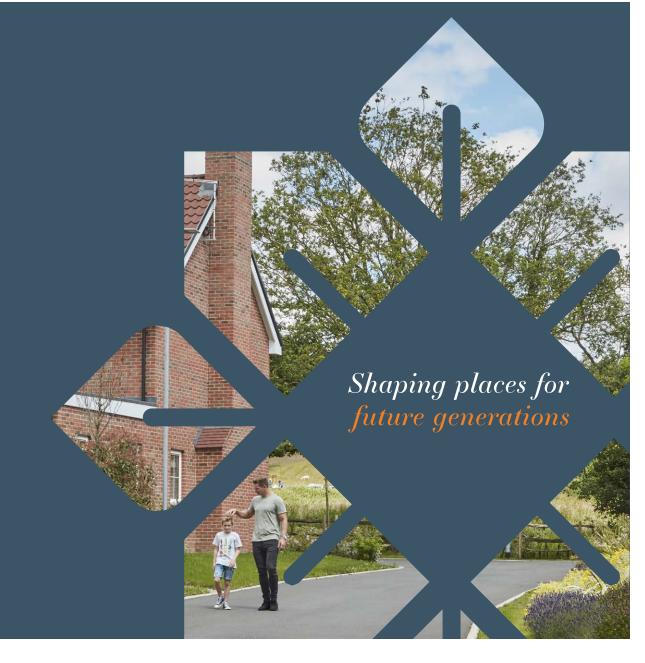
OAKLANDS MEADOWS SOUTH WOODHAM FERRERS

ESSEX

DESIGN AND ACCESS STATEMENT

September 2021





OAKLANDS MEADOWS SOUTH WOODHAM FERRERS

ESSEX

Oaklands Meadows comprises the significant majority of Land North of South Woodham Ferrers which is allocated for development as a Strategic Growth Site in the Chelmsford Local Plan, adopted in May 2020. Following the approval by Chelmsford City Council of the Masterplan, Countryside and Essex County Council Property Services are submitting a planning application for Oaklands Meadows.



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SECTION 1 INTRODUCTION

This section introduces the site, summarises the planning policy context within which the planning application is submitted, and describes the purpose and structure of the Design and Access Statement

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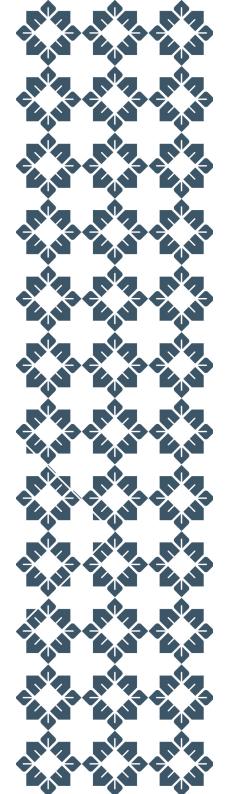


OAKLANDS MEADOWS SOUTH WOODHAM FERRERS

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INTRODUCTION

DESIGN AND ACCESS STATEMENT

Land North of South Woodham Ferrers was allocated for development within the Chelmsford Local Plan, adopted in May 2020. Within this document, it is referred to as Strategic Growth Site (SGS) 10.

Subsequent to the adoption of the Local Plan, and following an extensive process of consultation with local and statutory stakeholders, Chelmsford City Council, working together with development partners led by Countryside, approved a Masterplan for Land North of South Woodham Ferrers in March 2021.

A planning application is now being made for development in accordance with the approved Masterplan on Oaklands Meadows ('the site'), which comprises the significant majority of Land North of South Woodham Ferrers.

This planning application is made jointly by Countryside Properties and Essex County Council Property Services, who together control the land within the site.

This Design and Access Statement (DAS) has been prepared by Broadway Malyan as part of a wider set of documents and drawings submitted in support of the planning application, and should be read together with these.

The team

This DAS is based on work by the project team comprising:

- Phase 2 planning
- Broadway Malyan masterplanning and architecture
- David Jarvis Associates landscape design
- Mayer Brown highways and movement
- Aecom drainage, highways and movement, services, earthworks, socio-economics, health

- Geosphere ecology
- RPS archaeology and cultural heritage
- Turley sustainability
- Bidwells environmental impact assessment
- DevComms consultation and engagement

Structure of this document

This DAS is structured as follows:

- Section 1: Introduction introducing the document, the site, and the planning policy context within which the application is submitted;
- **Section 2:** Assessment describing the site, its local and strategic context;
- Section 3: Involvement and evaluation outlining the evolution of the proposed design through consultation with local and statutory stakeholders;
- **Section 4:** Vision and design principles describing the Vision for the site and identifying key aims and objectives;
- Section 5: Design describing the elements of the proposed design, explaining site-wide principles and more local key features;
- Section 6: Summary restating the key components proposed and outlining the next steps.

Description of development

This application is submitted in outline, with all matters reserved for future approval, but with full details provided for the principal means of vehicular access to the site, the initial phase of on-site highway works, strategic ground reprofiling, strategic surface water attenuation, and strategic foul drainage works. The proposed development comprises:

- Residential development of up to 1,020 homes (Class C3);
- Up to 88 bedroom units of residential care use (Class C2);
- Up to 1,100 sqm GEA Neighbourhood centre (including retail uses) within class E and including a multi-purpose community centre;
- Up to 1,200 sqm GEA of other commercial uses falling within Class E (of which not less than 1,000 sqm to be business floorspace within Use Class Eg);
- 2 form entry Primary School and 2 no.
 56 place Early Years facilities;
- 5 serviced plots for Travelling Showpeople (GEA 10,000 sqm);
- Open spaces and other landscaped areas, including parks, play areas, wildlife habitat areas, allotments, community orchards, formal/informal open space, playing fields and associated ancillary maintenance buildings, structures and pavilion;
- All associated highway infrastructure, including means of vehicular access to the site and all internal roads and service areas;
- Pedestrian, cycle and bridleway routes (including partial extinguishment of Bridleway 25);
- Vehicular and cycle parking to serve the proposed development;
- All drainage works including foul drainage infrastructure,
 Sustainable Urban Drainage Systems including
 ground and surface water attenuation features;
- Ground reprofiling works;
- Demolition of existing building;
- All associated ancillary works including services and utilities.

