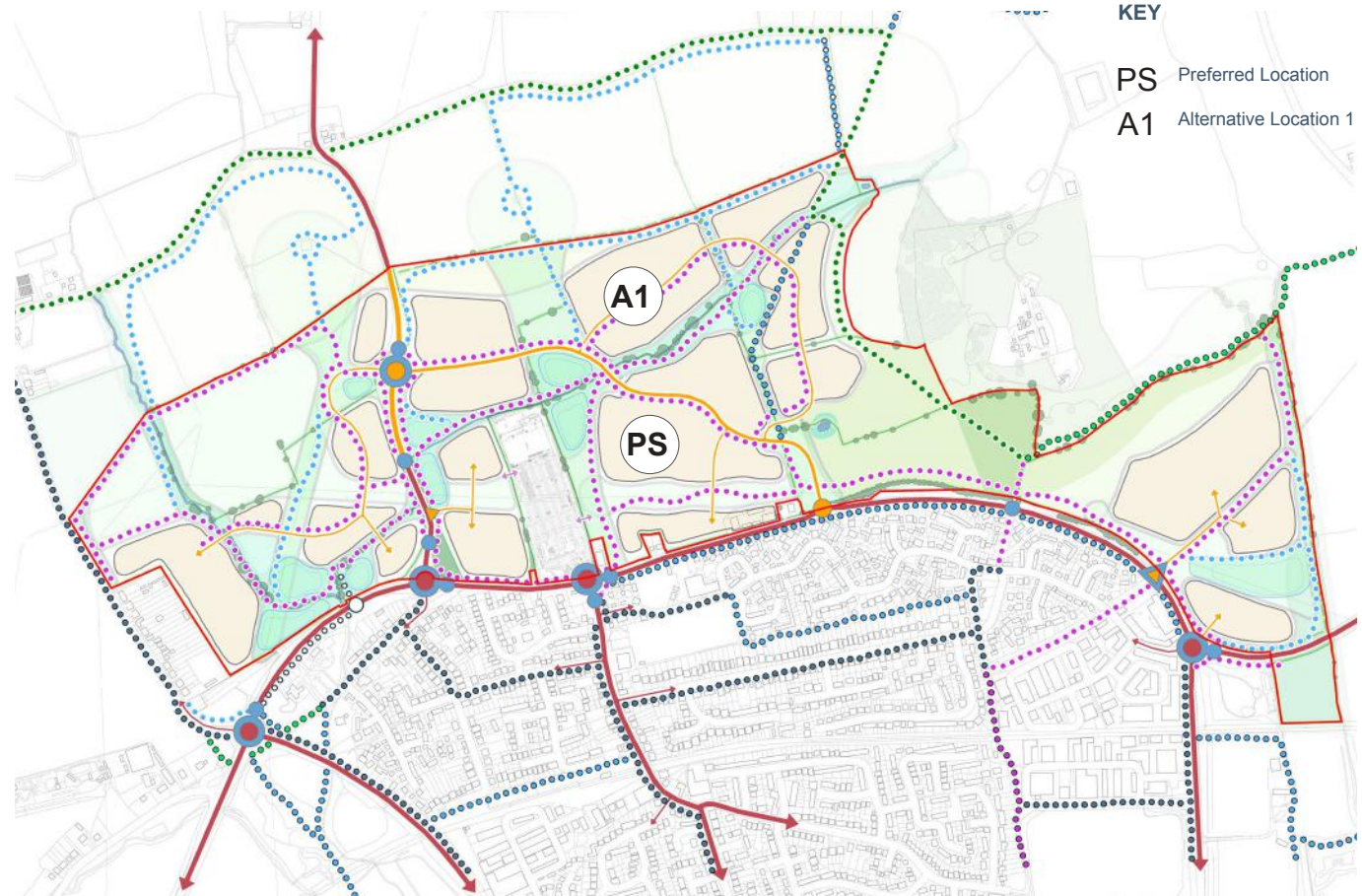
PRIMARY SCHOOL

The masterplan incorporates land for a new primary school, to be delivered by the local education authority, likely to be co-located with an early years and childcare nursery.

Key location principles

In considering potential locations for the primary school, key principles were identified, with reference to Essex County Council's 'Education Site Suitability Checklist':

- Central location within the masterplan;
- Proximity to the local centre to create a 'community hub';
- Ease of pedestrian and cycle access from within the development.
- Relatively flat topography;
- Absence of existing utility constraints;



Preferred location

The identified preferred location is that which best meets the key location principles identified above.

Adjoining the preferred Local Centre location, close to the new retail and health facilities, creating a central community focus at the heart of the masterplan.

Alternative location 1

This alternative location could be considered if alternative location 1 for the Local Centre was chosen, to maintain co-location of the Local Centre and primary school.

However its location further to the north makes it less central in relation to the wider site and takes it further away from the new retail and health facilities.

MIXED USE AND EMPLOYMENT

Provision of 1000 sqm of business floorspace, which could include a range of unit sizes and types within a range of use classes, forms part of the proposals.

