



Sites 3b, 3c & 3d
Land at East
Chelmsford
Essex

**DEVELOPMENT
FRAMEWORK DOCUMENT**

February 2021



Lambert
Smith
Hampton

Acknowledgements:

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Planning	Barton Willmore
Heritage	RPS
Ecology	SES Ecology
Transport, drainage	WSP
Landscape design	Lloyd Bore
Masterplanning	LSH
Engagement	BECG

Indicative character: Redrow Homes

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1 Introduction

Foreword

- 1.1 Chelmsford Local Plan 'Location 3 East Chelmsford' (shown opposite) comprises four Strategic Growth Sites, 3a, 3b, 3c and 3d. These sites are collectively identified by Chelmsford City Council (CCC) to deliver around 400 new homes, a stand-alone early years and childcare nursery (Use Class D1), safeguarded land for the future expansion of Sandon Park and Ride site and 5,000sqm of new B1 or other appropriate B Use Classes floorspace.
- 1.2 This Development Framework Document has been prepared by the Redrow Homes project team for Sites 3b, 3c and 3d. Site 3a: East Chelmsford - Manor Farm is being developed as a separate masterplan by Hopkins Homes for around 250 homes and a Country Park.
- 1.3 The CCC policy provisions for Strategic Growth Sites 3b, 3c and 3d (the Sites) are summarised below (*note: use classes referred to below: B1 and D1 are now replaced by E*)*:

Site 3b: East Chelmsford – Land North of Maldon Road (Employment Site)

- Around 5,000sqm (net) new Use Class B1 floorspace, or other appropriate B Use Classes;
- Land (circa 0.13 hectares) for the physical provision of a stand-alone early years and childcare nursery (ECC advise 56 places) (Use Class D1) in consultation with the Local Education Authority; and
- Safeguard land for the future expansion of Sandon Park and Ride site.

Site 3c: East Chelmsford – Land South of Maldon Road (Residential Site)

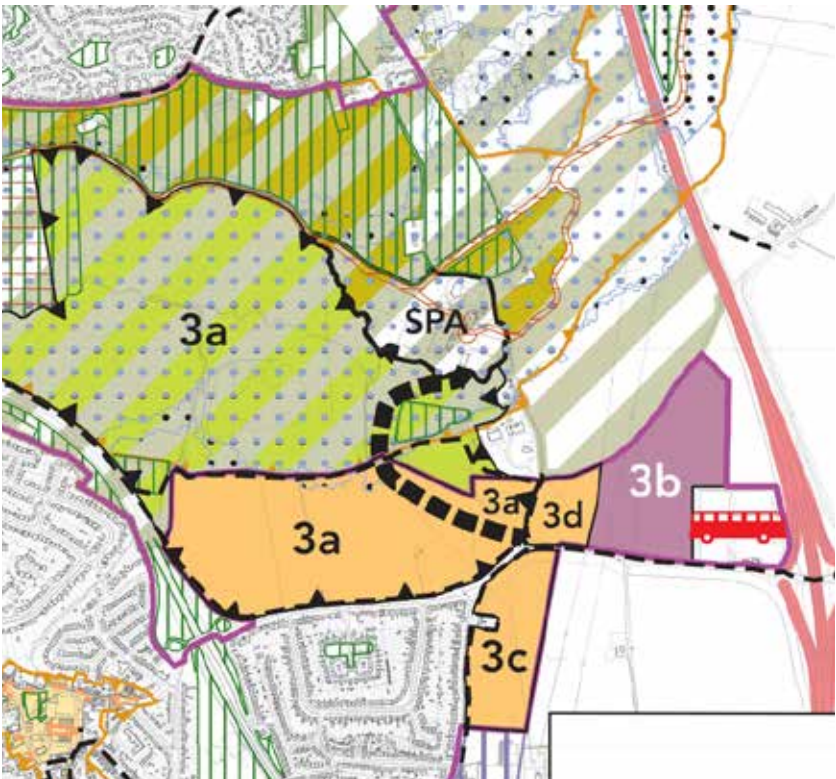
- Around 100 new homes of mixed size and type to include affordable housing.

Site 3d: East Chelmsford – Land North of Maldon Road (Residential Site)

- Around 50 new homes of mixed size and type to include affordable housing.
- 1.4 All Strategic Growth Sites require the preparation of masterplans to ensure that a comprehensive approach is taken to the planning and delivery of each allocation. Each masterplan is required to:
 - have an understanding of the associated infrastructure requirements;
 - ensure stakeholder engagement and public consultation before approval CCC Policy Board/ Cabinet; and then
 - be subject to a planning application submission.
- 1.5 This Development Framework Document describes the context for the Sites to provide an understanding of the capacity for development and infrastructure requirements. A planning application informed by this document will follow.

Structure

- 1.6 The remainder of this structured as follows:
 - Section 2, describes the surrounding context
 - Section 3 analyses the site
 - Section 4 discusses the opportunities and constraints to development
 - Section 5 discusses the design objectives and principles
 - Section 6 describes the masterplan concept
 - Section 7 describes the masterplan framework
 - Section 8 concludes this document



Chelmsford Local Plan

*Use Classes	
•	B2 General industrial - Use for industrial process other than one falling within class E(g) (previously class B1) (excluding incineration purposes, chemical treatment or landfill or hazardous waste)
•	D1 Non-residential institutions - Clinics, health centres, crèches, day nurseries, day centres, schools, art galleries (other than for sale or hire), museums, libraries, halls, places of worship, church halls, law court. Non-residential education and training centres
•	Class E- In 11 parts, Class E more broadly covers uses previously defined in the revoked Classes A1/2/3, B1, D1(a-b) and 'indoor sport' from D2(e):
•	E(a) Display or retail sale of goods, other than hot food
•	E(b) Sale of food and drink for consumption (mostly) on the premises
•	E(c) Provision of: (i) Financial services,(ii) Professional services (other than health or medical services), or (iii) Other appropriate services in a commercial, business or service locality
•	E(d) Indoor sport, recreation or fitness (not involving motorised vehicles or firearms)
•	E(e) Provision of medical or health services (except the use of premises attached to the residence of the consultant or practitioner)
•	E(f) Creche, day nursery or day centre (not including a residential use)
•	E(g) Uses which can be carried out in a residential area without detriment to its amenity: (i) Offices to carry out any operational or administrative functions (ii) Research and development of products or processes (iii) Industrial processes



Chelmer Village

Site 3a - country park

Essex Yeomanry Way

Sandford Mill Lane

A12

Site 3a - residential

Site 3d

Site 3b

Sandon Park
and Ride

Maldon Road

Maldon Road

Site 3c

Brick Kiln Road

Great Baddow

Molrams Lane

Woodhill Road

Sandon

5

VISION

- 1.7 Our proposals will help fulfill the vision of the Council for East Chelmsford, capitalising upon the location's assets in terms of accessibility, proximity to Sandon Park and Ride and relationship to the existing landscape and built environment.**

A great place to live

- 1.8 Redrow Homes seek to create a cohesive and sustainable development that will deliver a productive and vibrant community at East Chelmsford. It will be a place which combines housing with community, social and economic infrastructure all set in an attractive and accessible landscape. It will deliver a scheme that will achieve the optimum balance of uses for a new sustainable community providing new homes and jobs to meet a range of needs.
- 1.9 The Framework will provide a range of high quality homes where people will live and take pride in their environment. It will also offer significant areas of new public open space, recreational routes, children's play areas, a children's day nursery and employment area, in addition to safeguarding the extension of the park and ride site, of benefit to both new and existing residents.
- 1.10 High quality housing and supporting employment uses within a landscape setting can not only meets the needs of local residents, but will attract new people to live in East Chelmsford, contributing to the community and supporting shops and services within the wider area of Great Baddow and Sandon.
- 1.11 The Framework will protect and enhance local distinctiveness through the creation, protection and enhancement of networks to ensure a net gain for biodiversity and green infrastructure.
- 1.12 The Framework supports a strong sustainable transport focus through the provision of excellent pedestrian and cycle connections to the Sandon Park and Ride, the national cycle network and footpath network, Chelmsford city centre and urban area, together with neighbouring areas of Great Baddow and Sandon. The sustainable transport focus will help Chelmsford meet the need to reduce carbon emissions, also through the location of development and the design of buildings.



Redrow Homes

Designing a better way to live

- 1.13 At Redrow, we build more than just homes; we create thriving communities. Our creative and determined approach combines the best of town and country to create healthy, vibrant communities.
- 1.14 Redrow has long embraced the design principles of Garden Towns and Villages to create new communities that stand the test of time based around the key values that are essential to create better places to live and are applied to all of our developments, irrespective of their scale and location. Redrow are able to deliver thriving communities that integrate work, leisure and home life.
- 1.15 Not only do we build communities of our own, we work hard to integrate into the wider community, improving services for the benefit of the whole neighbourhood and making leisure spaces more accessible for everyone to enjoy. We create and improve transport infrastructure via roads, paths and cyclepaths that blend seamlessly with the existing network.

Natural places

- 1.16 Redrow enhances the ecological value of our developments recognising the importance of strengthening people's connections with nature and their natural surroundings. We achieve this through design, partnerships and our commitment to continually refine our understanding of important biodiversity principles. That's why we create layouts carefully designed to allow the natural flow of life, with ponds, wetlands and wildlife habitats, bee friendly gardens and family friendly woodlands. We often are able to create valuable wildlife corridors and habitat areas on our developments and work hard to protect the wider environment.

Award winning homes

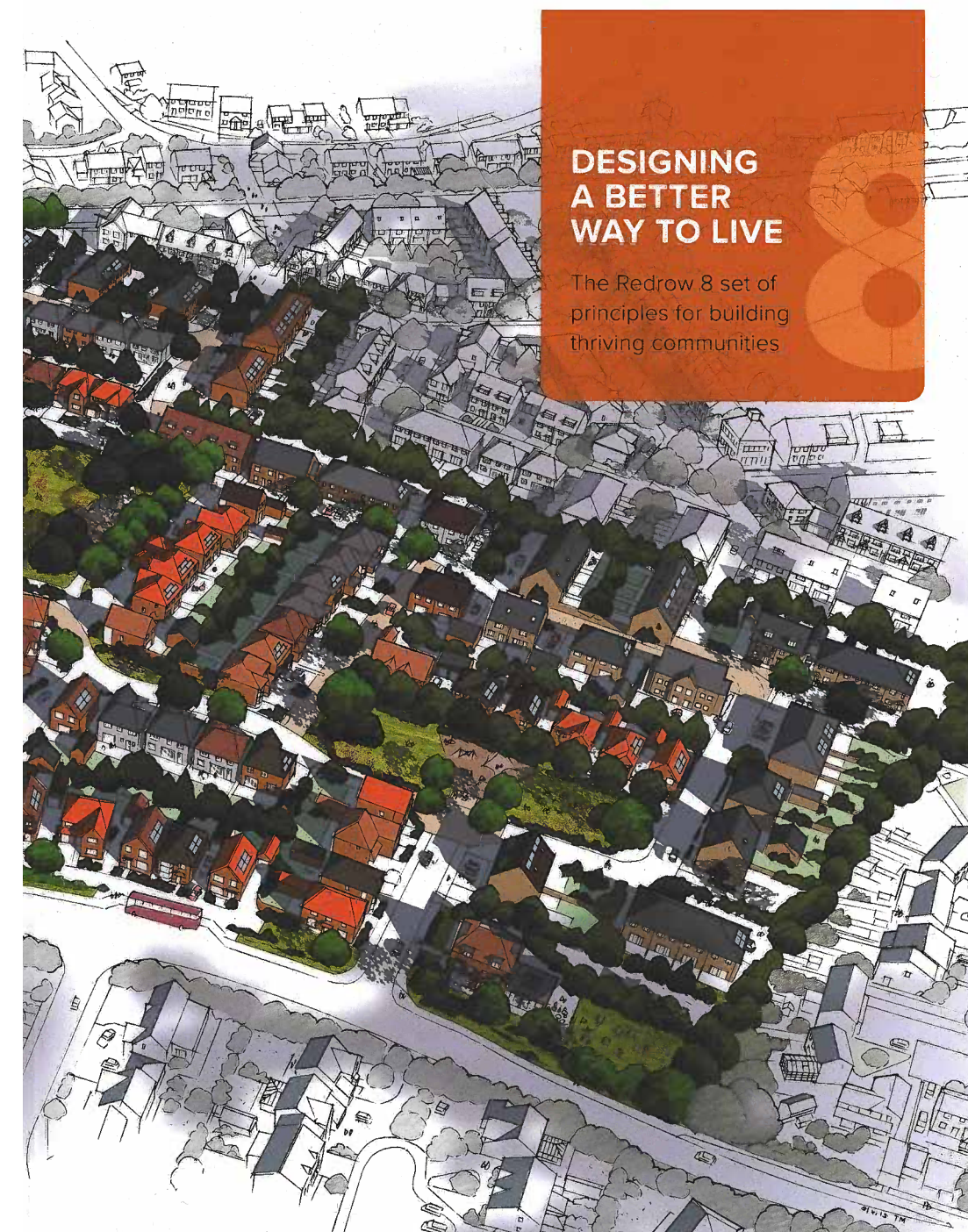
- 1.17 Every element of our award winning Heritage homes are carefully considered to offer a better way of living. Inside and out, from first time buyer to large family homes.
- 1.18 We never lose sight of our responsibility to our customers, making sure that their home is not just a place to live, but a place for living.
- 1.19 At Redrow we develop places where individuals and families can live and flourish. Places that not only cater for community needs but enhance lifestyles. Places that feel like home.

Redrow 8: Designing a Better Place to Live

- 1.20 The Redrow 8 are a key set of principles that sets out the ways in which redrow goes about creating a better place to live:
1. Listen to learn
 2. Keeping it local
 3. Easy to get around
 4. Places to go things to do
 5. Nature for People
 6. Streets for life
 7. Homes for all
 8. Built to impress

Our approach

- 1.21 Our approach is collaborative. Since September 2018 we have worked with Chelmsford City Council (CCC) Officers to produce a framework consistent with the emerging planning policies; to ensure that the Sites will deliver a high quality, attractive place that meets the vision and design principles set out in this document.
- 1.22 The masterplan process is iterative, informed by the input stakeholders and local organisations in addition to comments from ECC and CCC.