PLANNING POLICY CONTEXT

The planning policy context within which the application is submitted is summarised here. For fuller details, please refer to the Planning Statement submitted as part of the application documents.

The area of land allocated in the adopted Local Plan for development North of South Woodham Ferrers is shown in orange on the adjoining plan. It extends to just over 121 ha. It abuts the existing edge of South Woodham Ferrers along Burnham Road to the south, and lies either side of the B1418, extending as far west as Willow Grove.

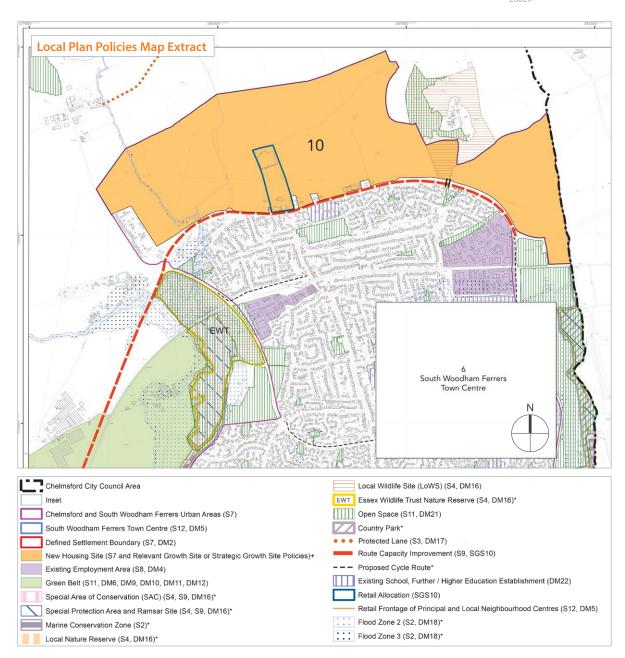
The site is allocated for residential development (with supporting uses and infrastructure) within the adopted Local Plan under Policy SGS10, and the development as proposed is fully in accordance with the Local Plan allocation.

Policy SGS10 requires development proposals to accord with a Masterplan that has been approved by the Council. The applicant has led the preparation of the Masterplan for the site, which started with the collation of background technical evidence about the site and surroundings, and which then led on to a community and technical stakeholder workshop in January 2020, six weeks of public consultation during June-July 2020, a Quality Design Review Panel in July 2020, and formal consultation on the amended Masterplan by Chelmsford City Council in the autumn of 2020.

The Masterplan was subsequently considered by Chelmsford's Policy Board in January 2021, prior to formal approval at Cabinet in March 2021. The requirement of the Policy to have a Masterplan approved has therefore been met.

The development as proposed in this application is wholly consistent with the key principles established in the approved Masterplan.

This Design and Access Statement explains how the proposals establish a framework for achieving a high quality of design.



INTRODUCTION

EXTENT OF APPLICATION

The application site covers an area of 112.2 hectares (277.2 acres) and is located to the north of the town of South Woodham Ferrers. It is outlined in red on the adjoining plan.

The site largely composes agricultural fields adjoining the existing town, with the B1012 Burnham Road forming the southern boundary of the site. Within the western part of the site, the B1418 runs northwards from Burnham Road towards Woodham Ferrers.

The majority of the western half of the site is relatively flat with the landform gradually rising to the north. 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.

The extent of the site

The plan opposite shows the SGS 10 Stage 3 adopted Masterplan, with the proposed outline planning application red line overlaid.

The site includes around 85% of the land within SGS 10 as identified within the adopted Chelmsford Local Plan.



There are three main areas of land within SGS 10 which do not form part of this application:

- the already completed development north of the Burnham Road/Hullbridge Road junction comprising a Sainsburys superstore, the Crouch Vale Medical Centre, and a petrol filling station;
- Land adjoining the application site to the west, with potential for some residential development in accordance with the approved Masterplan, mostly controlled by a different landowner;
- Land including the buildings associated with Hamberts Farm; this area is likely to come forward as a small scale residential development.

There are some areas of land within the application red line outside the extent of SGS 10. These are:

- The Old Fire Station plot fronting Burnham Road adjoining the Crouch Vale Medical Centre;
- Land within Highways ownership where works associated with the application are proposed;
- Land within the north-western part of the site around Mill Hill, identified with strong potential for recreational and biodiversity benefits.



02





"Well-designed places are: based on a sound understanding of the features of the site and the surrounding context, using baseline studies as a starting point for design; integrated into their surroundings so they relate well to them; influenced by and influence their context positively; and responsive to local history, culture and heritage." (National Design Guide, 2021)

This section describes 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, <u>character and facilities within the town.</u>













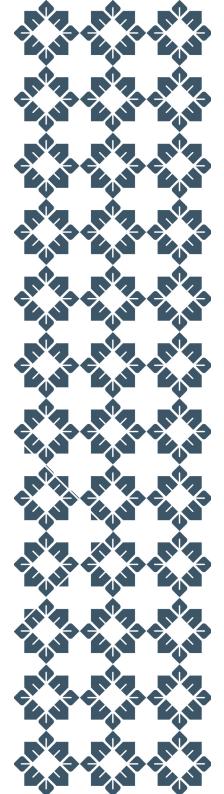


OAKLANDS MEADOWS SOUTH WOODHAM FERRERS

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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 has a population of over 16,000 people. It is the second largest settlement within the City of Chelmsford administrative area and is located approximately 17 km to the south-east of Chelmsford 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.