Key location principles

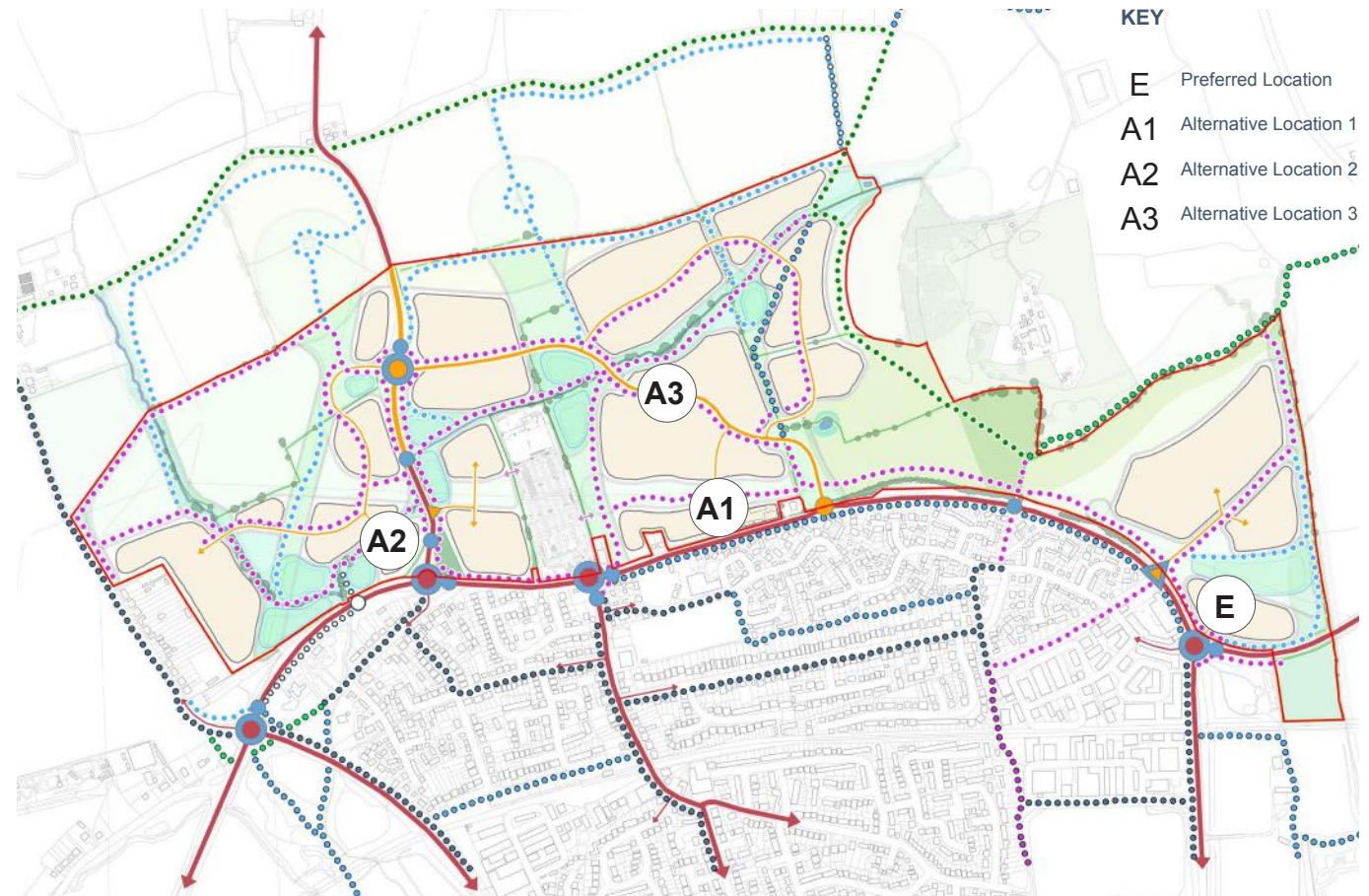
In considering potential locations for employment provision, key principles were identified:

- Ease of pedestrian and cycle access from within and beyond the development;
- Ease of vehicular access from the surrounding highway network;
- Relatively flat topography;
- Need for sensitivity to potential existing and proposed adjoining residential areas;
- Potential integration with existing utility constraints;

Preferred location

The identified preferred location is that which best meets the key location principles identified above.

Access (vehicular, pedestrian and cycle) in this location is straightforward, and does not compromise potential residential parcels. Proximity to the existing Hamberts Road employment area is also of benefit.



Alternative locations 1 and 2

These locations fronting Burnham Road have appropriate topography and enjoy straightforward pedestrian and cycle access from the existing town and the new development. Vehicular access direct from Burnham Road however is subject to assessment of junction proximity. There is the potential of some disturbance to existing residents to the south of Burnham Road.

Alternative location 3

This location would enable the provision of employment uses within the centre of the layout, co-located with the Local Centre. This location would be slightly less convenient for vehicular, pedestrian or cycle access from the existing town. Its proximity to new homes would also be likely to restrict the range of employment types appropriate within this location.