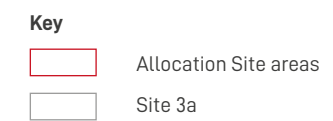
2 Context



Location

- 2.1 The Strategic Growth Sites are located to the east of Chelmsford City Centre and adjacent to Great Baddow.
- 2.2 Sites 3b (at circa 10.66ha) and 3d (at circa 2.8 ha) lie to the north of Maldon Road and Site 3c (at circa 7.2 ha) lies to the south of Maldon Road.

Key	
	Allocation Site areas
	Site 3a





Accessibility

- 2.3 The Sites are located within close proximity to the A12 and the Essex Yeomanry Way which provides access to the wider highways network. The Sites are within 3km of Chelmsford City Centre and 1.25km of The Vineyards' local centre at Great Baddow.
- 2.4 The Sites are within 25 minutes cycling distance of much of Chelmsford, Great Baddow and the western edge of Danbury using existing roads and cyclepaths.

2.5 The following pedestrian and cycle routes are considered important to the connectivity of these allocation Sites:

- East-west to and from the nearby facilities in Great Baddow and to Chelmsford City Centre;
- North-south to and from Chelmsford City Centre, Chelmer Village and the area identified for a new country park;
- North-south-from Chelmer Village to the Sandon School;
- To and from Sandon Park and Ride; and

- To and from the existing and proposed residential areas and the children's day care/nursery at Site 3b.

Bus routes

- 2.6 There are a number of bus routes along Maldon Road, and bus stops within convenient walking distance (250m and 500m) of the Sites. The bus services provide access within circa 11 minutes to Chelmsford City Centre and to local services at Great Baddow. Sandon Park and Ride also provides frequent services direct to Chelmsford City Centre (See details opposite).



Bus Stops and Routes around the Sites.

Park and Ride

Chelmer Valley Cross City Service (Throughout the day (Mon-Sat))

Chelmer Valley Park and Ride, Anglia Ruskin University, Chelmsford Railway Station, Duke Street Careers Office, New London Road, Reed Agency, Job Centre, Parkway, Sandon Park and Ride

Sandon Cross City Service (Throughout the day (Mon-Sat))

Sandon Park and Ride, Mildmay Car Park, Victoria Road South, Chelmsford Railway Station Anglia Ruskin University, Chelmer Valley Park and Ride

Sandon Peak Time Service (0730-0830 / 1610-1800 (Mon-Fri))

Sandon Park and Ride, Mildmay Car Park, Victoria Road South, Duke Street Careers Office, New London Road, Reed Agency, Job Centre, Parkway Sandon Park and Ride

Broomfield Hospital Service (Every 23 minutes from 0637 to 1830 (Mon-Fri))

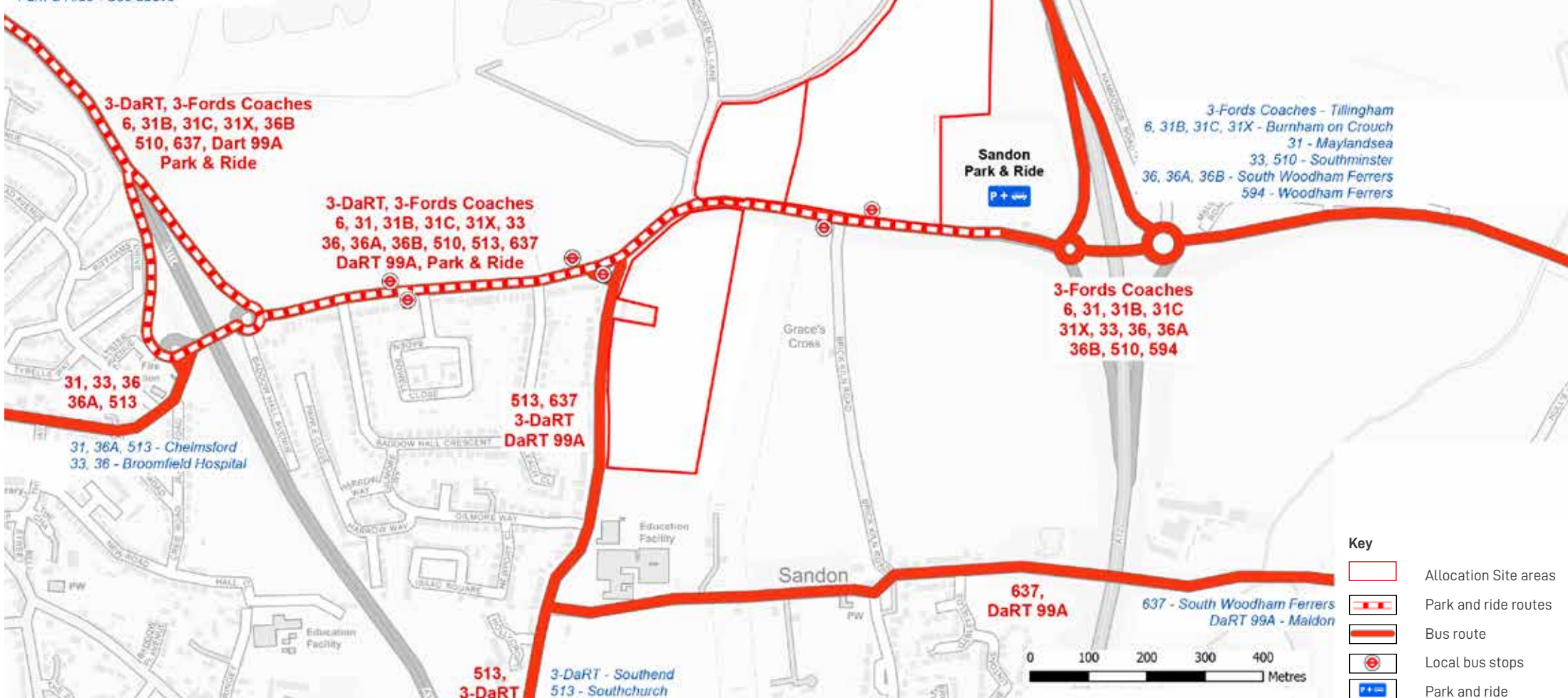
Chelmer Valley Park and Ride, Broomfield Hospital

3-DaRT, 3-Fords Coaches, 6, 31B, 31C,

31X, 36B, 510, 637 - Chelmsford

DaRT 99A - Broomfield Hospital

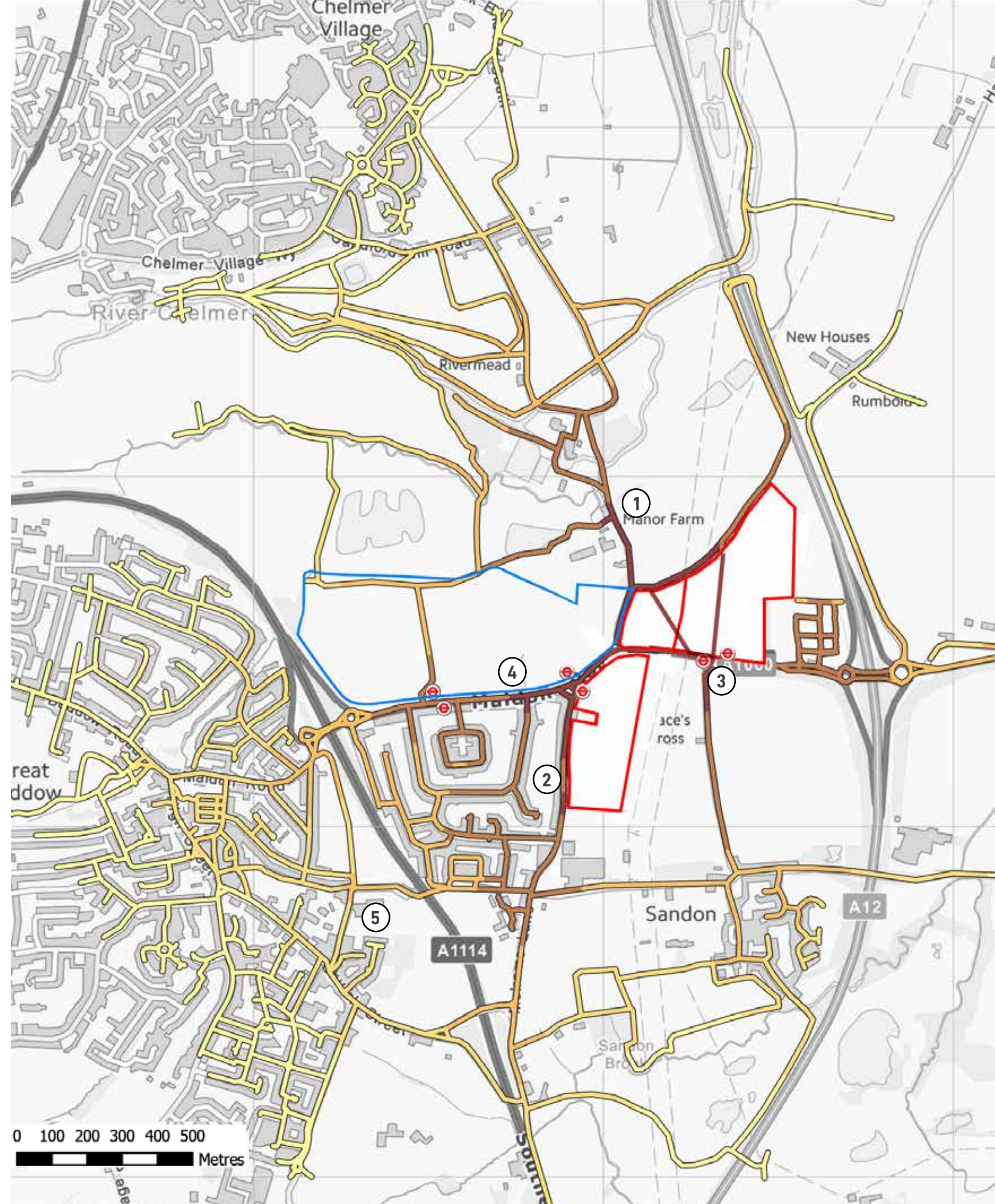
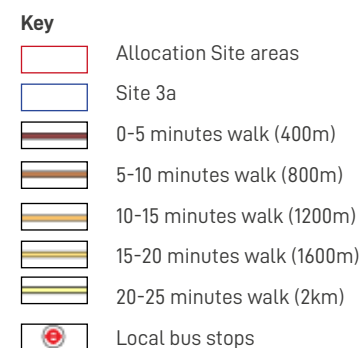
Park & Ride - See above





Footpaths

- 2.7 The wider, strategic footpath network connecting the Sites into the local context and journey times is shown opposite. For walking to and from Chelmer Village, pedestrian routes start on Sandford Mill Lane (**1** plan opposite).
- 2.8 From Sites 3d and 3b heading due south towards Sandon School and Great Baddow, a desire line is to cross Maldon Road in the area between the Sandford Mill Lane and Molrams Lane junctions (**2** plan opposite) using the existing footpaths.
- 2.9 For users of the existing footpaths through Sites 3d and 3b, the desire line south to Sandon is to cross Maldon Road close to the junction with Brick Kiln Road (**3** plan opposite)
- 2.10 There are two pedestrian routes from the Sites to and from Great Baddow to the west. The first runs along Maldon Road for the majority of its length (**4** plan opposite). The second uses the west side of Molrams Lane and the traffic free route towards the infant/junior schools and the Vineyards neighbourhood centre (**5** plan opposite) - within 25 minutes walking time.
- 2.11 There is no continuous footpath along Maldon Road from the junction of Brick Kiln Road leading to Sandon Park and Ride. A 1m wide path extends as far as the bus stop opposite Brick Kiln Road.



Footpath Isochrones. Walk times are based on a speed of 4.8kph, approximately 80m per minute (3mph). Source WSP.

Cyclepaths

2.12 The sites are within 25 minutes cycling distance of much of Chelmsford, Great Baddow and the western edge of Danbury using existing roads and cyclepaths. See figure right. The existing and proposed principal routes are highlighted on the plan opposite and below:

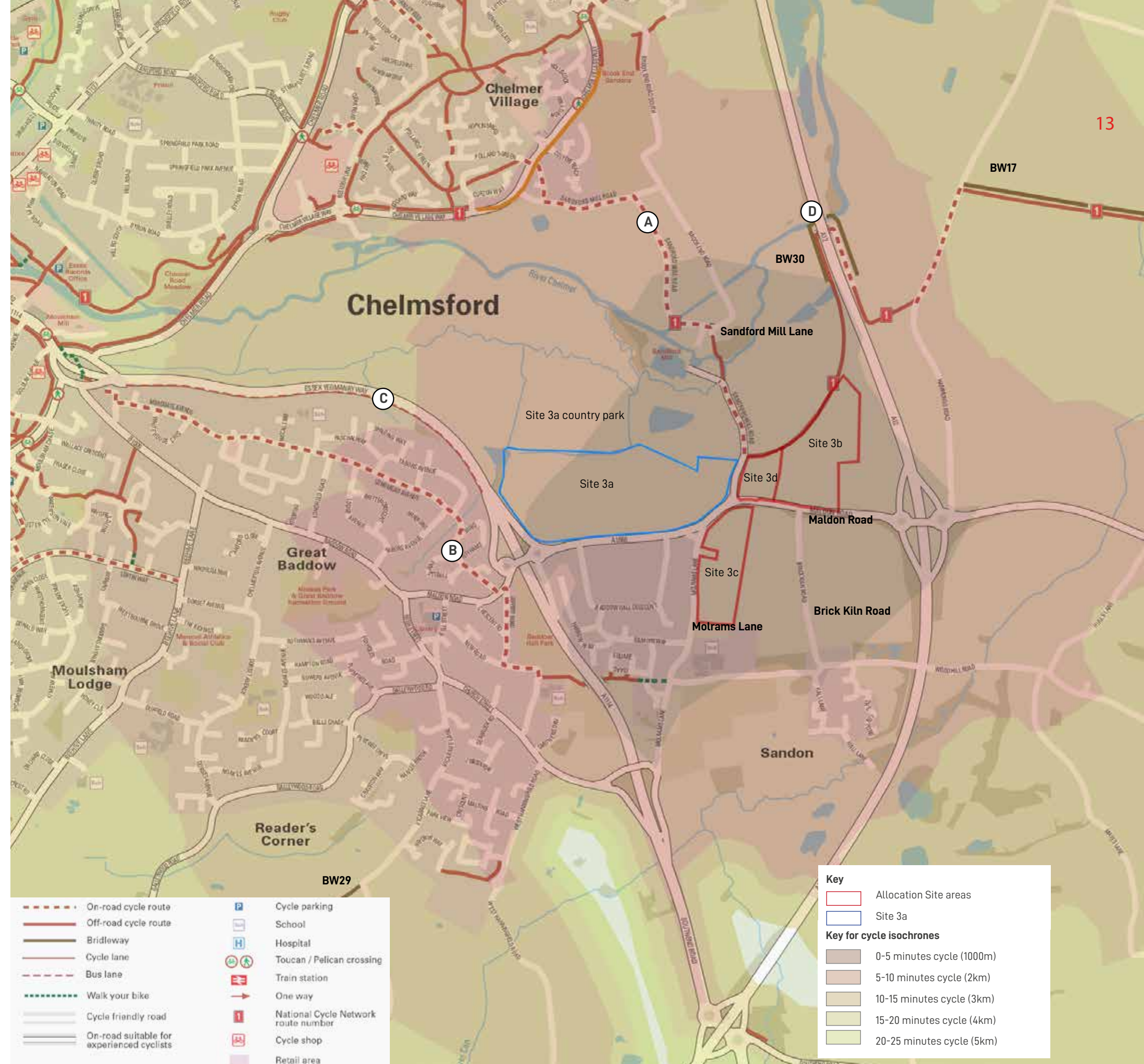
- **(A)** National Cycle Network Route 1 (NCN R1) at Sandford Mill Lane which links north-south to Chelmsford City Centre and Chelmer Village. North of Site 3d NCN R1 is an unlit collection of single lanes, tracks, and where it crosses the River Chelmer a shared footpath.
- **(B)** Cycle routes east-west via The Bingey towards Great Baddow local centre and beyond, Chelmsford City Centre towards the City Centre.
- **(C)** West along the bus lane of the west bound carriageway of Essex Yeomanry Way

2.13. Cycle routes through the sites will help connect the existing routes **A**, **B** and **C**, creating the framework for a circular network within east Chelmsford.