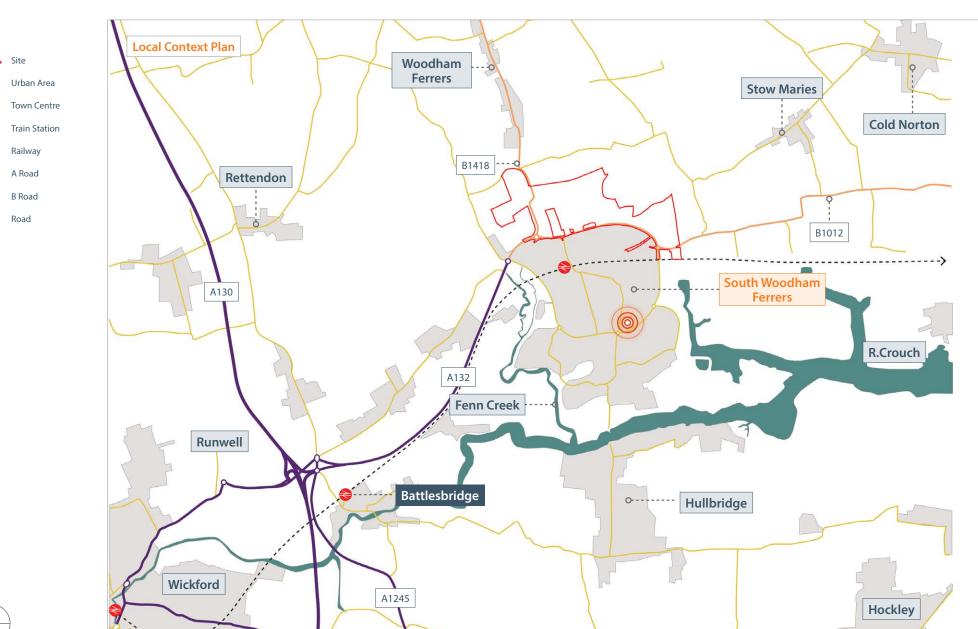
The setting of South Woodham Ferrers is rural in character and includes a number of smaller villages such as Stow Maries, Woodham Ferrers, Rettendon and Battlesbridge. The River Crouch, immediately to the south of the town, is a key element of its setting. South Woodham Ferrers town centre is within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







OAKLANDS MEADOWS SOUTH WOODHAM FERRERS ESSEX



Key

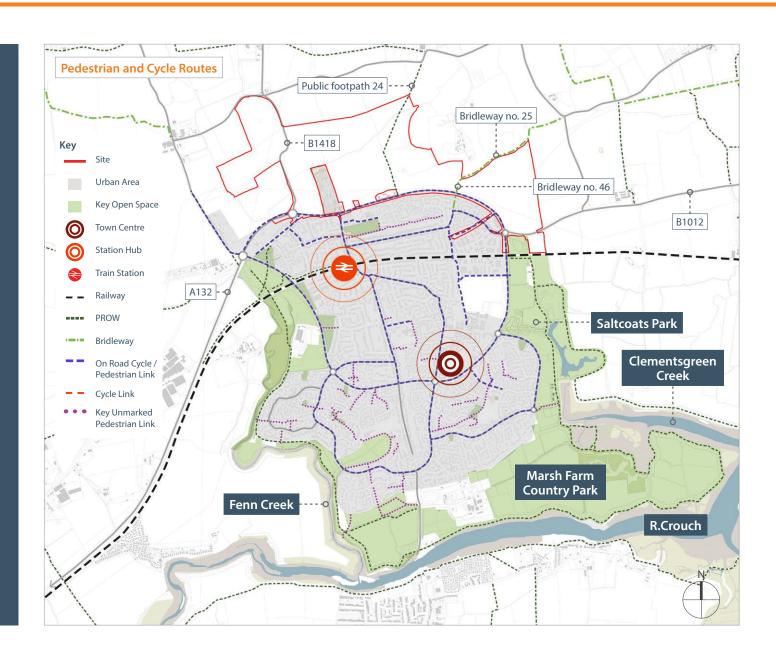
EXISTING PEDESTRIAN AND CYCLE NETWORK

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 footpaths 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.

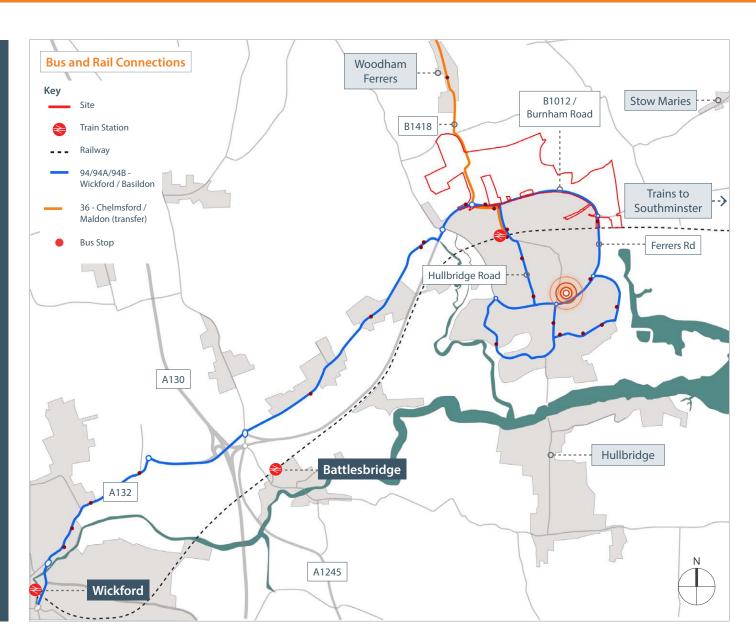
Services within the town typically run from the train station and along key spine roads and arterial routes such as Hullbridge Road, Ferrers Road and the B1012.