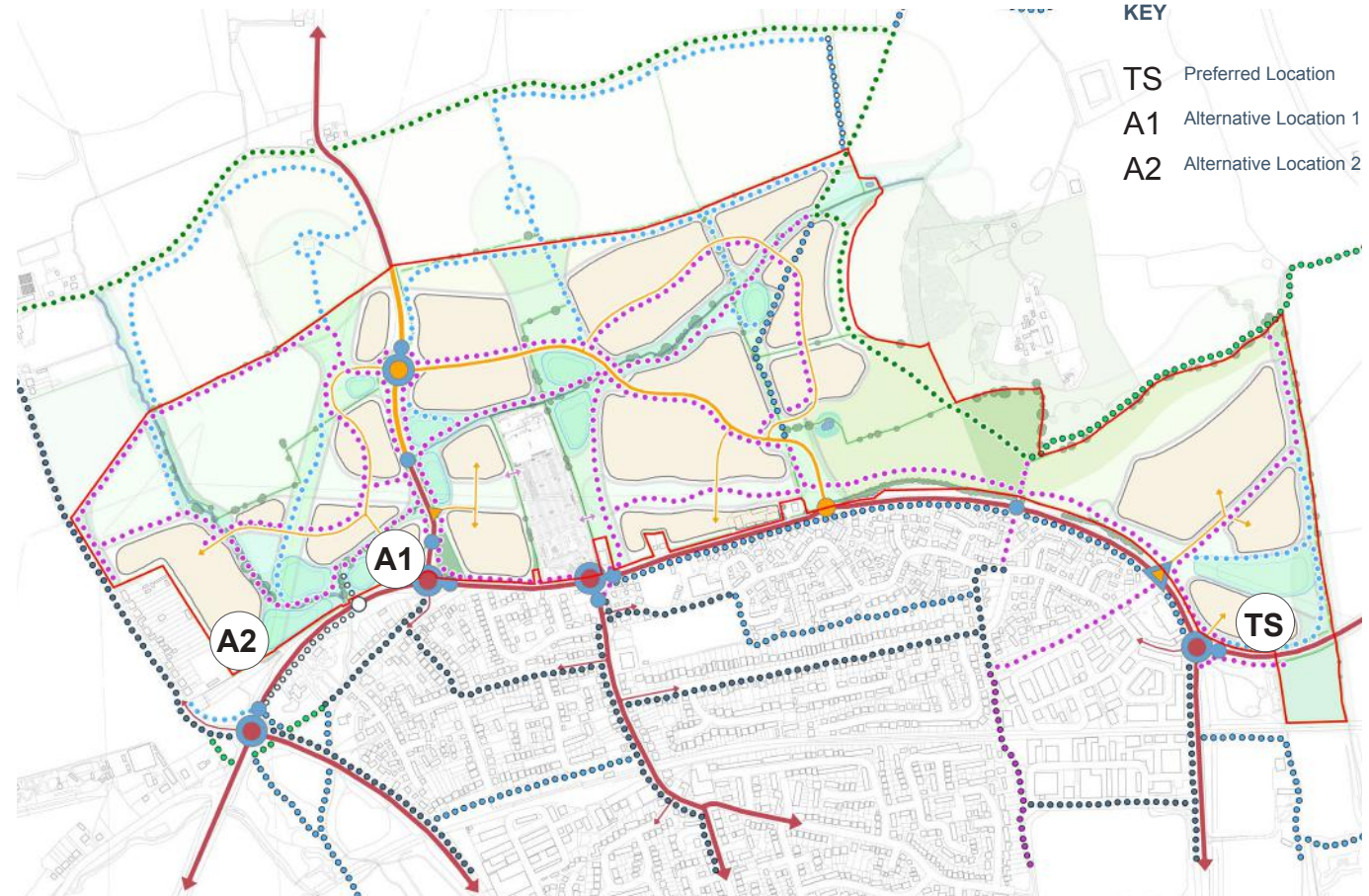
TRAVELLING SHOWPEOPLE

Emerging policy requires the provision of five serviced plots for travelling showpeople within the masterplan.

Key location principles

In considering potential locations for the travelling showpeople provision, key principles were identified:

- Ease of vehicular access, ideally directly from the wider major highway network;
- Avoidance of areas of high flood risk;
- The ability to create a clearly defined area;
- Need for sensitivity to potential existing and proposed adjoining residential areas;
- Minimise visual impact;



Preferred location

The identified preferred location is that which best meets the key location principles identified above.

Vehicular access off the existing Burnham Road / Woodham Road / Ferrers Road roundabout, possibly in association with the employment area, would be relatively straightforward, and the risk of impact on existing residents and the new homes would be minimised.

Alternative location 1

This location off Woodham Road would also potentially be suitable. Vehicular access direct from Burnham Road however is subject to assessment of junction proximity.

Alternative location 2

This location could also be suitable, subject to vehicular access from Burnham Road being feasible. This location would minimise the travel distance to the site for the residents. It would however potentially be perceived as generating disturbance to existing residents on Willow Grove.

FRAMEWORK MASTERPLAN

FRAMEWORK MASTERPLAN

The framework masterplan opposite has been generated by bringing together the design strategies described in Section 4, the Green Grid, and the uses, facilities and access proposals described on the previous pages:

Drainage strategy

Restricting development to areas of lower flood risk and incorporating a network of SUDS features and swales to limit discharge rates and manage overland flows.

Ecology strategy

Retention and enhancement of important existing habitats, with the creation of additional grassland areas, tree and hedge planting, creation of new ponds, and establishing a lasting management regime.

Landscape strategy

Responding sensitively at the edges of the proposed development, and structuring the layout around the green grid created by existing watercourses and hedgerows.

The Green Grid

The 'Green Grid' constitutes the spatial framework for the proposed masterplan, providing a comprehensive landscape led structure within which the proposed uses can be distributed.

Desire routes

Identifying key pedestrian and cycle desire routes through the site, together with connection points with the existing town.

Open Space

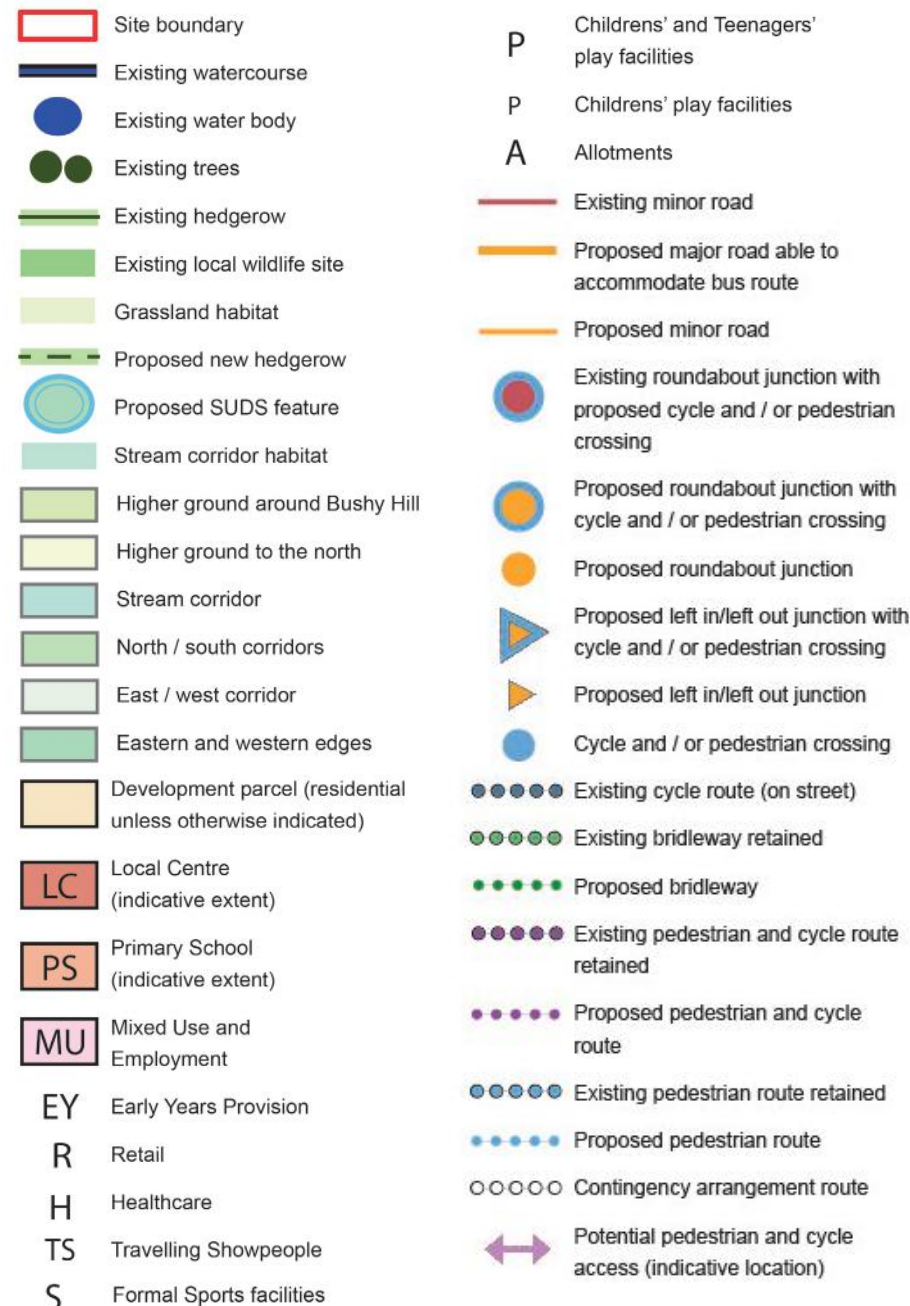
Provision of a well-connected and distributed network of open space and formal provision, meeting policy requirements whilst maintaining the sensitive northern boundary.