Bridleways

2.14 The area has a fragmented bridleway network and there are no bridleways within the immediate context of the sites. There is an aspiration for improvements to the bridleway network, with a link to the existing A12 underpass (NCN R1), BW30 and BW17 as shown indicatively **(D)**, connecting south to Brick Kiln Road.

2.15 Beyond the allocation sites. There is also the aspiration to access the Site 3a country park subject to the masterplanning of Site 3a and the country park. The connections could be made from Sandford Mill Lane.



Cycle Isochrones, proposed and existing cycle routes and bridleways. Source: Chelmsford Cycling Map, Chelmsford Growth Package, Local Cycling and Walking Infrastructure Plans. Cycle isochrones are based on an average speed of 12kph, approximately 200m per minute (7.5mph). Source WSP.



The Vineyards local shopping centre.

Access

- 2.16 Sites 3b and 3d are accessed from a field gate off Maldon Road and Sandford Mill Lane. Across Site 3d and there is a footpath link to the north. Site 3c lies to the east off Molrams Lane, from which there is a field gap access to the south west corner. East of Site 3c lies Brick Kiln Road which affords access to the north east corner across intervening land.
- 2.17 All sites are proposed to be served from new junctions with Maldon Road. There is also the potential to serve limited residential development direct off Molrams Lane.

Local Facilities

- 2.18 A key theme of the development of Sites 3b, c and d will be connectivity, ensuring integration between the new and existing community, enhancing links within and between the River Valley, using existing and new recreational resources (PRoW and cyclepaths) to achieve this. The range of accessible facilities is shown overleaf.

Country Park

- 2.19 In addition to the local services, development at Site 3a will facilitate a new Country Park in the valley floor of the Chelmer and Blackwater Navigation (See figure overleaf). This will be a significant new recreational focal point for local communities and the city as a whole, and part of a wider network of resources to the east of Chelmsford.



Sandon Park and Ride.



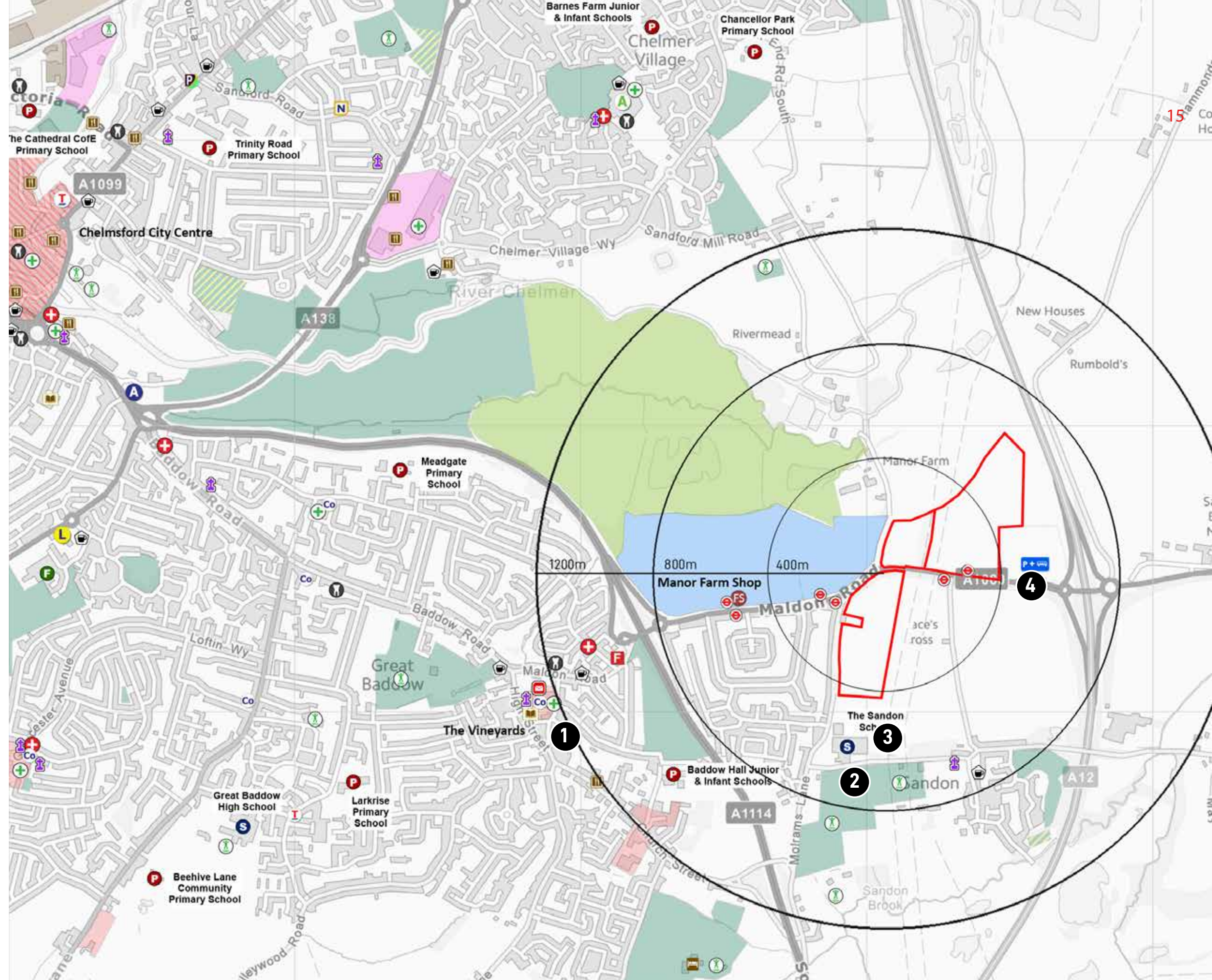
Playing fields.



The Sandon School.

Key

- Site Location
- Proposed Housing Development - Site 3a
- Employment
- City Centre
- Retail Park
- Retail / Local Shopping
- Allotments
- Sports Ground / Recreation Space
- Proposed country park Site 3
- A Aldi
- A Asda
- Co Co-op
- FS Farm Shop
- L Lidl
- N Nisa
- P Premier
- T Tesco
- T Tesco Express
- P Primary School
- S Secondary School
- F College
- H Hospital (No A and E)
- + GP Practice
- + Pharmacy
- D Dentist
- S Sports / Fitness Venue
- L Library
- W Place of Worship
- PO Post Office
- P Pub
- R Restaurant
- H Hotel
- F Fire Station
- P + car Park and Ride
- B Bus Stops (nearest Site)



Local services and 5, 10 and 15 minute walking radii (source WSP).



3 Site Analysis

Site Boundaries

- 3.1 The northern boundary of Sites 3b and 3d is defined by Sandford Mill Lane/NCN R1, a narrow track with hedgerow and trees along the common boundary. The track leads east towards the A12, and passes beneath the road to the north east. The lane eastward is closed to vehicular traffic.
- 3.2 Between Sites 3b and 3d are pylons and overhead wires.
- 3.3 The eastern boundary to Site 3b is defined by the edge of the allocation area. Some 5-10m east of this there is a field boundary which extends south toward Sandon Park and Ride. At the south eastern boundary to the park and ride there is dense screen planting.
- 3.4 The southern boundary to Sites 3b and 3d is defined by Maldon Road. The road has a landscape character with woodland along the southern edge (Cross Wood) and hedgerow to the north.
- 3.5 The western boundary to Site 3d is defined by Sandford Mill Lane. At the boundary, is a mature hedgerow which increases in density to the north.
- 3.6 The northern boundary to Site 3c is defined by Cross Wood, beyond which is Maldon Road.
- 3.7 The eastern boundary to Site 3c is defined by the allocation boundary. East of the boundary are pylons and overhead wires, Brick Kiln Road and Grace's Cross, a listed building. Along brick Kiln Road there are dense hedgerow.
- 3.8 The southern boundary to Site 3c is defined by the hedgerow boundary to the Sandon School playing fields.
- 3.9 The western boundary to Site 3c is defined by Molrams Lane which comprises a mix of predominantly two storey detached, semi-detached and short terraces set back from the lane behind long driveways.
- 3.10 The surrounding housing is of a mix of styles. The housing on Molrams Lane marks the present, well defined, eastern edge to the built area of Great Baddow.