The site is highly accessible in terms of public transport. Its 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.



LAND USES

The town centre is situated in the east of South Woodham Ferrers and is the town's major focus for 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. Recently a new Sainsburys superstore and the Crouch Vale Medical Centre have also opened, on the northern edge of the town immediately adjoining the site. Other community facilities within the town include Town Council buildings, Village Hall and places of worship.

Within the northern part of the Town Centre is the William de Ferrers secondary school 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 and the west of the town provide significant areas of employment.

The southern, eastern and western edges of the town comprise 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 an attractive 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.



William De Ferrers secondary school



Crouch Vale Medical Centre



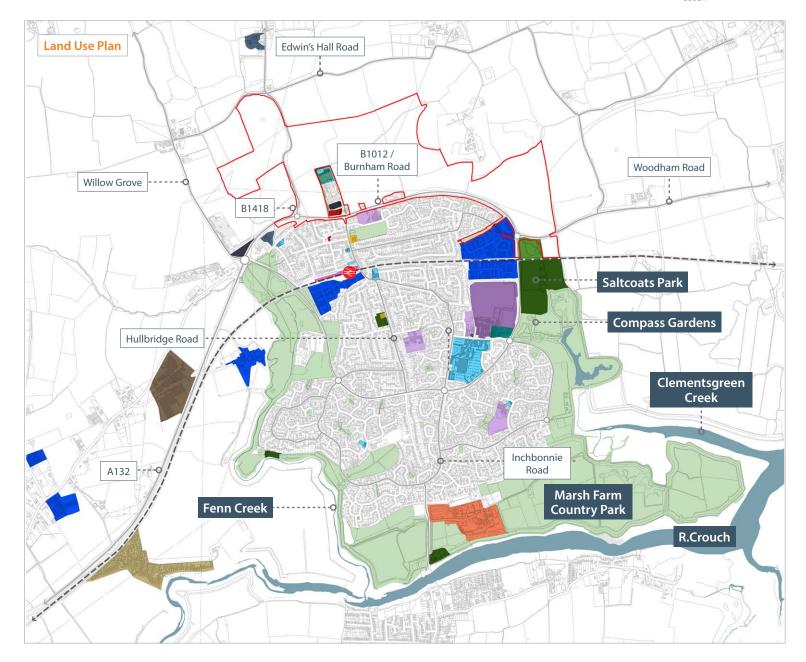
Sainsbury's South Woodham Ferrers



The town centre has a strong retail offer

OAKLANDS MEADOWS SOUTH WOODHAM FERRERS ESSEX







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.

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.

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 new Sainsburys superstore and Crouch Vale Medical Centre form another node to the north of the town, adjoining the site.

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.

Movement / Routes:

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

Within the town Ferrers Road, Inchbonnie Road and Hullbridge Road serve as primary movement corridors for pedestrians and vehicles, with residential streets branching off these 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

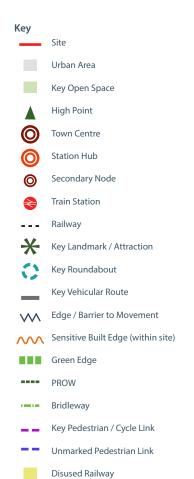


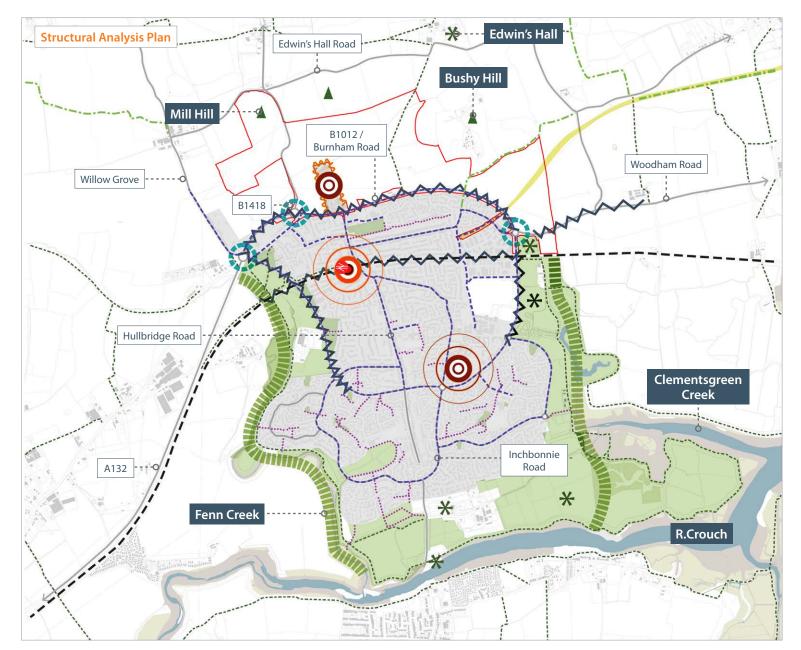
The B1012 creates severance issues along the northern boundary of the town



The open countryside surrounding the town forms a distinctive green edge







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 site on 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.