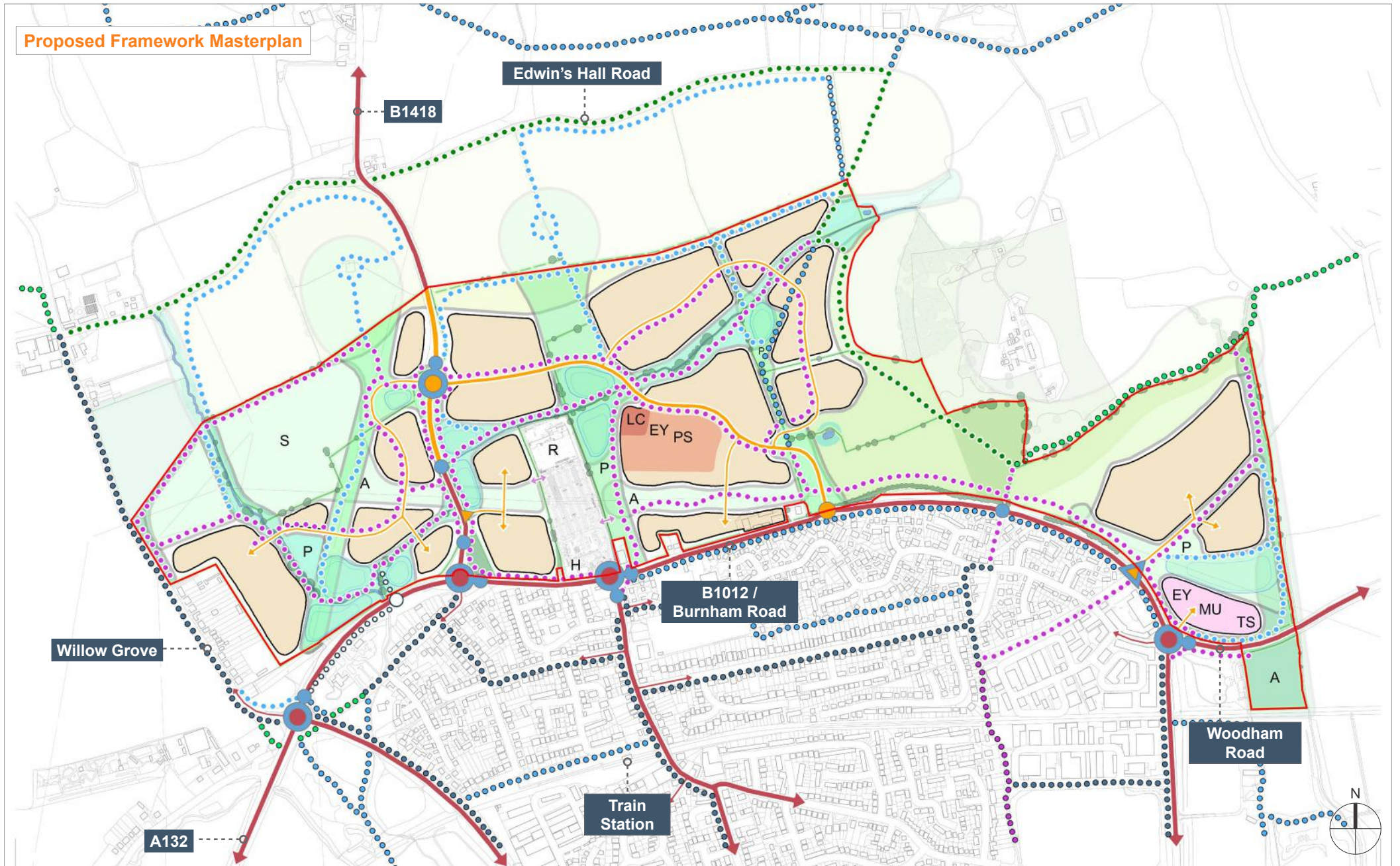
Development areas and land use

The creation of development parcels set within the framework established by the 'Green Grid', incorporating a wide range of residential dwelling types and tenures across the site as a whole, as well as focal community and education facilities, employment, retail and healthcare, with their preferred locations identified.

Access and movement

Creating pedestrian and cycle links responding to identified desire routes and safely connected with the existing town. Provision of vehicular access throughout the proposed development including for public transport.





RESIDENTIAL DENSITY

| RESIDENTIAL DENSITY

The diagram opposite identifies the principles of how residential density varies across the development areas within the site which include residential use.

Variations in residential density across a masterplan are important for a number of reasons, including:

- Reinforcing the creation of different characters within the masterplan, helping establish richness of local identity in a considered way for different areas within a wider coherent whole;
- Responding to existing constraints within or directly adjoining the site, helping to enable different areas within the proposed development to relate to their immediate contexts in an appropriate way;
- Ensuring that a wide range of dwelling types can be successfully accommodated and located appropriately within the wider masterplan so that a mixture of household needs can be met.

Three density types are proposed within the masterplan; the principles guiding their characteristics and location within the masterplan are described here.

The residential density approach described here results in the potential for up to 1,200 new homes across the masterplan as a whole.

Residential Density - higher

Areas of higher residential density are clustered within the central part of the masterplan. These are the areas closest to the existing supermarket and medical centre as well as the proposed local centre and primary school. They also enjoy the closest access to the railway station via Hullbridge Road.

These areas are likely to contain a mix of flats and houses, with the houses predominantly being smaller or medium sized. There will be a smaller proportion of larger detached houses in these areas. The residential density here is envisaged as being around 40 dwellings per hectare.

Residential Density - medium

Areas of medium residential density are distributed throughout the masterplan. These areas are generally not immediately adjacent to the local centre, nor in the most sensitive locations around the site's boundaries.