1. Housing at corner of Molrams Lane and Maldon Road.



5. Site 3c boundary from Molrams Lane.



9. Junction of Sandford Mill Lane and Maldon Road looking towards Site 3a.



13. Pylons east of Site 3c looking towards Grace's Cross.



2. Existing houses on Molrams Lane facing Site 3c.



6. Existing houses on Molrams Lane backing onto Site 3c.



10. Site 3c from edge of Maldon Road looking at Cross Wood.



14. Grace's Cross on Brick Kiln Road.



3. Molrams Lane and existing hedgerow to Site 3c.



7. Molrams Lane from Maldon Road with Cross Wood to left.



11. Site 3c boundary (Cross Wood) from Maldon Road looking west. Site 3d boundary in the background.



15. Pill box within Site 3c as seen from Molrams Lane.



4. Molrams Lane looking north alongside Site 3c boundary.



8. Maldon Road looking east towards Site 3d along woodland and hedgerow corridor. Cross Wood to right of frame.



12. Hedgerow boundary of Site 3d adjacent to Sandford Mill Lane.



16. Sandford Mill Lane looking east.

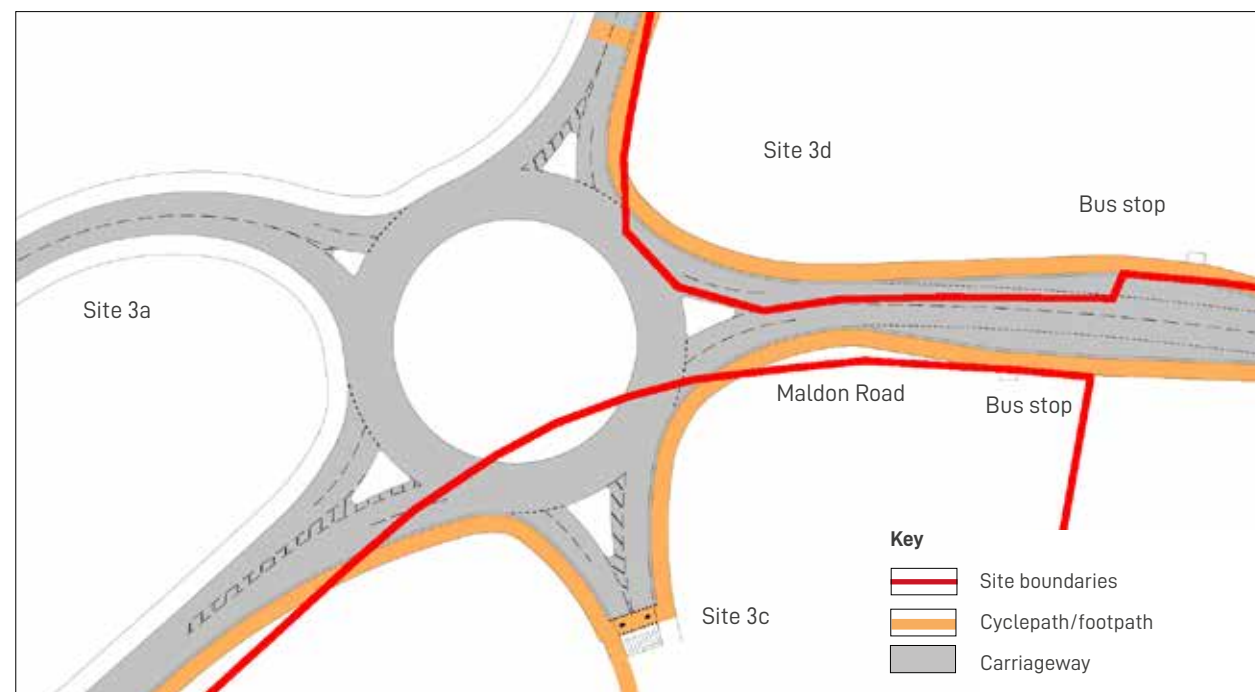


Access

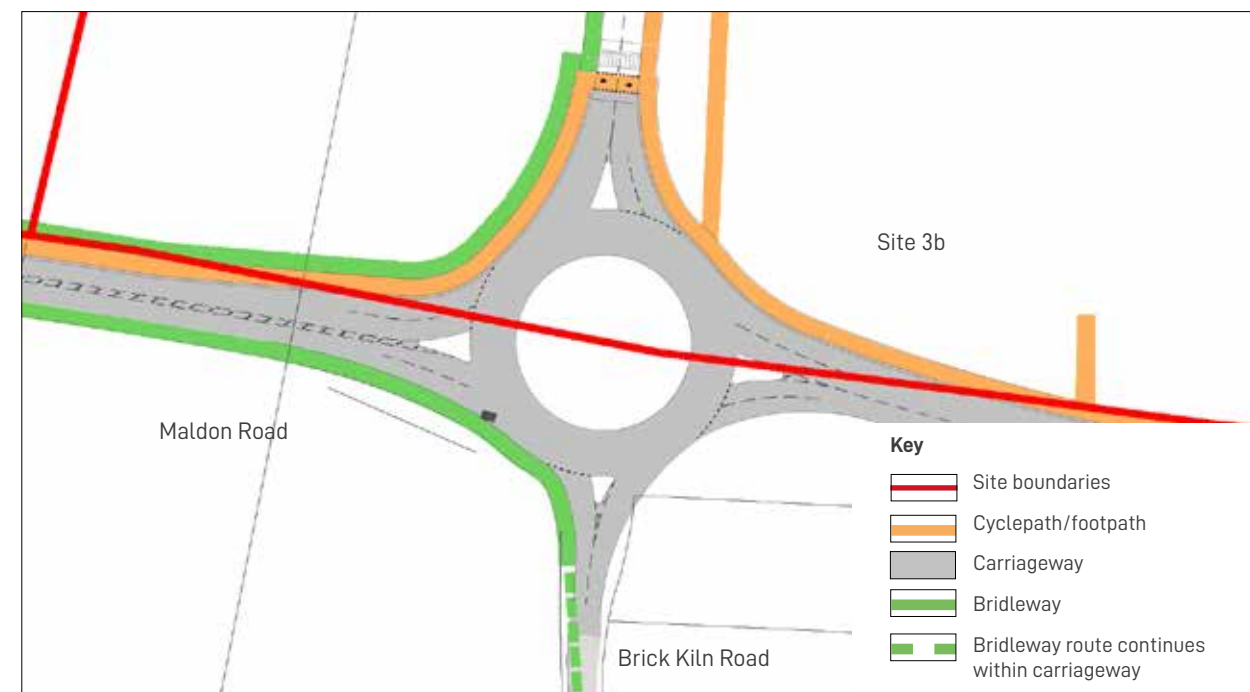
- 3.11 Sites 3b and 3d are presently accessed from field gates off Maldon Road and Sandford Mill Lane. There is a field gap access to the south west corner of Site 3c from Molrams Lane.
- 3.12 Important to the delivery of the Sites is the vehicular access arrangements from Maldon Road and the safe/ convenient crossing of the road. The Sites are proposed to be principally served from new roundabout junctions with Maldon Road.
- 3.13 The design of the access to Sites 3a, b and c has been the subject of discussions with ECC, and a 5-arm roundabout has been agreed in principle to the west. The design has been developed to take account of the strategic pedestrian and cycle desire lines as well as a review of design standards. Liaison with the consultants acting for Hopkins Homes (Site 3a) has also been undertaken.
- 3.14 The proposed access arrangements (images right) have been resolved to prioritise the safe and convenient crossing points to help foster integration across Maldon Road to the east of the five arm junction. Following a review of a number of options, the design proposes cycle/footpath routes towards a Toucan / Pegasus crossing located mid way between the western and eastern junctions. This location is considered to be the safest point, close to the intersection of the existing footpath desire line from Site 3d.
- 3.15 To help facilitate safe horse crossing of Maldon Road from Brick Kiln Road towards Sandford Mill Lane / NCNR1, a bridleway is proposed to the south of the carriageway from the end of the proposed four arm roundabout west to the crossing. This approach maintains the existing continuity of the route. Once the carriageway is crossed the bridleway continues along the north side of the carriageway before turning north towards Sandford Mill Lane / NCNR1.
- 3.16 There is also potential for access to serve a very limited number of dwellings within Site 3c direct off Molrams Lane.
- 3.17 The existing PROWs through Sites 3b and 3d presently provide the only public/pedestrian access to the Sites. The development of the Sites will facilitate a much broader connectivity to the local context.



Emerging design for access to allocation areas and Site 3a.



Emerging design for the five arm western roundabout.



Emerging design for the four arm eastern roundabout.



Emerging design for crossing of Maldon Road. The 'Brick Kiln Road' bus stops will be moved to lay-bys either side of the eastern arm of the 5-arm roundabout. They will both have new shelters / appropriate facilities tbc with ECC. This will remove any conflict with bridleway shown along a dedicated verge to the south of Maldon Road. The detailed design of the roundabouts will need to ensure that safe crossing points are provided across the arms for pedestrians, and cyclists where appropriate.

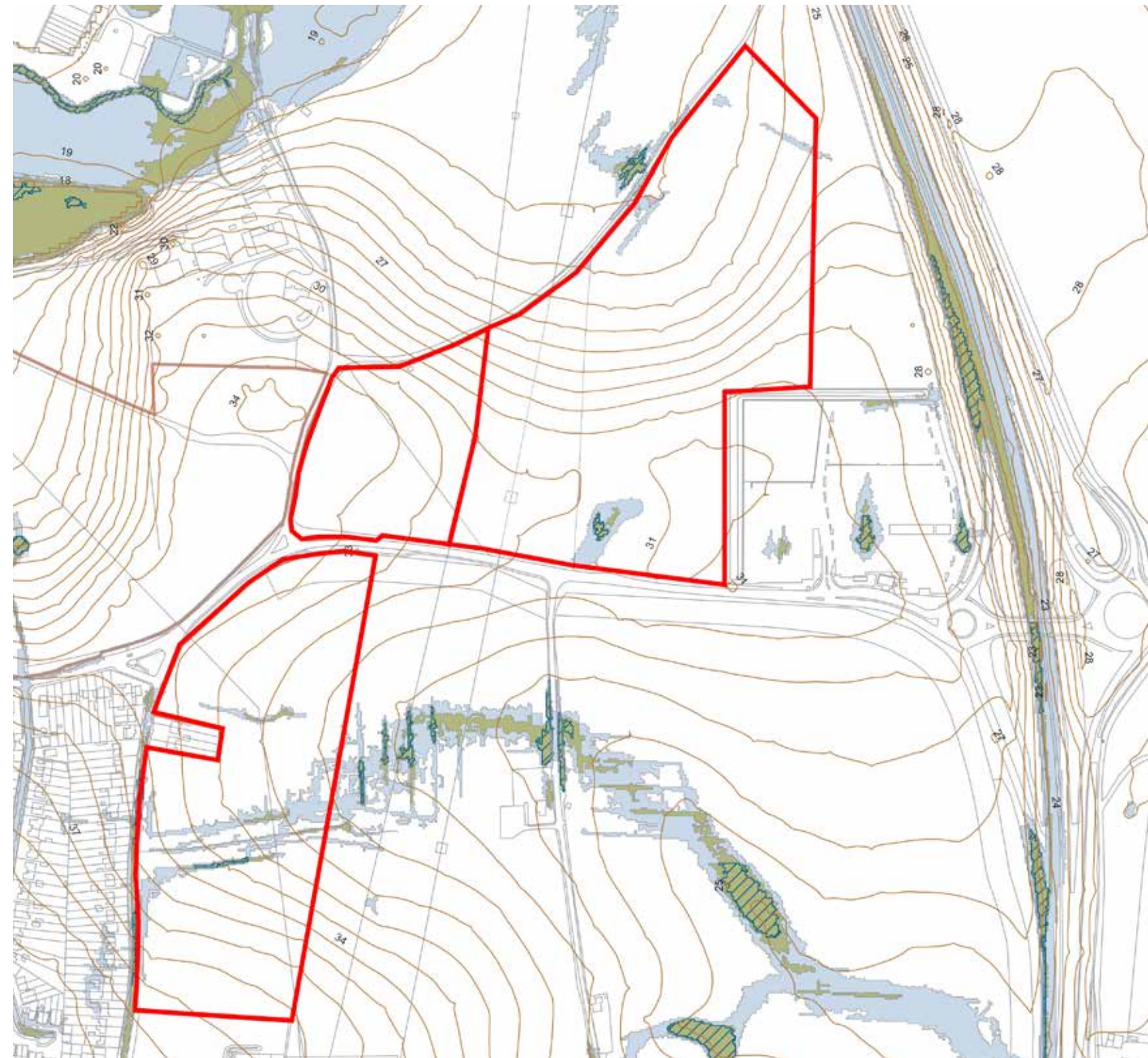
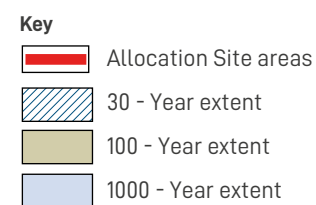


Topography

- 3.18 The Sites are located on gently undulating ground.
- 3.19 Site 3c is located on ground that slopes down gently to the east. A high of c.32m AOD is recorded in the west, to a low of c.28m AOD beyond the boundary.
- 3.20 Sites 3b and 3d slopes gently to the north-east, from a high of c.31m AOD at the boundary with the A1060, to a low of c.25m AOD at the northern site boundary.
- 3.21 In summary, development will work with the topography of the sites and surrounding land to facilitate Sustainable Drainage Systems (SuDS).

Drainage & Flood Risk

- 3.22 The Sites lie within Flood Zone 1 and are considered at low risk of flooding. Surface water runoff on the existing green fields discharges naturally to the low points to the northern part of Site 3b and adjacent to Maldon Road, and beyond the eastern boundary of Site 3c.
- 3.23 For the sustainable drainage strategy, surface flood water attenuation basins will be required within natural low points of the Sites. The preferred approach for the Sites is to create as naturally, and sustainable draining solution as possible. Following a detailed drainage appraisal and considering the topography, the characteristics of the soil and site features, a strategy requiring two attenuation basins is proposed, one sited within Site 3b at the natural depression and the other at the depression to the east of Site 3c. It is not considered possible to sustainably drain Site 3c within the allocation area. To facilitate the delivery of Site 3c with a natural, sustainable drainage strategy, the proposed strategy is to include a small area of land to the east to accommodate a basin within an extended green infrastructure along the boundary.



Topography, Drainage and Flood Risk.

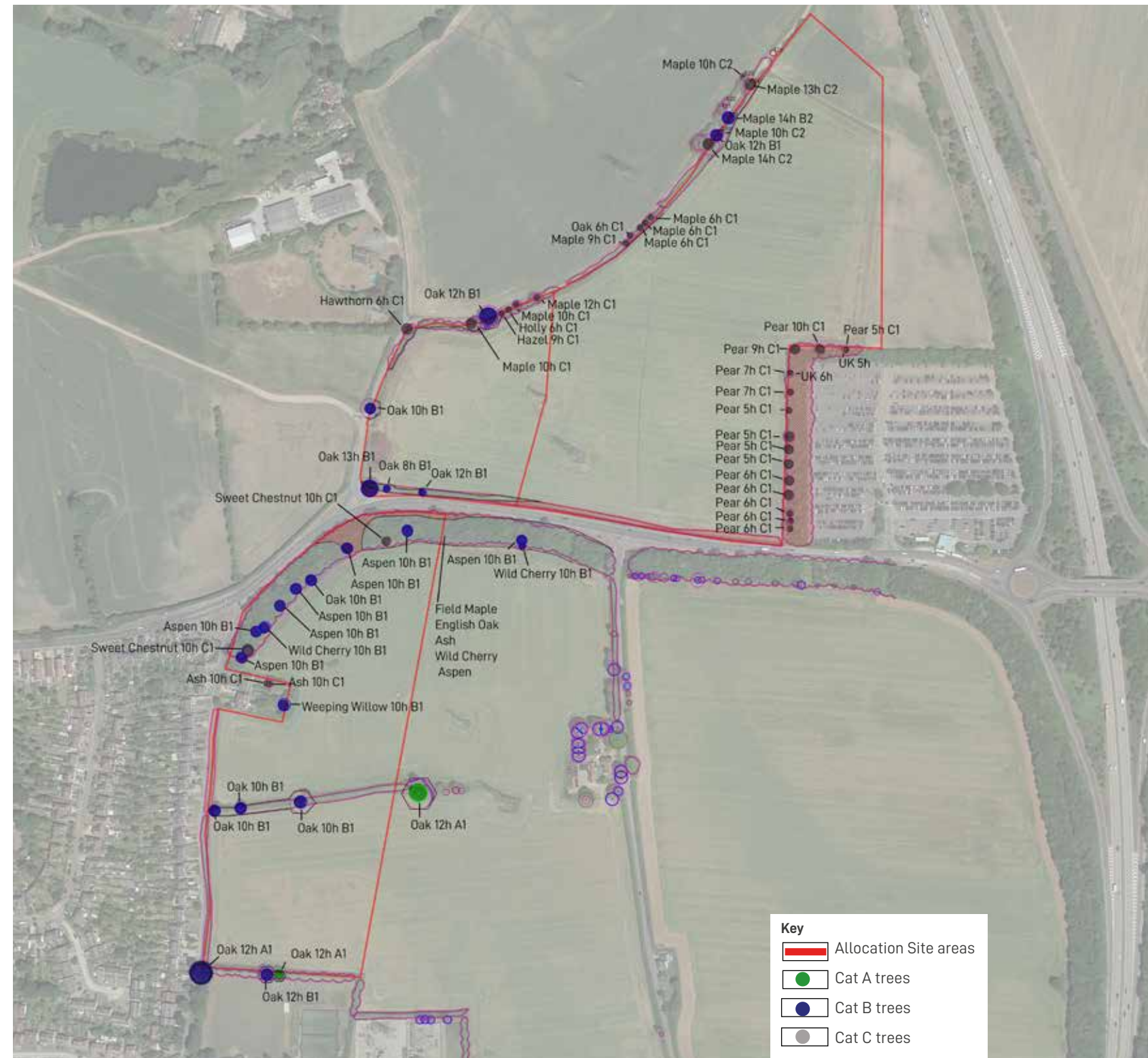
Landscape Features

- 3.24 Sites 3b and 3d are one large, open arable field sloping down to the River Chelmer floodplain. To the north-east there is no boundary vegetation with the adjacent agricultural land. The north-west and west boundaries are formed by a hedgerow with occasional groups of trees, partly located on a bank. A hedgerow forms a strong site boundary to the south, and contributes to the creation of a green corridor along Maldon Road. The lack of trees along most of the hedgerow means that the pylons and the wind turbine in the park and ride site are dominant in views from Maldon Road. A mature oak in the south-west corner is an attractive feature in a number of views. There are filtered views through the hedge after leaf-fall.
- 3.25 Site 3c is also a large, open arable field, with a good landscape structure to the northern, western and southern boundaries. Cross Wood and hedgerow contains the site to the north, creating an effective screen and attractive feature on Maldon Road. The eastern boundary is defined by the allocation. Beyond the eastern boundary a hedgerow with occasional trees contributes to the attractive rural lane character of Brick Kiln Road. A young hedgerow forms the western boundary, which will provide a stronger element of landscape structure as it matures, giving better definition to the site boundary with Molrams Lane. A hedgerow with occasional trees runs across the centre of the site from west to east. Hedgerows to the south boundaries with the school and sub-station provide a relatively strong low-level screen.
- 3.26 In summary Site 3c has a good landscape structure which would help to integrate any proposed development into the wider landscape, whilst Sites 3b and 3d have a weaker landscape structure which can be enhanced.