Church of St Mary, Woodham Ferrers



Ilgars Manor along Willow Grove



Edwin's Hall

(Robert Edwards, Wikimedia Commo



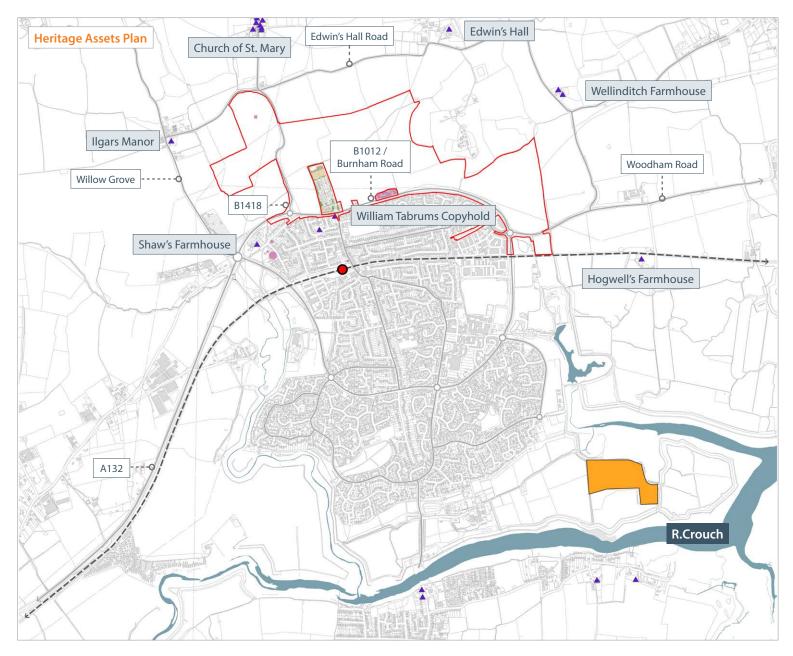
Hamberts Farm - Frontage to Burnham Road looking West



Hamberts Farm -Frontage to Burnham Road looking East



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





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.



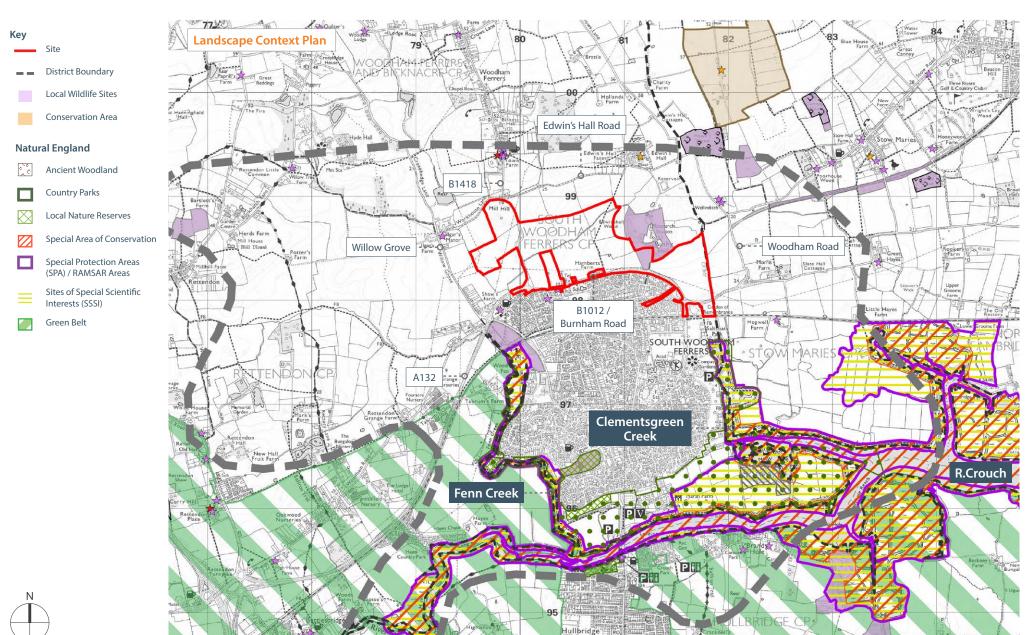
View of the River Crouch from the northern bank







OAKLANDS MEADOWS SOUTH WOODHAM FERRERS ESSEX



LANDSCAPE CHARACTER

The site lies within the 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 the character area assessment 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 the 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 the characteristics of this LCA.

The F12 East Hanningfield Wooded Farmland Landscape 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