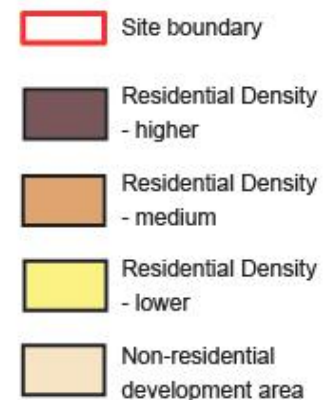
These areas are likely to predominantly contain houses, with occasional flat buildings. A wide range of house sizes and typologies are appropriate. The residential density here is envisaged as being around 30 dwellings per hectare.

Residential Density - lower

Residential development in the most sensitive locations within the site are generally envisaged as lower in density. Particularly sensitive locations include:

- The edges of the development closest to the site's northern and eastern boundaries, adjoining the countryside beyond;
- The undesignated heritage asset of Hamberts Farm;
- The existing residential properties along Willow Grove, adjoining part of the site's western boundary.

Lower density areas are likely to predominantly contain medium or larger houses, generally detached or semi-detached in typology. The residential density here is envisaged as being around 20 dwellings per hectare.





CREATING THE HEART OF THE PLACE

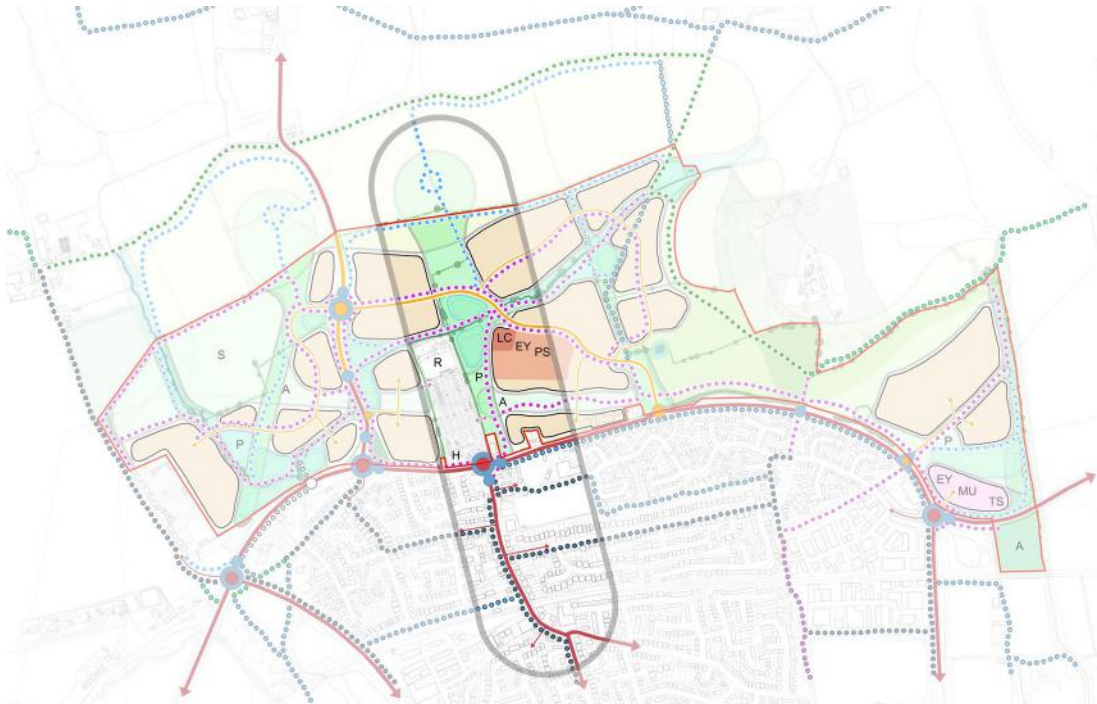
THE CENTRAL CORRIDOR

The central corridor is a key element within the masterplan. It provides a linkage between the site across the Burnham Road / Hullbridge Road junction towards the railway station and the heart of the town. A number of the key recreational and community uses within the masterplan are likely to be located along it.

The plan opposite shows in illustrative format how this corridor might incorporate a variety of community uses and amenities. These are linked together by pedestrian and cycle routes, and are connected to the existing town across Burnham Road.