Trees and hedgerow

- 3.27 Cross Wood is a young plantation of predominantly oak (*Quercus robur*), ash (*Fraxinus excelsior*) and wild cherry (*Prunus avium*) with a lesser number of field maple (*Acer campestre*) and aspen (*Populus tremula*) dispersed along the belt. It is a uniform even aged plantation, with trees planted in a grid formation having mixed size and form as is typical of plantation trees. This is likely to require future thinning works to make the woodland more resilient in the long-term. There are two locations where the trees within the existing section of tree belt plantation have been topped at 3m height due to being located underneath high voltage overhead electricity cables.
- 3.28 A section of Cross Wood is proposed to be removed to accommodate a proposed entrance road. Compensation is to be provided in the form of improvements to the structural composition of the retained tree belt plus additional structural edge planting within Site 3c.
- 3.29 A number of hedgerows are present, most of which are species-poor with a few exceptions, i.e. the hedgerow running across the middle of the western field which contains species such as hawthorn, field maple, hazel, pedunculate oak *Quercus robur*, elder *Sambucus nigra* and guelder rose *Viburnum opulus*. Other hedgerow species include blackthorn *Prunus spinosa*, sycamore *Acer pseudoplatanus* and bramble *Rubus* sp. A number of hedgerows without trees are positioned around the site, generally species-poor; species typically include hazel, ivy *Hedera helix*, field maple, bramble, elder, beech *Fagus sylvatica*, blackthorn and hawthorn.
- 3.30 A 2m high hedge of mixed native species, predominantly of hawthorn, borders the length of the northern edge of the woodland.
- 3.31 The hedge that crosses Site 3c contains a few Category B trees and terminates in a Category A Oak beyond the site boundary. The Oak is a feature of views in the context of Site 3c.
- 3.32 There are also a number of Category B trees within the hedgerow boundaries to Sandford Mill Lane and NCN R1.



Hedgerow and Tree Survey.

Ecology

- 3.33 The site is not located close to any designated sites but is within the Zone of Influence of the Essex Coast Recreational Disturbance Avoidance Mitigation Strategy (Essex Coast RAMS).
- 3.34 An extended Phase 1 Habitat Survey of the sites was undertaken in March 2015 and updated in 2018. Other species surveys were undertaken and updated or repeated in 2018 for badgers, bats (including tree inspection), birds, Great crested Newts, invertebrates, reptiles, small and medium sized mammals and hedgerow. There was limited evidence of protected species within the site with birds and invertebrates being classified as of District Importance. Other features were either of Local or Site importance.
- 3.35 The site is dominated by habitats considered to be of relatively low ecological value (arable farmland). Habitats considered to be of relatively higher biodiversity value are present including hedgerows and tree belts. There were five habitat types found within the sites and one beyond site 3c:
- 1. Semi-improved Grassland:** A narrow boundary (1m to 0.5m) of semi-improved grassland bounded the majority of arable fields. The semi-improved grassland was not considered particularly diverse
 - 2. Scattered Trees:** Scattered trees made up boundary features (or former boundary features) in fields within the site, some of which were mature
 - 3. Hedgerows with Trees:** Most of which were species-poor
 - 4. Plantation Woodland:** Young broadleaved plantation woodland
 - 5. Arable:** The fields supported intensively managed, winter wheat
 - 6. Standing Water:** An ephemeral pool at the end of a ditch west of Site 3c
- 3.36 The proposed development provides opportunities to not only achieve no net loss to biodiversity but deliver real biodiversity gains targeting priority species and habitats, shaping the masterplan enabling landscape-scale coherent ecological networks to the planned through the strengthening and interconnecting of site's green infrastructure.



Ecology.

Archaeology

- 3.37 An Archaeological Desk-Based Assessment of the sites was undertaken in August 2015. No archaeological designated heritage assets are recorded on or in close proximity to the Sites. Two undesignated archaeological assets are recorded on the Essex Historic Environment Record and comprise two pill boxes.
- 3.38 Site 3c is considered to have a low to moderate archaeological potential for evidence dated to the Bronze Age, Iron Age, Medieval and later localised modern evidence of the pill boxes. A low archaeological potential is considered for all other periods of human activity.
- 3.39 Site 3b and 3d are considered to have a moderate to high archaeological potential for evidence dated to the Bronze Age and Iron Age given the proximity of evidence uncovered during the Sandon Park and Ride excavations. A low to moderate archaeological potential for later localised modern evidence of the pill box is identified. A low archaeological potential is considered for all other periods of human activity.
- 3.40 It is anticipated that any archaeological remains present would likely be of local significance.

Heritage

- 3.41 A Built Heritage Statement was prepared for the site in May 2017. The report outlines the heritage assets on and around the sites, as well as assessing the impact of a larger development area (in relation to Site 3c and the eastern boundary) on the heritage assets.
- 3.42 Grade II listed Grace's Cross, to the east of Site 3c, is an eighteenth century two-storey brick house, with a northern extension dating to the nineteenth century (1 - plan opposite). A small portion of development proposals would likely be appreciable or experienced within the heritage asset's setting. From Site 3c, intervening vegetation, and the distances involved

Key			
	Allocation Site areas		Conservation area boundaries
	Site 3a		Listed building
			Non-designated heritage asset



Heritage Assets.

between the heritage asset and new development, will ensure that any visual change to the setting is negligible. On balance, the harm on the heritage asset's significance was considered to be at the lower-end of the less than substantial spectrum.

- 3.43 To the south east of Site 3c and beyond a dense woodland plantation is the Sandon Conservation Area. There are listed buildings identified within the Conservation Area boundary, including the Grade II* listed St Andrew's Church (**2- plan opposite**). The report states that the dense vegetation between the Sites and the Conservation Area ensures that their association is insignificant.
- 3.44 A small portion of the Chelmer and Blackwater Navigation Conservation Area lies to the north of Sites 3b and 3d. The Conservation Area stretches approximately 21.1km from Springfield Basin, Chelmsford to Heybridge Basin near Maldon. It is hidden from view behind an established hedgerow and tree planted field boundary.
- 3.45 Within Sites 3c and 3d are two Second World War pill boxes. These pill boxes formed part of the four-hundred similar hardened defence installations within the General Headquarters Line between Great Chesterford and Canvey Island, Essex. Defined as local monuments, these pill boxes constitute 'non-designated heritage assets'. Their retention supported by suitable interpretation methods is considered to offer suitable benefits to the overall development, allowing a continued understanding of the General Headquarters Line in Essex for future users.

Utilities

- 3.46 Details of the power lines, gas mains and easements have been provided and the relevant statutory authorities will be consulted with as the development progresses.
- 3.47 There are a number of 11 kv, 22 kv and 132 kv overhead lines crossing Site 3c, extending north from the primary substation at the southern boundary. There is also an electric transmission line owned by National Grid running north south between Sites 3b and 3d.
- 3.48 There are high pressure and intermediate pressure gas pipelines running through Site 3c.



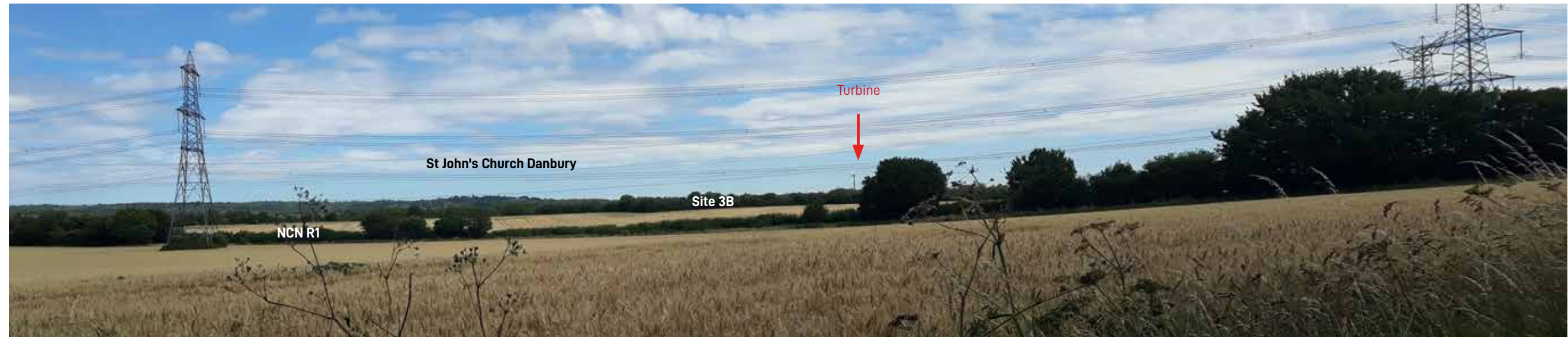
Utilities.



Views into and across Sites

- 3.49 There are a number of public views and vistas across, into and from the Sites which visually connect them into the wider landscape and urban form. A number have been identified by CCC Officers to assist in masterplanning the Sites. Those which help describe the local context and can help inform development parameters are summarised across the following pages.
- 3.50 From the north, and south along Sandford Mill Lane/ NCN R1 beyond the edge of the Chelmer and Blackwater Navigation Conservation Area the turbine is a prominent local landmark in the landscape where glimpsed views are afforded by gaps in the hedgerow (Views 1 and 2).
- 3.51 There are no public views (along Sandford Mill Lane) from the Chelmer and Blackwater Navigation Conservation Area to the north, the boundary to which is well defined by a dense hedgerow.
- 3.52 For views across Site 3b from Sandford Mill Lane, the pylons are prominent and the A12 is an urbanising, visible and audible influence on the landscape character of the area.
- 3.53 View 1, the first opportunity to glimpse the sites from the north, illustrates the change in landscape and how the trees and hedgerow layer the scene.
- 3.54 The woodland and hedgerow edge to Sites 3b and 3d along Sandford Mill Lane is a visibly well defined boundary to the allocation area as described earlier (View 3).





1. North along Sanford Mill lane, there is a gap in the woodland/hedgerow boundary which affords long distant views across the fields towards the wind turbine within Sandon Park and Ride, the pylons and the higher ground to the south west of site 3b – the field in the middle. Beyond on the horizon is Danbury Ridge, on which can be seen the spire of St John The Baptist Church Danbury.



2. On approaching 3b and 3d, The existing woodland and hedgerow screen local views into the sites. The pylons and turbine are prominent on the skyline.



3. Panoramic view north east from NCN R1 across the edge of Sites 3b and 3d with the A12 in the distance. Also visible is the Green Wedge and Conservation Area to the left of frame.

- 3.55 View 4 from along the PROW 232 2 through Site 3d illustrates the visual containment of Sites 3b and d, and the visual prominence of the turbine and pylons.
- 3.56 From Molrams Lane, the two semi-detached houses, densely planted boundaries, woodland and hedgerow, screen most views east across Site 3c except for at gaps in the hedgerow (as illustrated earlier). As the hedgerow matures, these views will be screened.
- 3.57 From within Site 3c there are long views east towards Danbury (view 5). The eastern edge to Site 3c, as defined by the allocation boundary is open to the remainder of the existing field, which is enclosed to the east by the hedgerow along Brick Kiln Road and trees around Grace's Cross.
- 3.58 For views 4 and 5, the principal elements that are considered important are:
- 1. The distant ridgeline
 - 2. Spires on the ridgeline
 - 3. The turbine
 - 4. The layered landscaping, reinforced by hedgerow and tree belts that define fore, middle and background





4. Panoramic view across Site 3b and 3d from PROW towards Sandon Park and Ride with boundary trees and hedgerow to Sandford Mill Lane to the left of the frame. The level changes across Site 3b are evident in the background. Left of frame is the Pill box. In the distance is Danbury Ridge and Little Baddow. The turbine is prominent on the skyline.



5. Panoramic view east across Site 3c towards Grace's Cross and beyond, distant ridgeline and Danbury.



Inset. Wind turbine at Sandon Park and Ride (left of frame) and Grace's Cross (centre) with the spire of St John The Baptist on the ridgeline at Danbury.

- 3.59 Views 6, 7 and 8 are from Molrams Lane looking east across Site 3c. They illustrates the visual prominence of the turbine and pylons.
- 3.60 At gaps in the hedgerow to the Site 3c boundary along Molrams Lane, there are long views east towards Danbury (view 8) and south towards the sub station and Sandon School boundary (View 7).
- 3.61 For views along Molrams Lane the principal elements that are considered important are:
1. The distant ridgeline
 2. Spires on the ridgeline
 3. The layered landscaping, reinforced by hedgerow and tree belts that define fore, middle and background





6. View from Molrams Lane along line of field boundary with Site 3c towards Grace's Cross and distant ridgeline. The Pylon adjacent to Grace's Cross detracts from the setting of this listed



7. Panoramic view south towards field boundary with Sandon School and the sub-station.



8. View east along southern boundary to Site 3c showing existing hedgerow field boundary and trees to Sandon School boundary. In the background can be seen the spire of St John The Baptist on the ridgeline at Danbury.

- 3.62 From Brick Kiln Road there are views south towards Grace's Cross, the sub-station and school in the background (Views 9, 10 and 11).
- 3.63 The urban edge of Molrams Lane is in view at gaps in the hedgerow and from within the field (View 9 and 10). Views 9 and 10 illustrate that the existing urban edge is clearly defined by linear development seen above the hedgerow.
- 3.64 In these views, the development and retained hedgerow reinforce the historic field pattern - an underlying feature of the area which is described later.





9. Panorama south across Site 3c along line of Brick Kiln Road. Grace's Cross is largely hidden by trees and hedgerow.



10. Winter view across Site 3c from Brick Kiln Road towards Pill box, Molrams Road and Sandon School. The existing urban edge is well defined along Molrams Road.