1

South Essex Farmlands



Crouch & Roach Farmlands

District Character Areas

© Chelmsford and Maldon Districts

C4 - Fleet Estuarine Marsh / Mudflats

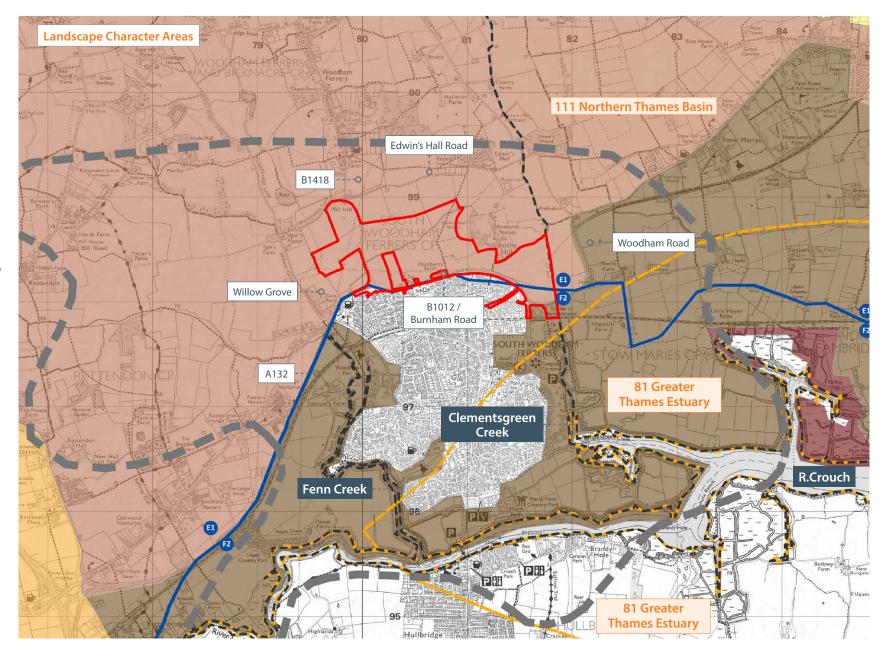
D9 - Fambridge Drained Estuarine Marsh

E2 - Tillingham and Latchingdon Coastal Farmland

F6 - Woodham Wooded Farmland

F11 - South Hanningfield Wooded Farmland

F12 - East Hanningfield Wooded Farmland





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.

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

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.

To the north of the site, Footpath 19 provides an east / west route, but there are no current east / west routes through the site.

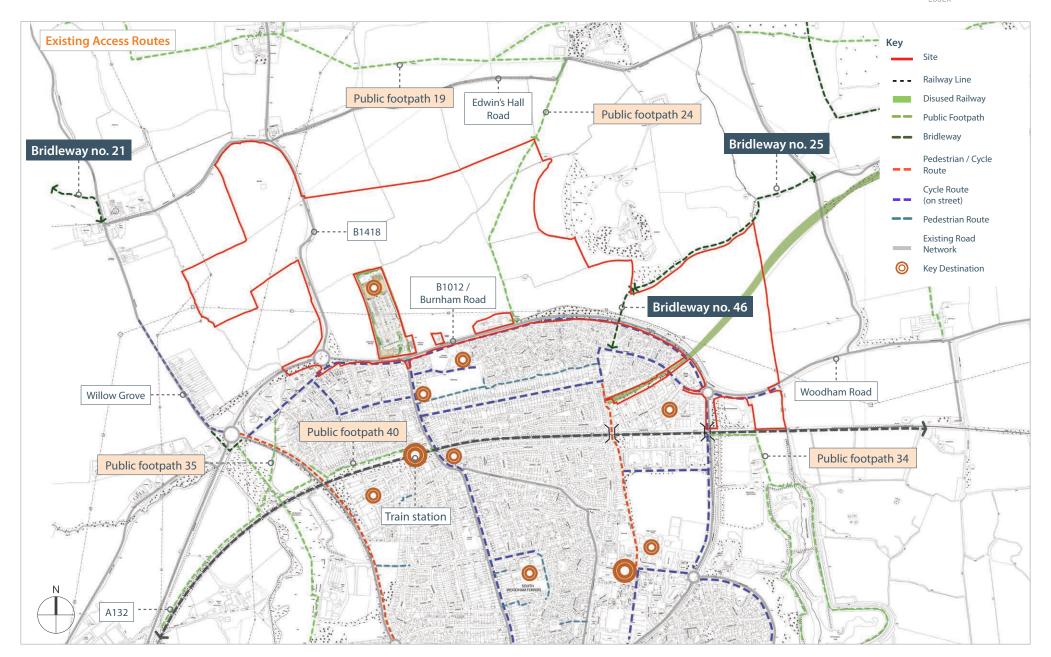


Bridleway no.46 provides links into South Woodham Ferrers from the site



Public footpath 24 looking south from Edwin's Hall Road





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, with gradients 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 beyond 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 the 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.

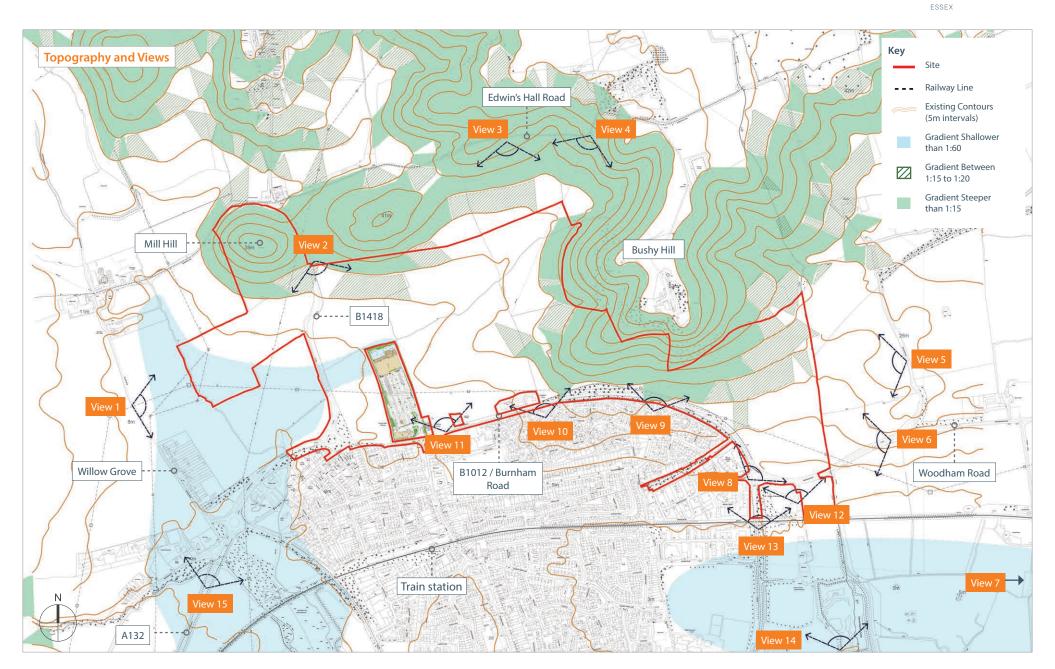
View 12: This view shows the eastern part of the site from the Memorial Garden south of Woodham Road.