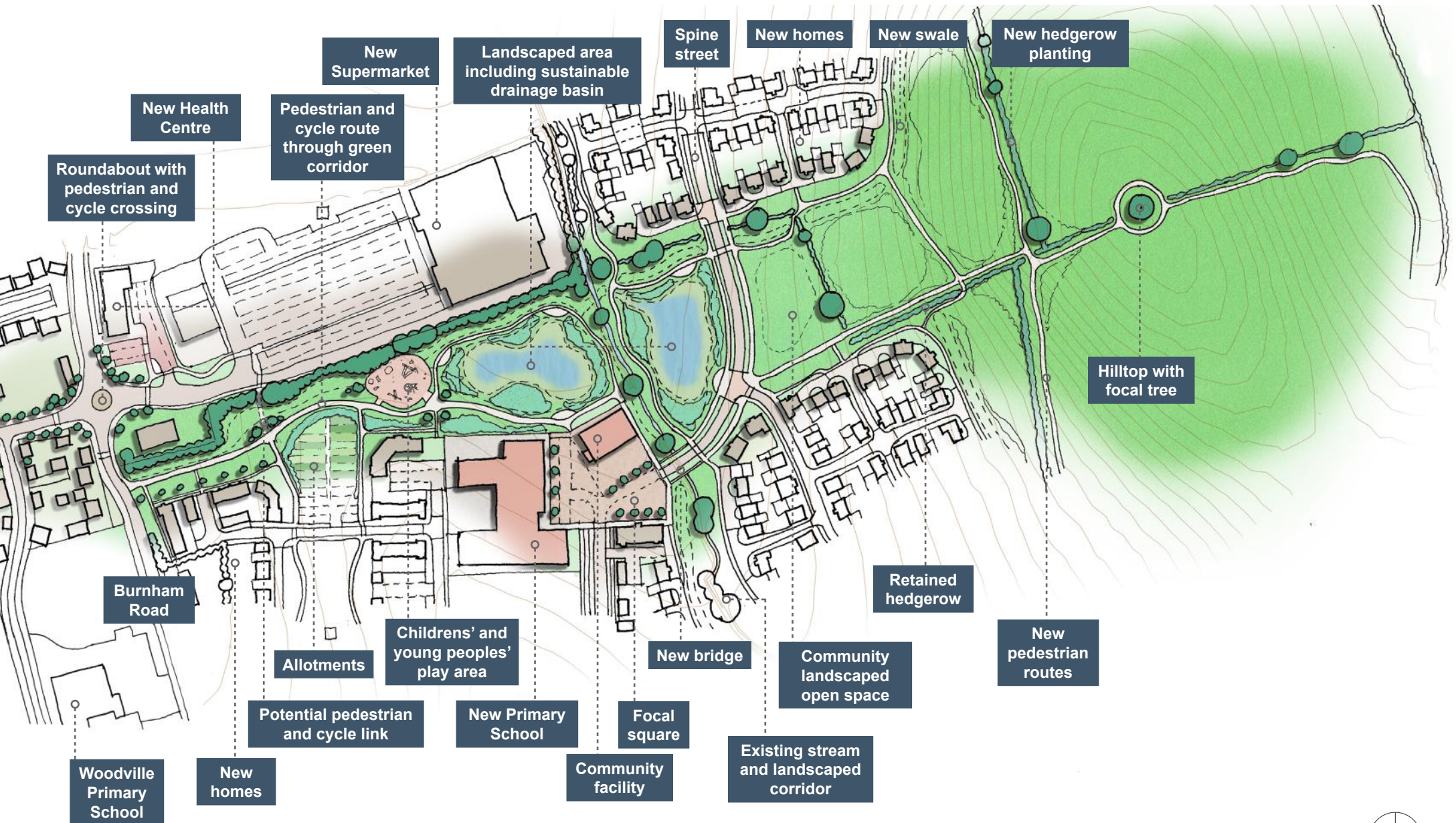


View from Burnham Road across the site towards the



Central Corridor location





SECTION 7

SUMMARY AND NEXT STEPS



This section summarises the key elements which will be provided within the proposals, and outlines the next steps towards their delivery



LAND NORTH OF
**SOUTH WOODHAM
FERRERS**
ESSEX

SUMMARY AND NEXT STEPS

| THE MASTERPLAN WILL DELIVER THE VISION IN THE FOLLOWING WAYS:

The new neighbourhood will sit within a high quality and varied green infrastructure framework that respects the existing landscape context:

- Retention and enhancement of key existing site features such as streams, trees and hedgerows;
- Around 45% of the site area will become public open space;
- Delivery of 10% biodiversity net gain;
- Planting at least one tree for each new resident;
- New planting buffers along northern and eastern site boundaries;

The new neighbourhood will be a healthy place that offers spaces for outdoor activity as well as quality walking and cycling routes both within the site and to the surrounding countryside

- Around 6 hectares of land for formal recreation including sports pitches;
- Over 10 kilometres of new pedestrian and cycle routes and bridleways within the site;
- Childrens' and young peoples' play provision in four locations across the layout;
- New allotments provided in various locations including south of Woodham Road;

The new neighbourhood will be fully integrated with the adjoining community and well connected to key services and facilities in the town

- Existing Burnham Road crossing points enhanced;
- New crossing points provided across Burnham Road and the B1418;
- Provision for public transport to be routed through the site;
- The centre of the layout adjoins Sainsburys and the Crouch Vale Medical Centre;

The new neighbourhood will have a strong sense of place and community, focused around a central, accessible and mixed use local hub

- The Local Centre is likely to incorporate complementary services from the tertiary sector and community uses such as a nursery or community hall / focal building;
- Land for a new primary school, to be delivered by the local education authority, likely to be co-located with an early years and childcare nursery;
- 1,000 sqm of business floorspace, which could include a range of unit sizes and types within a range of use classes;

The new neighbourhood will cater for a cross section of society, offering market and affordable housing as well as a location for travelling show people

- Around 35% of the site area will become land for new homes, incorporating a range of dwelling types and residential densities;
- New homes will comprise a range of tenures including affordable, intermediate and private sale;
- Five serviced plots for Travelling Showpeople;

The new neighbourhood will be an attractive and characterful place and a new northern gateway into the town

- The layout will be structured around a 'green grid' comprising a variety of interlinked landscaped spaces;
- New homes will be arranged around a hierarchy of streets with a range of typologies, providing appropriate accessibility and reinforcing placemaking, in accordance with local and county-wide guidance;
- Buildings and the spaces between them will be of high quality design, responding to local and regional context and creating a strong identity;



10%
biodiversity Net
Gain



6 ha
of new sports
and recreation
facilities



10 km
of new foot and
cycle paths



**Integrated
placemaking**
with a strong
sense of
community and
character



**New
Community
Facilities**
for the benefit
of all



45%
of the site will
be public open
space



Up to
1,200
New homes of
mixed type and
tenure



One tree
planted for every
resident



View from the site looking south across the edge of South Woodham Ferrers towards the Crouch Estuary

NEXT STEPS

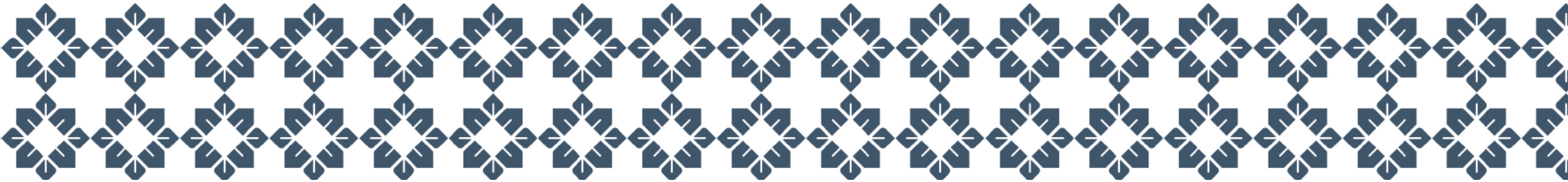
This Masterplan, once approved, gains formal status as part of planning policy in relation to the site.

Future planning applications will use this Masterplan as a basis for development of its principles in greater detail.

This document will be a material consideration in the approval process for future planning applications, which are envisaged as the next stage in the process of delivery of this site

SECTION 8

APPENDIX 1 - INFRASTRUCTURE TO BE DELIVERED



This appendix sets out the level of infrastructure to be provided as part of the allocated development at Land North of South Woodham Ferrers.