11. View south into Sandon Village. The edge of the Conservation Area lies at the woodland. The hedgerow to either side of Brick Kiln Road obscure views into Site 3c to the west.

- 3.65 A illustrated by views 11 and 12, there are views south along the lower part of Brick Kiln Road of development into Sandon that are framed by hedgerow. Views east and west from Brick Kiln Road are limited.
- 3.66 Looking north along the edge of Brick Kiln Road, there is no visual connection between Sandon village and the Sites. From the edge of the woodland at the northern edge of the Sandon Conservation Area on Brick Kiln Road there are oblique views from gaps in the hedgerow across Site 3c (View 13).
- 3.67 From the southern end of Molrams Lane there are views towards the existing houses adjacent to Site 3c.

Summary

- 3.68 The development of Sites 3b, 3c and 3d should seek to maintain key views to connect the new communities into the landscape setting. The development can also use variation in heights and new hedgerow/landscaping to reinforce the hierarchy of the fore, middle and background, and help define a new urban edge.
- 3.69 Sites 3b and 3d to a greater extent are visually contained by trees and hedgerow, except for some limited views from the north along Sandford Mill Lane afforded by gaps in the hedgerow, which reveal the local topography. Site 3c and the field to the east are also to some extent visually contained by boundary hedgerow and woodland. The allocation boundary to Site 3c is open to the residual field area. This 'boundary' could be defined by a new hedgerow consistent with the prevalent pattern.





12. View towards Sandon illustrating extent/height of hedgerow along Brick Kiln Road.



13. View from edge of Conservation Area on Brick Kiln Road looking over hedgerow. The existing urban edge of Great Baddow and the sub station are clearly visible.



14. View from Molrams Lane looking north alongside school towards road narrowing. In the foreground are mature trees and the fence of the school to the right and the wide footpath to the left.



Summary Site Features

3.70 Informed by the previous analysis, the following plans provide an overview of the key Site features.

Site 3d

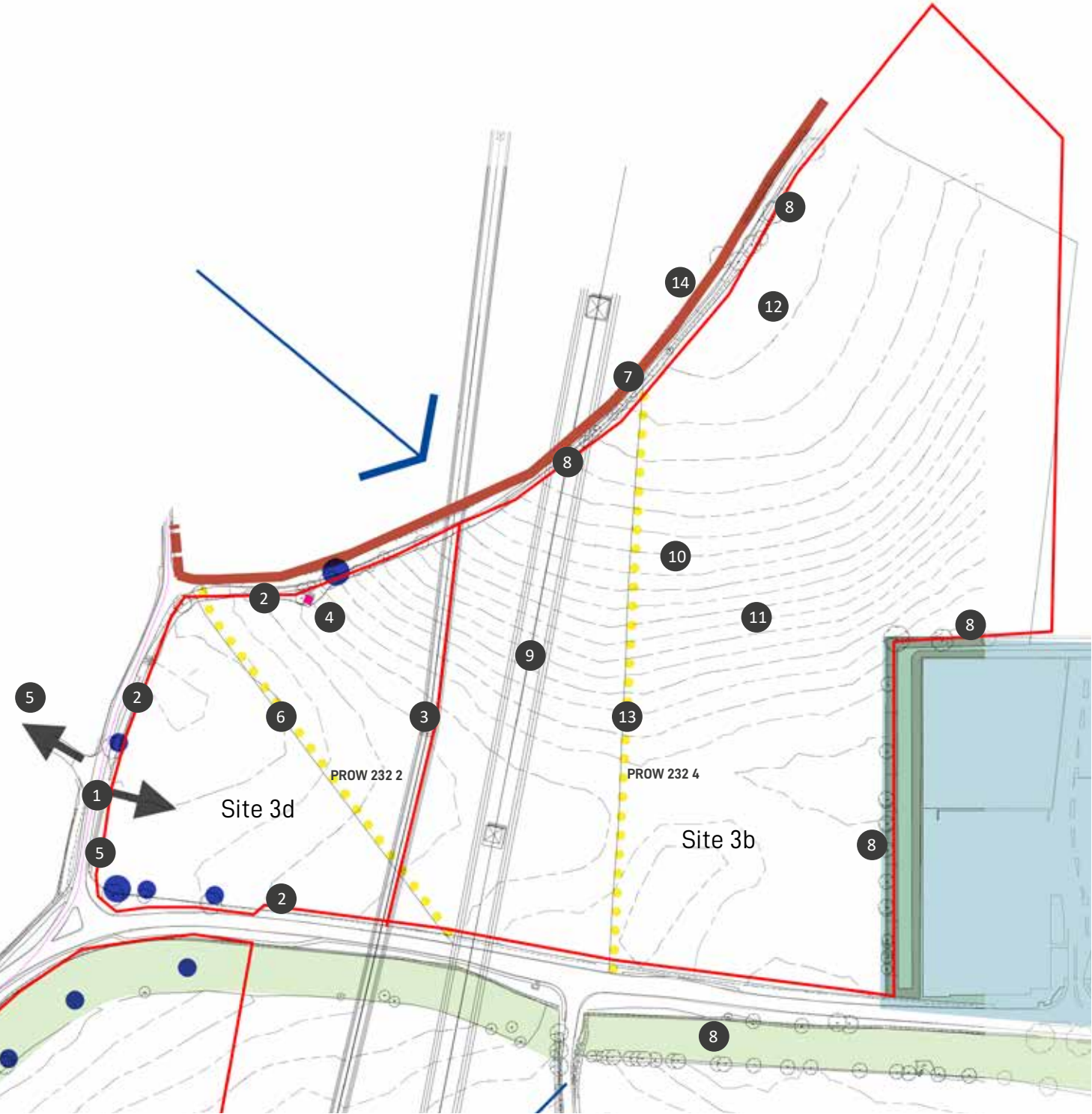
- 1. Existing field access from Sandford Mill Lane
- 2. Existing mature boundary hedgerow and trees
- 3. Overhead power line defining eastern boundary
- 4. Pill box
- 5. Access to Site 3a
- 6. Footpath (232 2 - unmarked)

Site 3b

- 7. Existing field access from Sandford Mill Lane
- 8. Existing mature boundary hedgerow and trees
- 9. Overhead power lines
- 10. Views - glimpsed from Sandford Mill Lane
- 11. Slopes
- 12. Low point (drainage)
- 13. Footpath (232 - 4 unmarked)
- 14. NCN R1 cyclepath

Key

- Site allocation areas
- Sandon Park and Ride
- NCN R1
- Woodland
- PROW footpath
- Category A trees (from survey)
- Category B trees (from survey)
- 5m contours
- Views
- Current field access/egress



Site 3b and 3d Features.



Northern boundary to NCN R1. Note extent of mature hedgerow, which forms a barrier to connectivity except at the point of the footpath. There is also a level change at the boundary, NCN R1 (14) is set slightly below the field level and there is a ditch.



Northern boundary to NCN R1 and corner of Sandford Mill Lane. Note raised level of hedgerow at boundary to Site 3d.



Dwellings north of Site on Sandford Mill Lane. The Lane is designated NCN R1.



The pill box located within the hedgerow along northern boundary.



The unmarked route of the footpath across the site.



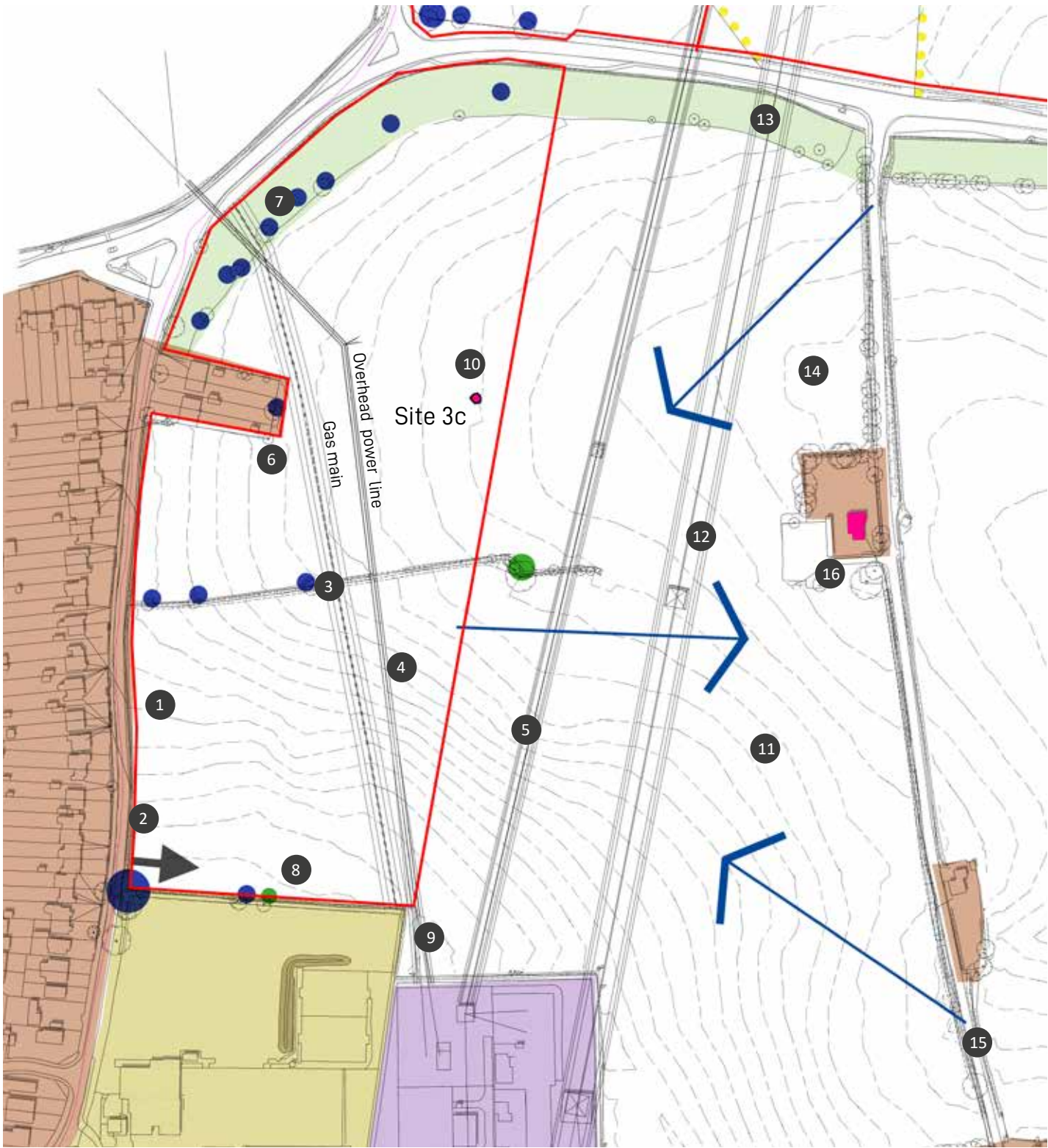
The woodland boundary to Sandon Park and Ride.

Site 3c

- 1. Existing field access from Molrams Lane
- 2. Existing boundary hedgerow to Molrams Lane
- 3. Existing historic field boundary, hedgerow and trees east-west through site
- 4. Overhead line
- 5. Overhead power line
- 6. Fence and planted boundary
- 7. Extent of Cross Wood along Maldon Road
- 8. Mature hedgerow to school boundary
- 9. Sub-station site boundary
- 10. Pill box
- 11. Open boundary views east across countryside
- 12. Power lines
- 13. Section of tree belt plantation topped at 3m height due to being located underneath high voltage overhead electricity cables.
- 14. Topography. Levels drop from south to north east, towards a low point beyond the allocation boundary. This will impact siting and drainage
- 15. Contained views north
- 16. Listed building

Key

	Site allocation area
	Residential area
	Sandon School
	Sub station
	Woodland
	PROW footpath
	Category A trees (from survey)
	Category B trees (from survey)
	Heritage asset
	5m contours
	Views
	Current field access/egress



Site 3c Features.



Grace's Cross listed building.



Junction of Brick Kiln Road and Maldon Road with bus stop shelter in background.



Existing built edge to Molrams Lane from Brick Kiln Road looking across Site 3c.



The Sandon School.



Flank of house on Molrams Lane backing into Site 3c.



Brick Kiln Road looking south towards Grace's Cross

Understanding Place

38 An understanding of the context, history and the cultural characteristics of a site, neighbourhood and region influences the location, siting and design of new developments. It means they are well grounded in their locality and more likely to be acceptable to existing communities. Creating a positive sense of place helps to foster a sense of belonging and contributes to wellbeing, inclusion and community cohesion.

National Design Guide

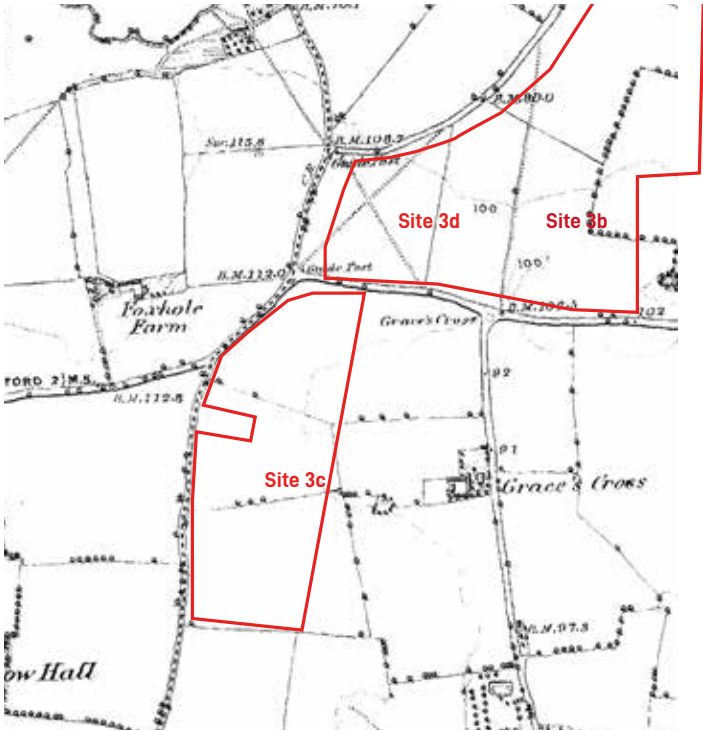
3.71 The following paragraphs describe the local townscape, the pattern of built form and the features of which will inform the development proposals.