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.

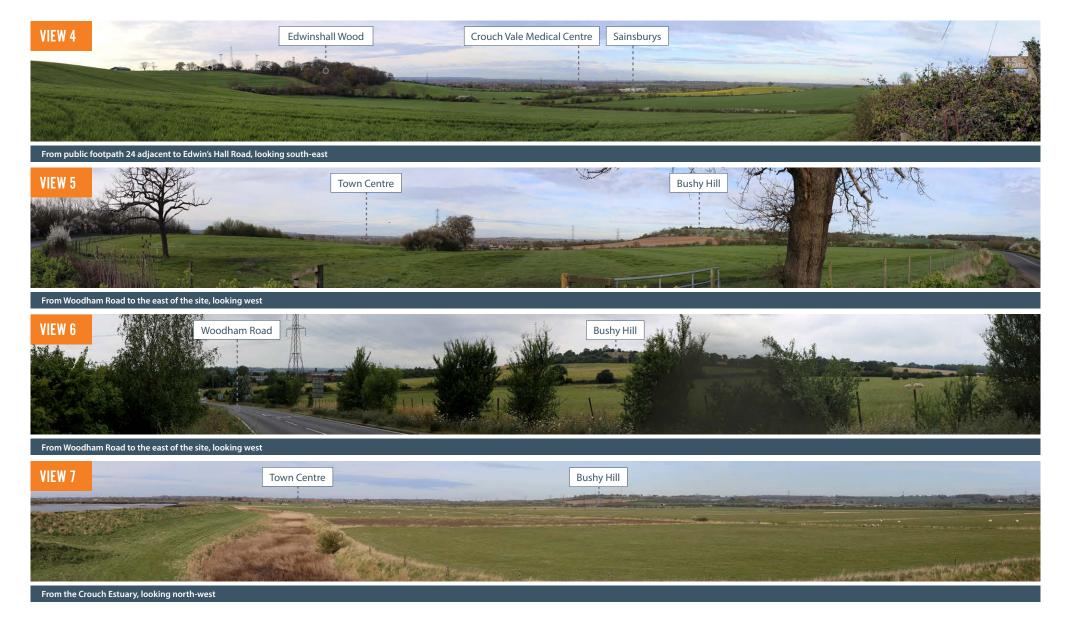
View 15: This is a more distant view from Burnham Road to the south-west, with a glimpse of the higher ground to the north of the site above the tree line which screens the site itself.

OAKLANDS MEADOWS SOUTH WOODHAM FERRERS



VIEWS TOWARDS THE SITE





VIEWS TOWARDS THE SITE





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.

A watercourse runs east to west through the site towards Fenn Creek, to the southwest. 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. 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

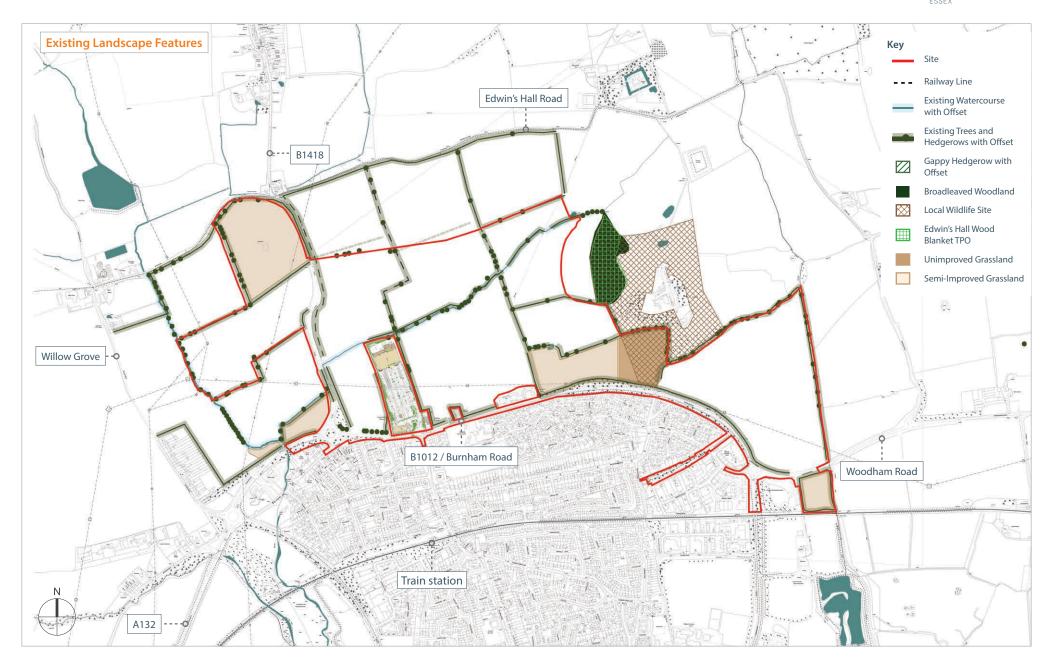


Woodland margin along the edge of Edwinshall Wood



Mature trees within hedgerows and field margins

OAKLANDS MEADOWS SOUTH WOODHAM FERRERS



FLOODING AND SURFACE WATER DRAINAGE

The western part of the site falls from the northeast to the southwest with steep falls from approximately 30.0m AOD on the north eastern boundary to 8.0m AOD at the roundabout between the B1012 and B1418. The parcel on the west of B1418 falls from 20.0m AOD to 8.5m AOD.