LAND NORTH OF
SOUTH WOODHAM
FERRERS
ESSEX

APPENDIX 1 - INFRASTRUCTURE TO BE DELIVERED

Introduction

This appendix sets out the level of infrastructure to be provided as part of the allocated development at Land North of South Woodham Ferrers, taking into consideration the high level requirements as set out within Policy SGS10. The quantum of infrastructure will be refined as the development progresses from masterplan through pre-application and application submission to determination.

This summary shows that through the masterplan, the infrastructure required to comply with Policy SGS10 will be delivered and in some cases exceeded.

1. Highway Infrastructure

The Local Plan requires:

- Appropriate improvements, as necessary, to the local and strategic road network as required by the Local Highways Authority;
- Appropriate measures to promote and enhance sustainable modes of transport;
- New and enhanced cycle routes, footpaths, Public Rights of Way and bridleways where appropriate;
- Capacity improvements to the A132 between Rettendon Turnpike and South Woodham Ferrers, including necessary junction improvements;
- Multi-user crossings of the B1012 in South Woodham Ferrers which may include a bridge or underpass.

A schedule of highways improvements is set out below. These improvements will be scoped and agreed with ECC and then tested to inform Transport Assessments which will support future planning applications, to the satisfaction of the Highway Authority.

As such, the schedule of improvements is subject to further refinement as the proposals develop.

The improvements as set out below are required for all development scenarios with some further improvements identified above that which was tested at the Local Plan stage.

1.1 B1012 / B1418 Improvements

Burnham Road/Woodham Road/Ferrers Road roundabout and Crossing 6:

- Enlarged five arm roundabout with new development access arm;
- New Toucan Crossing on Woodham Road;
- Improved Island Crossing Points on Ferrers Road and Hamberts Road;
- New/improved footway from development on Woodham Road and Hamberts Road.

Burnham Road/Left in/Left-out access:

- New left-in/left-out junction with a central island.

New junction and Crossing 5:

- New island crossings across the junction and to the southern side of Burnham Road connecting to proposed cycle link.

Burnham Road Toucan Crossing at Crossing 4:

- New Toucan Crossing on Burnham Road;
- Extinguish the Bridleway on Southern Side of Burnham Road and provide pedestrian/cycle route.

Burnham Road New Access Junction:

- Proposed new 3-arm roundabout junction to serve as development access;
- Proposed footway/cycleway from development along northern side of Burnham Road;
- Widening of footway to south of B1012 between Hullbridge Road and Woodham Road.

The new roundabout would not restrict flow on Burnham Road and will be appropriately sized to serve the development.

Hullbridge Road/Burnham Road Pedestrian Crossing 3:

- Upgrading crossing to Toucan Crossing.

The Local Plan identified that this junction would be over capacity, and that as much capacity could be provided by a new roundabout brought forward by the new retail store. It was recognised that the developer should look to further mitigate the impact of their development through other access arrangements and sustainable transport links. The upgrade proposed will provide additional capacity above the conclusions of the local plan evidence base.

B1418/Burnham Road Junction and Crossings 2 and 7:

Junction modelling at the Local Plan stage suggested the junction would be over capacity. Mitigation was not designed as it was identified that this would be a main site access point and so any new site access would need to ensure all forecasted growth is accommodated in access proposals. The two options to be tested with the local highway authority are:

Option 1:

- Enlarged Roundabout junction to provide additional capacity and reduce queuing at junction;
- Proposed Toucan crossing on Burnham Road east of the roundabout;
- Proposed Toucan crossing on B1418 arm of the roundabout;
- Proposed footway/cycleway from development along B1418 eastern side and Burnham Road northern side.

Option 2:

- Provision of a signal junction to provide additional capacity and reduce queuing at junction;
- Proposed Toucan crossing on Burnham Road east of the roundabout;
- Proposed Toucan crossing on B1418 arm of the roundabout;
- Proposed footway/cycleway from development along B1418 eastern side and Burnham Road northern side.

Burnham Road/Ferrers Road Crossing 1:

- Provide a staggered pedestrian crossing on Burnham Road (cyclists dismount signs would be provided);
- Burnham Road localised widening west of the Willow Grove/Ferrers Road/Burnham Road junction;
- Extension of the two lane taper southbound, west of the Willow Grove/Ferrers Road/Burnham Road junction arm of the roundabout;
- At the eastbound approach to the junction, widen the flare to 3 lanes at the junction.

Tabrum's Farm Junction:

- New taper lane on Burnham Road for left-turning vehicles into Tabrum's Lane.

1.2 A130 / A132 Improvements

Hawk Hill Junction:

The Local Plan evidence identified a capacity issue at the Hawk Hill junction and identified that the junction could be widened. It is expected that the developers implement the identified improvement or something similar, to the satisfaction of the highway authority, to reduce the impacts on the network. Examples of the options that the developer is considering to fully mitigate the impacts are:

Hawk Hill Junction Option A:

- Proposed hot cross bun junction, from A130 to A1245 with signalisation.

Hawk Hill Junction Option B:

- Signalisation of A130 off-slip arm.

The final option will be defined through the determination of future planning applications.

Rettendon Turnpike Junction:

The suggested mitigation proposed by Essex Highways at the Local Plan stage for this junction is to increase the flare length on Main Road and to create 3 lanes from the A1245.

If this mitigation is not sufficient, a developer would have to demonstrate that they can sufficiently mitigate this junction through a combination of infrastructure improvements and sustainable transport improvements for the development. The two options to be tested with the local highway authority are:

Option A:

- Left-turn only onto A132 and removal of the Turnpike West bus stop.

Option B:

- Signalisation of junction;
- Off-site cycle and pedestrian improvements;
- Upgrades to the network from the crossing points through to key destinations within South Woodham Ferrers.

2. Public Transport Infrastructure

Bus services

The following interventions have been identified to date so as to improve local bus services so that they are an attractive alternative to private car use. Along with extensions to local bus services, demand responsive technologies are proposed to enable residents to travel anywhere within a catchment area. Contributions will be secured through a Section 106 Agreement so that the developers support the creation of these new services for a set period of time to support them becoming viable options.

Policy SGS10 also requires creation of, or contributions towards the creation of a car club for new residents and businesses and existing businesses. The exact details of how a car club can be brought forward will also be secured through a Section 106 Agreement.

Extension of 36 bus service (or equivalent):

- Divert the existing 36 bus service (or equivalent) through the development providing a clockwise and anti-clockwise service to serve the development, town centre and Chelmsford;
- Provide the above service at a 20 minute frequency;

APPENDIX 1 - INFRASTRUCTURE TO BE DELIVERED

- Extend the service to Broomfield Hospital.