Historic pattern of growth

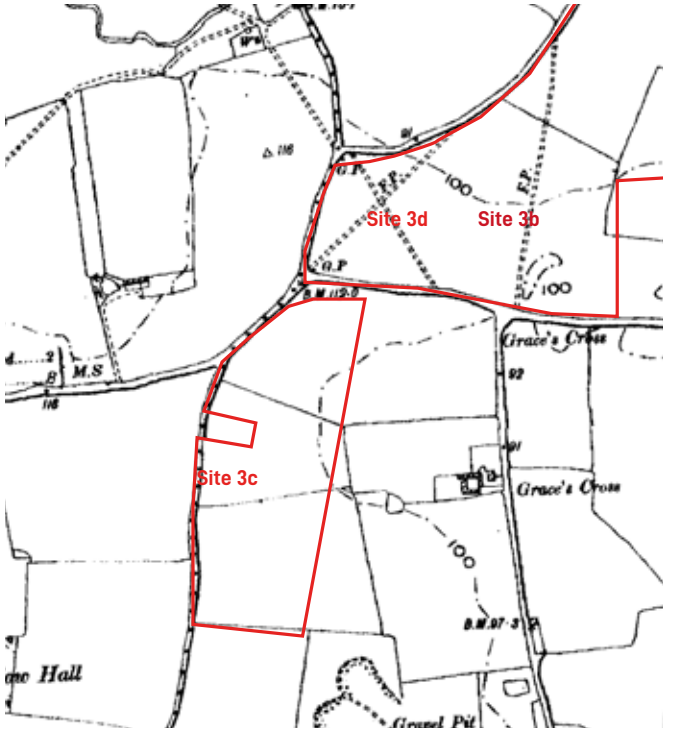
3.72 The pattern of growth has been eastwards and defined by development within, and contained by field boundaries. These historical field boundaries are evident in the underlying pattern of development, such as Baddow Hall and the Sandon School site. Informed by the historic pattern of growth, the development will be seen as a natural progression of the eastward growth Great Baddow along Maldon Road.

3.73 Relevant features of the historic maps are:

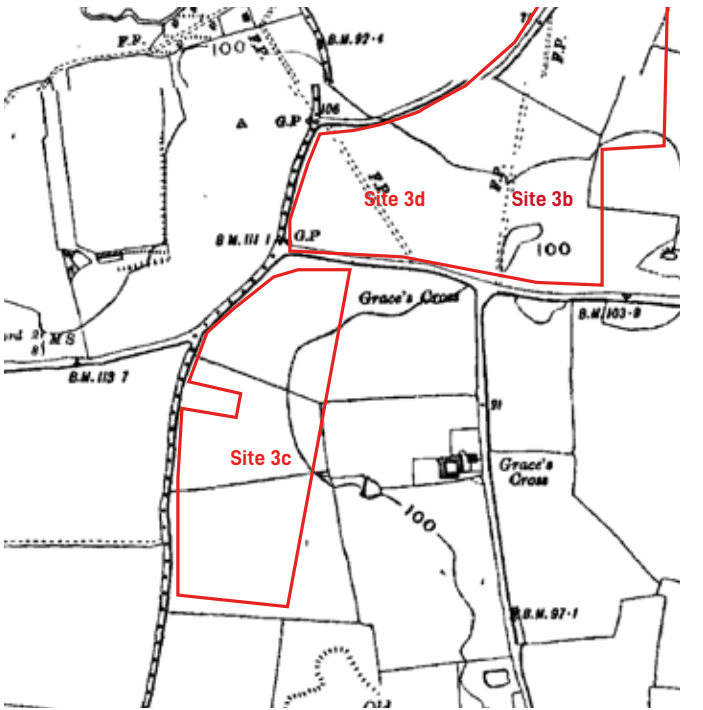
- Post war suburban eastern expansion along Maldon Road from Great Baddow;
- Underlying streets and places (Maldon Road, Sandford Mill Lane, Brick Kiln Road) much older;
- Self contained areas defined by field boundaries; and
- Strategic Sites 3b and 3d have existing PROWs - footpaths - that should be retained and integrated into the development.



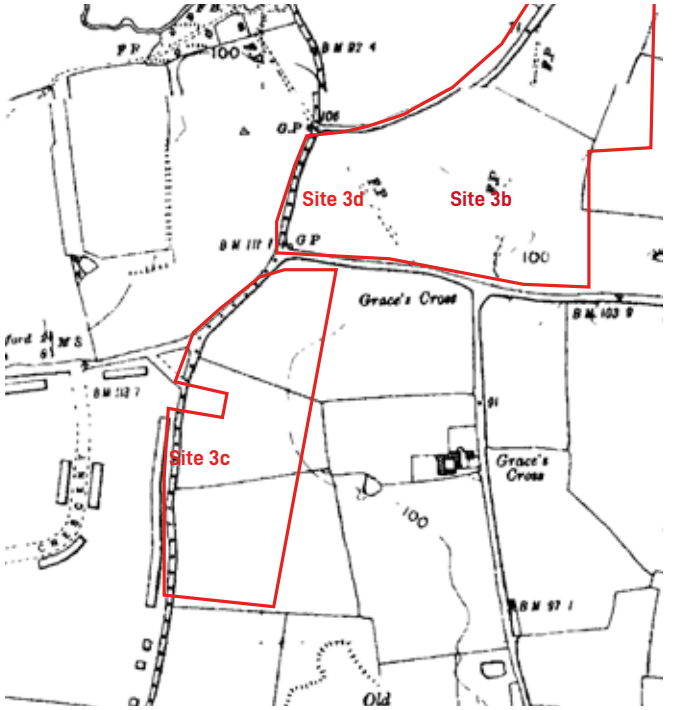
1881: Grace's Cross is one of the few buildings in the surrounding area. There are two diagonal footpaths running through Site 3d and the north-south footpath through Site 3b. The east-west hedgerow through Site 3c is evident.



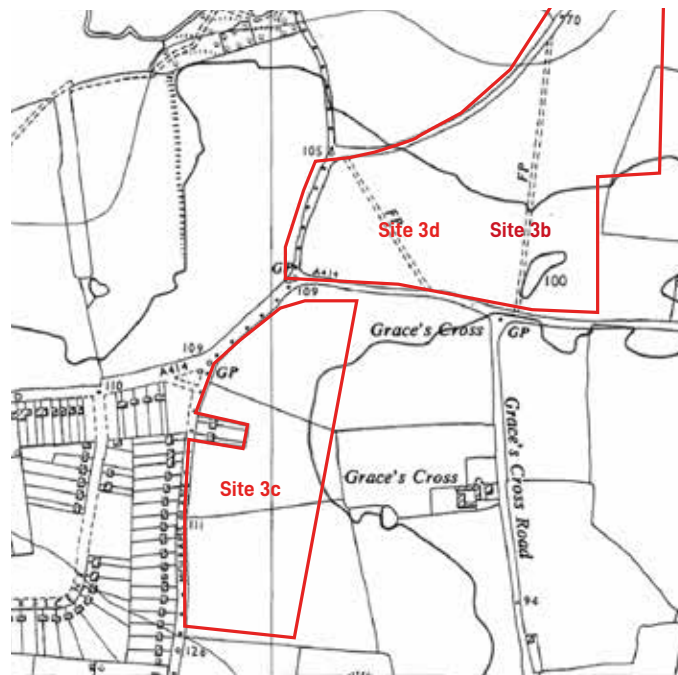
1898: No significant change in context.



1924: One of the two footpaths through Site 3d has been deleted.



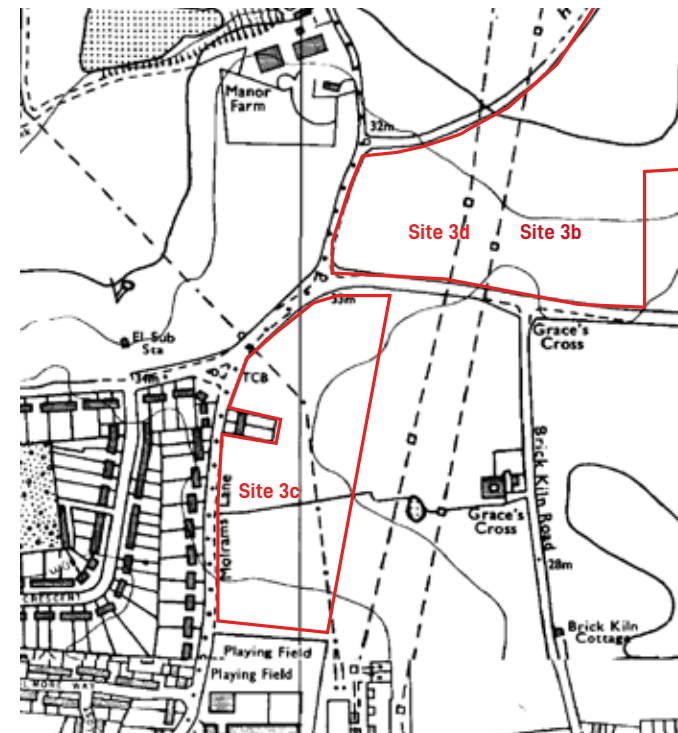
1938: The first signs of the eastward growth of Great Baddow are evident with housing along Maldon Road, Hall Crescent and Molrams Lane.



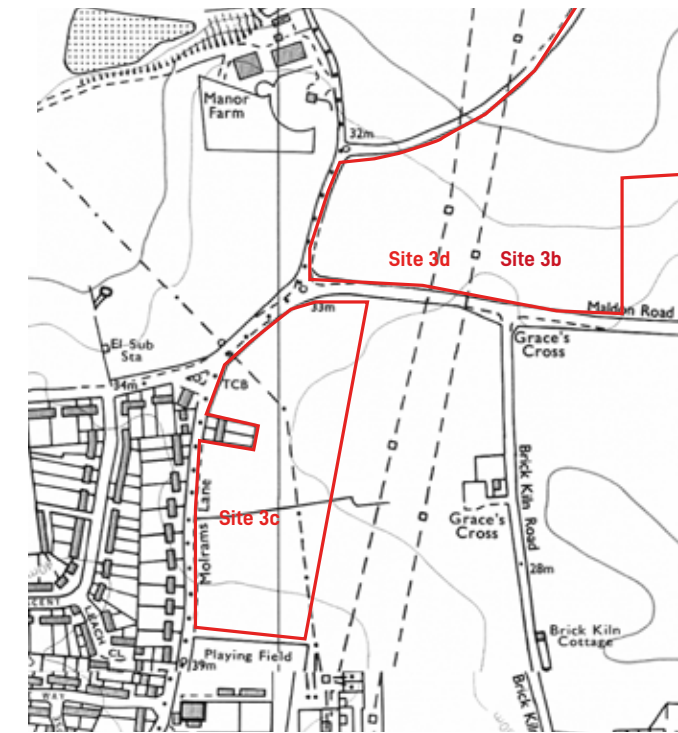
1954: By 1954 the Baddow Hall estate is nearing completion. The two houses east of Molrams Lane and adjacent to Site 3c are shown.



1965: The Baddow Hall estate to the west of Site 3c is complete. Evident is the retained field boundary through the middle of Baddow Hall (see above 1881).



1983: The school was built and powerlines cross the sites. Manor Farm has also expanded. Grace's Cross Road has also changed name to Brick Kiln Road. The school is shown to the south of 3c alongside the substation.



1990: The development pattern has remained largely unchanged from 1983.



2000: Cross Wood is visible along the northern boundary to Site 3c.



2005: The infill development within the Baddow Hall estate is under construction.



2009: The infill development is complete and the Sandon Park and Ride is open, with a strong landscape buffer to the west.



2016: The Sandon Park and Ride has expanded westward to its present boundary, removing the original landscape buffer.



Character

3.74 Informed by the historic pattern of growth, the development will be seen as a natural progression of the eastward growth Great Baddow along Maldon Road. The following paragraphs describe the local built context and character. The character study also references the business park development(at Springfield Lyons to the north of Chelmer Village to inform local, modern patterns of employment use.

Great Baddow

3.75 The Great Baddow Village Design Statement is planning guidance which is taken into account by Chelmsford City Council when making planning decisions. In the Village Design Statement, Site 3c adjoins the Baddow Hall residential character area.

3.76 The houses along Molrams Lane and to the west, Baddow Hall Crescent, date mostly from the late 1940s, 1950s. They comprise a mix of mostly semi-detached and detached two storey dwellings in large plots. The layout is formal, with long, straight streets and mostly consistent buildings.

"In Molrams Lane the housing is mixed with some brick and render and variation within terraces. Housing further away from Sandon School has more fencing, especially black bow-top fencing, including outside the new Molrams Terrace. This forms an attractive boundary while keeping the feeling of space suitable to the rural feel of the edge of the village."

- 3.77 The materials and detailing include:
1. Arts and Craft references (particularly Baddow Hall Crescent but also in the semi-detached houses backing onto the application site)
 2. Hipped roofs
 3. Prominent gables with decorative tile hanging
 4. Brick/rendered elevations (red/brown brick)
 5. Grey/red roof tiles



Houses on Molrams Lane.



Houses on Molrams Lane.



Houses on Baddow Hall Crescent.



Houses on Molrams Lane.



Street scene along Molrams Lane.



Houses on Molrams Lane.



Area location plan and density study areas.



Houses on Baden Powell Close.



Houses on Baden Powell Close.



Apartments on Baden Powell Close.



Density/grain study. Sandon, Hall Lane: 25 dph.



Density/grain study: Molrams Lane
23 dph.



Density/grain study: Baddow Hall
Crescent: 21 dph.



Density/grain study: Baden Powell
Close: 53dph.

Sandon

- 3.78 Sandon village lies to the south of the site. The northern part of the village along Woodhill Road and including the Church lies within a Conservation Area. The village is visually and physically separated from the Sites by woodland along the northern edge of the Conservation Area and along Woodhill Road, and the edge of Brick Kiln Road.
- 3.79 The Village is structured around The Green and Woodhill Road, wherein the oldest properties are concentrated. The village grew south and east from these areas. With reference to the Sandon Village Design Statement (2011) the building form, style and materials within the Conservation Area have a number of Essex features, including:
- White/cream rendered elevations;
 - Hipped, catslide roofs; and
 - Prominent gables and jetties.
- 3.80 Other features and materials include:
- Red brick with decorative banding in a contrasting colour;
 - Gabled roofs; and
 - Grey, red roof tiles.
- 3.81 Development in the Sandon Conservation Area is concentrated on post-medieval development surrounding the Grade II* listed St Andrew's Church. Associated with the Church is the Grade II* listed The Rectory, located further to the south-west.
- 3.82 The east-west orientated Woodhill Road forms the main 'spine' of the Conservation Area although the greater proportion of development in Sandon is located outside of the Conservation Area boundary further south, where successive expansion has occurred and typically characterised by cul-de-sacs extending north east off Hall Lane.
- 3.83 The Church of St Andrew's provides a local landmark in the Conservation Area, set back from Woodhill Road within its associated churchyard.