The eastern part of the site falls from north to south with levels dropping from 40.0m AOD to 9.5m AOD. A small parcel to the south of the B1012 is included in the site, with existing levels falling from 9.5m AOD to 6.0m AOD.

The Fenn Brook flows north to south through the western portion of the site. It was classed as a Main River by the Chelmsford City Council Strategic Flood Risk Assessment (SFRA)4.

A branch of the Fenn Brook flows north east to south west through the site. This branch crosses the B1418 to the north of its roundabout junction with the B1012 in a culvert. It was classed as an Ordinary Watercourse by the SFRA along much of its length, becoming a Main River downstream of the B1418. It joins the Fenn Brook to the north of the B1012 between its roundabout junction with the B1418 and the roundabout

junction with the A132. The Fenn Brook then flows south under the B1012, connecting to Fenn Creek at a point approximately 650m south of the site. The Fenn Creek flows in a southerly direction towards the River Crouch, which is located approximately 2.5km south of the site.

The contours on the western part of the site fall directly towards the Fenn Brook branch and to existing ditches that convey the runoff into the Fenn Brook branch. Therefore, the runoff from the majority of the site discharges into the Fenn Brook.

The topographical survey shows no watercourses in the eastern land. The contours in the east of the site are falling towards the B1012. There is an existing ditch to the south of the B1012, between the Memorial Gardens and the site. This ditch flows in a north to south direction, crossing below the railway lines.

The Fenn Brook, which runs north to south on the west boundary of the site, is the primary source of fluvial flood risk to the site. The EA map shows Flood Zones 2 and 3 sitting on the southwest boundary of the site. Therefore, the approved masterplan has been designed to ensure that all development is situated outside of Flood Zone 2 and 3, falling within Flood Zone 1 only. Flood Zone 1 comprises land assessed as having a less than 0.1% (1

in 1000) annual probability of river or sea flooding. The risk of fluvial flooding can be considered as low.

Parts of the west of the site are susceptible to flooding from groundwater whereas the vulnerability of the east side from groundwater flooding is considered as low. There are no known instances of groundwater flooding on or in the vicinity of the site. Notwithstanding this, the risk to the undeveloped site from groundwater flooding is considered to be medium. The impact of the proposed development to groundwater flooding on adjacent areas is expected to be low and further action or mitigation is not considered to be required. 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.

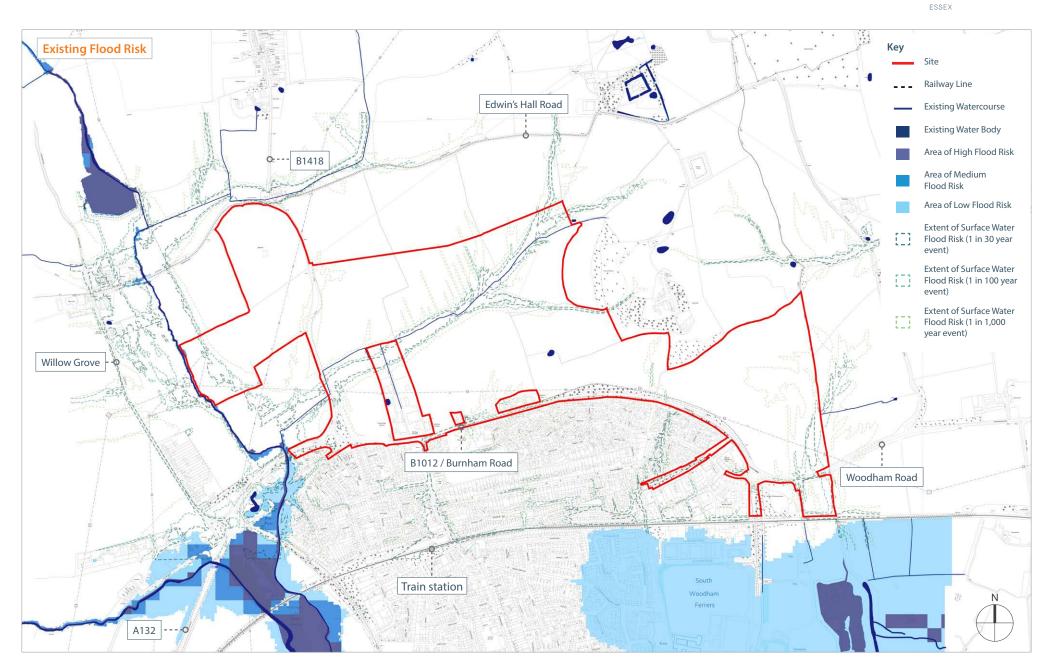
The site does not fall within the risk of flooding area from any reservoir according to the Environment Agency Mapping.

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

OAKLANDS MEADOWS SOUTH WOODHAM FERRERS



UTILITIES

A number of utilities run across the site, both above 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 eastwest direction closely following the southern boundary onto Burnham Road. Further overhead power lines criss-cross the site and land immediately adjoining on the western side.

There are further low voltage power lines on the site, but it is assumed that these will be placed underground. as required.

A high pressure gas main runs underground in a south east – north west direction, crossing the western part of 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 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

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