Extension of 36X bus service (or equivalent):

- Enhanced frequency commuter service to Chelmsford benefitting from the infrastructure upgrades described above. It is considered this is a measure that will increase bus modal share above that envisaged in the Local Plan evidence base.

Introduction of DRT service:

- Provision of a Demand Responsive Bus Service for the South Woodham Ferrers Area;
- A DRT service is an additional intervention to be delivered on the site compared to what was considered at the Local Plan. This would be a material benefit reducing car journeys within South Woodham Ferrers.

Peak period service to Wickford and services to Basildon:

This is delivered in two ways:

- As part of a wider network adjustment by ECC using contributions to provide a South Woodham-Wickford-Basildon Service; or
- The use of the DRT service to provide a shuttle service; or
- Developer contribution towards alternative proposals.

An additional peak period service to Wickford is considered above that which was assessed at the Local Plan.

The service period will be defined through the determination of future planning applications.

Provision of bus stops:

- Provision of new bus stops within the site and on Burnham Road to serve the whole development. The locations will be determined by the maximum travel distances from the spine road to serve residents.

3. Travel Plan

Travel Plans are used as a way to identify a number of soft measures to encourage residents to use more sustainable modes of transport.

Measures identified to date are summarised below. Measures would be identified within a Travel Plan and implemented as the development comes forward. These measures will be subject to change as the development progresses through the determination of future planning applications.

It is also likely that Chelmsford City Council and the Local Highway Authority would require Travel Plan monitoring to explore which measures are working effectively and which are not.

Specific Travel Plans would also be created for the employment and mixed-use areas and the primary school alongside the residential development.

Smarter Choices Campaign:

- The provision of a Smarter Choices Campaign for the wider area to promote sustainable travel. The Smarter Choices campaign is an additional intervention to be delivered on the site compared to what was considered at the Local Plan.

Better Points Scheme:

- The implementation of a Better Points Scheme where residents can earn rewards for their

'green' travel choices, to be extended to include South Woodham Ferrers. This would be a material benefit in reducing car journeys to and from South Woodham Ferrers.

One-year free Bus Travel for residents of the development:

- Provision of up to one years' free bus travel on local and proposed bus services for up to four persons in each household.

Cycle training/courses for residents:

- Provision of a cycle training/cycle maintenance course on site for all residents.

Travel Packs for residents:

- Provision of Travel Packs for all residents to include sustainable travel information.

Provision of a Car Club for residents and businesses on site:

- Provision for residents and businesses on site and available to the rest of South Woodham Ferrers.

4. Footpath, Cycle Path and Bridleway Infrastructure

Footpaths and Cycle Paths:

Within the masterplan, over 10km of footpaths and cycle paths are proposed. These paths are either new links or connecting existing paths into a wider network, including paths south into the town. Routes are also identified north of the allocation boundary and up to Woodham. Whilst these routes are outside of

the allocation boundary, they form part of the network being created. Delivery of these external routes will be secured through legal agreement.

Bridleway Provision:

The masterplan shows the extinguishment of Bridleway 46, 108m in length, in favour of a pedestrian/cycle route, along with cycle track downgraded to footpath from Bridleway so cyclists can legally link to the new and existing Bridleways. These two bridleways will be replaced with a route up to Edwin's Hall Road which is approximately 1,100 m in length; 860m of this is within the allocation boundary.

The bridleway will be secured through a legal agreement to be attached to an outline planning permission to ensure its delivery as part of a comprehensive package of sustainability measures.

5. Open Space Infrastructure

Policy SGS10 requires the provision of open space across the site.

Requirements for open space are as follows:

- Allotments and community gardens - 0.864ha;
- Amenity green space- 1.152ha;
- Play space (children) - 0.144ha;
- Play space (youth) - 0.144ha;
- Parks and recreation grounds - 4.752ha of which 4.4ha may be rugby club.

As shown within the masterplan, the site provides 64ha of green space. As such the site over-provides on all types of the open space. Sufficient provision is made within the masterplan for formal recreation facilities such as the relocation of the rugby club if Chelmsford City Council wish to pursue this option.

6. Education Infrastructure

Early Years and Primary School:

Policy SGS10 requires land to be reserved for the provision of a 2 form entry primary school (420 pupil places) along with an early years and nursery facility or two standalone nursery facilities. This will also be secured through a Section 106 Agreement.

Sufficient land is identified within the masterplan for a 2 form entry school and nursery, and a standalone nursery. The development would generate 58 nursery school places when completed, and 191 primary school aged pupils.

The delivery of a school on this site would will serve the development and a wider catchment if the County Council choose to call upon the land.

Secondary and Post 16 Provision:

Secondary, post 16 and SEND places will be addressed through Section 106 contributions and the sums will be based on the forecasted populations within these age groups based on the housing mix to be secured.

School Transport:

Alongside the school places, sums would be required in order to provide the transport for children to attend schools. Contributions for transport will be secured through a S106 Agreement based on the submitted housing mix and forecasted school age population.

7. Environmental Infrastructure

Chelmsford City Council declared a climate emergency in July 2019. An Environmental Action Plan was adopted in January 2020. Within the plan, there is a clear commitment for the City Council to undertake

a greening programme to significantly increase the amount of woodland and the proportion of tree cover in Chelmsford.

The site can provide new trees at a rate of at least one new tree per every new resident. Based on an average occupancy, the site would deliver a minimum of 2400 trees (1000 homes) up to 2880 trees (1200 homes). These trees will form part of the community woodland proposals as they develop, alongside the site wide landscaping that will be secured as proposals progress.

An extension to Bushy Hill Local Wildlife Site is also proposed and further details will be secured through the planning application process. The site will also provide electric vehicle charging capacity as required by Development Management Policies.

8. Summary

This schedule is provided to set out the high level approach to infrastructure provision at Land North of South Woodham Ferrers. It demonstrates that the site meets Local Plan policy requirements, and in some cases exceeds these. The schedule above includes a range of off site highways works that are not set out in masterplan, and it gives a clear indication of the commitment to deliver appropriate infrastructure.

The masterplan is the stage of the process where high level land use principles are secured. Further work is ongoing to agree the design solution to off site highway work. The various options put forward are subject to further refinement and testing through pre-application and determination of future planning submissions.

LAND NORTH OF
SOUTH WOODHAM
FERRERS
ESSEX



BroadwayMalyan^{BM}

David Lock Associates
Town Planning and Urban Design



Bellway