Area location plan.



Sandon Place, Sandon Village.



Fore and Post House, Sandon Village.

3.84 In terms of the Conservation Area's setting, dense vegetation predominately defines Sandon's immediate surroundings, particularly to the north where the Site 3c lies beyond. The Church itself is not orientated in the direction of Site 3c. Within the churchyard, views looking north are obscured by the dense woodland along Woodhill Road. This landscape buffer provides a clear separation between Sandon and the agricultural fields that constitute the Site.

Springfield Lyons Business Park

3.85 To assist in the development of Site 3b, CCC have recommended that the design team consider the layout and form at Springfield Lyons Business Park. Some of the key characteristics are noted as follows:

1. Buildings address principal streets and parking areas
2. Service areas to the rear sharing access with parking areas
3. Contemporary and traditional design
4. Two storey, small and large scaled buildings
5. Dense site coverage with efficient landscaping - narrow roadside verges
6. Shared cyclepath footpath along one side of carriageway, footpath along other
7. Strong landscape setting to carriageway
8. Buildings sited close to carriageway



Springfield Lyons.



4 Constraints & Opportunities

4.1 The following constraints and opportunities have been identified from the previous analysis and will inform the development proposals.

Constraints

Access

- 4.2 Vehicular access/egress will be principally taken from Maldon Road via new junctions and will need to safeguard future access to Site 3a. There could also be access to a limited number of dwellings from Molrams Lane. There will also need to be safe pedestrian, cycle and equestrian crossing from 3b/3d to 3c across Maldon Road.
- 4.3 The proposed roundabout access into Sites 3b and 3c will impact upon Cross Wood to the north of Site 3c and hedgerow and trees planting along the boundary to Site 3d. Compensatory woodland planting will be required to mitigate tree loss.
- 4.4 The existing PROWs through Sites 3b and 3d will need to be considered in determining the layout of buildings and spaces.
- 4.5 There is no continuous footpath along Maldon Road leading to Sandon Park and Ride.

Topography

- 4.6 The layout of buildings and spaces will need to have regard to the topography of the sites and surrounding context in considering drainage and building heights, particularly where buildings may be visible from the edges of the Conservation Areas identified earlier.

Drainage

- 4.7 For the sustainable drainage strategy, surface flood water attenuation basins will be required within the natural low points, which for Site 3c is beyond the allocation area.

Trees and hedgerow

- 4.8 There are a number of Category A and B trees within the hedgerow boundaries that need to be considered in the layout of buildings and spaces.
- 4.9 Pedestrian/cycle and vehicular access from Molrams Lane will need to consider the impacts upon existing hedgerow.

Heritage assets & conservation areas

- 4.10 The setting of the surrounding Conservation Areas will need to be considered with regard to development heights and the edges of the built areas.
- 4.11 Development may make the pill boxes accessible which will have implications for safety and maintenance of these non designated heritage assets.

Powerlines & gas easements/safety zones

- 4.12 Discussions with the relevant utilities companies will inform wayleaves and easements. The gas mains through Site 3c has implications for uses within the easement zones and the structuring of development.
- 4.13 Under-grounding the power line through Site 3c may require an easement which will impact upon the layout of buildings and open space. The swing of overhead lines through Site 3b will also impact on the siting of buildings.

Minerals

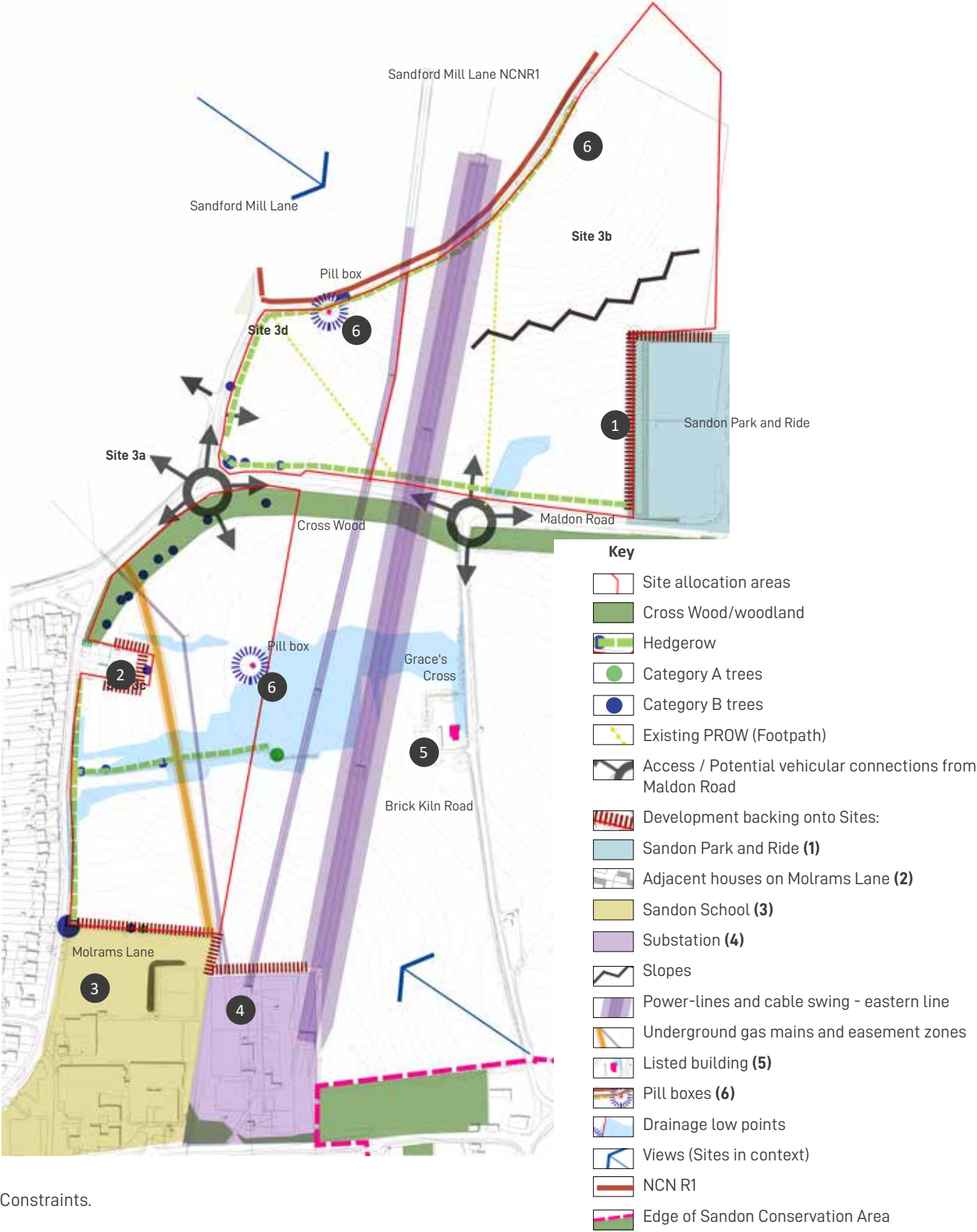
- 4.14 Parcels of the site are located within a Minerals Safeguarding Area. This predominantly relates to Site 3b. A Minerals Resource Assessment will be submitted as part of the planning application. This will assess the viability and feasibility of extracting minerals from the site prior to development occurring. Should minerals require to be extracted, this would occur prior to development taking place.

Molrams Lane

- 4.15 A pair of semi-detached houses cut 'back' into the development area. Development should have regard to overlooking, privacy and security of their boundaries.
- 4.16 Site 3c backs onto the playing fields of the adjacent school playing fields, a potential noise issue and also nearby is an all weather pitch with flood lighting, and to the south east is the sub station - a noise source.

Extension to Sandon Park and Ride

- 4.17 The extension to the park and ride site should consider levels and accessibility, planting at the boundary and lighting. Advised by ECC, the park and ride should safeguard the extension for circa 600 spaces.



Constraints.

Opportunities

A sustainable development

- 4.18 There is the opportunity to optimise the capacity of the sites for development to deliver an attractive place within which to live and work - providing for potential skills development and training opportunities that will emerge as part of the development.

Access

- 4.19 There is the opportunity to extend and integrate the existing footpath and cyclepath network to support a sustainable transport modal shift, including the provision of a safe and convenient crossing of Maldon Road that facilitates footpath, cyclepath and equestrian crossing. There is the opportunity to accommodate a bridleway through Site 3b, to connect to NCN R1 affording potential access to the proposed country park via Sandford Mill Lane.
- 4.20 There is the opportunity to promote public transport usage through providing new and improved bus stop infrastructure, and by providing direct convenient and attractive links to existing/new bus stops and to the Park and Ride site.
- 4.21 There is the opportunity for limited vehicle access/ egress to a small residential area from Molrams Lane with no through link to the wider Site 3c. There is the opportunity for a footpath within Site 3c alongside Molrams Lane.

Landscape

- 4.22 There is the opportunity to structure development within the landscape setting, using views, topography and planting to frame and site buildings. Structuring development around existing features can reinforce a sense of place.
- 4.23 To mitigate the loss of trees at Cross Wood and hedgerow facilitated by access, compensatory planting and biodiversity enhancements will be provided.
- 4.24 There is the opportunity to provide additional planting to reinforce local landscape character; address sensitive views; reduce the visual impact of the pylons; reinforce existing hedgerow.

- 4.25 There is the opportunity for trees and hedgerow (retained and proposed) to contribute to the placemaking of the development and wider ecological and biodiversity benefits as part of a wider green infrastructure network - such as those within the hedgerow at Site 3c which mark an historic field boundary.

Ecology

- 4.26 There is the opportunity for a number of landscape corridors through the sites along the services corridors to enhance the biodiversity value of the sites as well as providing for areas of amenity.

Views

- 4.27 There is the opportunity to create views through the development areas that connect to existing features to aid legibility and placemaking.

Existing heritage assets

- 4.28 there is a broad archaeological context to the sites and a potential for archaeological remains which can tell a clear and interesting story about the past. The pill boxes are visible remains which can be incorporated into the development proposals, as part of the landscape and open space strategy.

Sandon Park and Ride

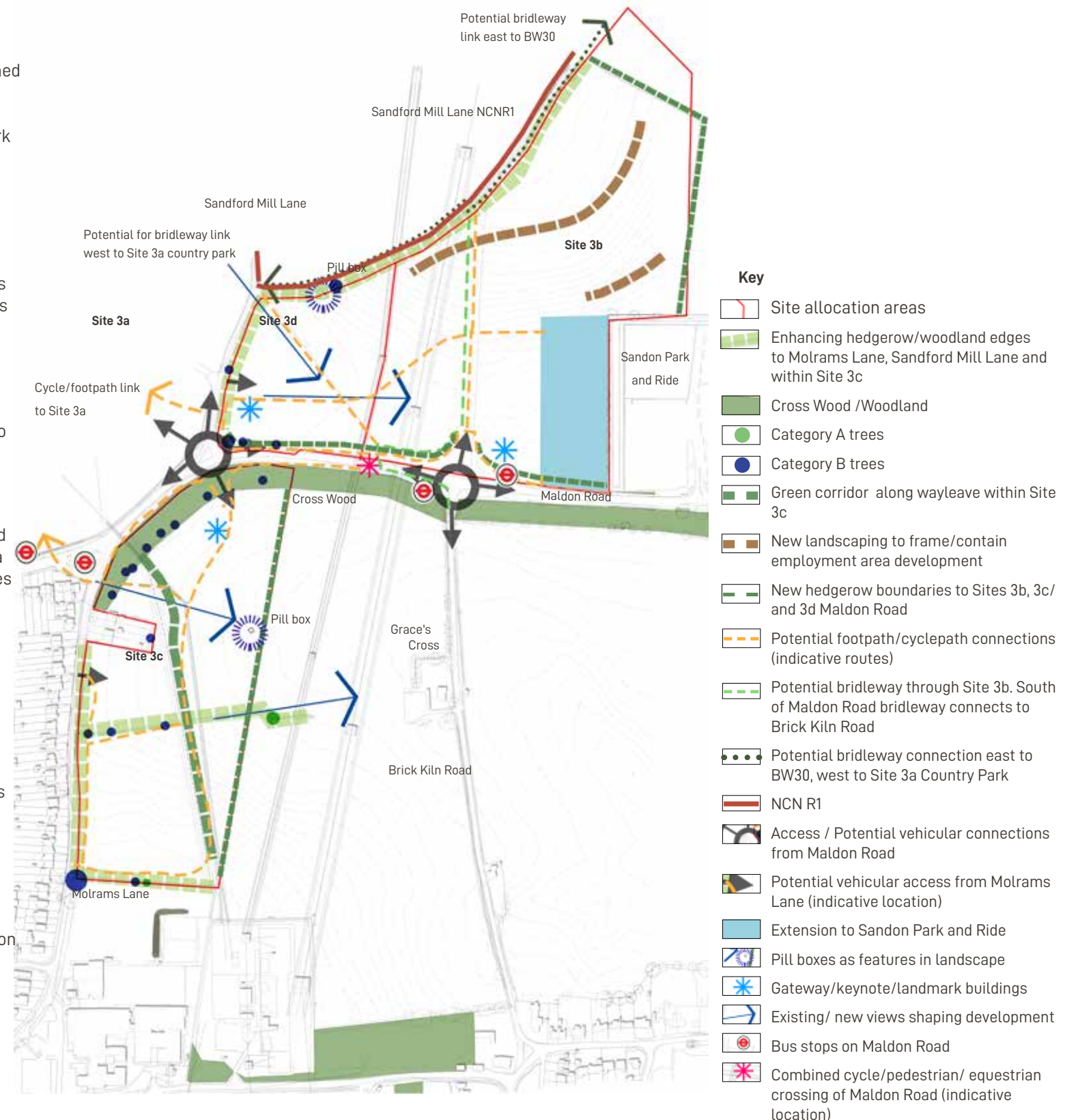
- 4.29 There is the opportunity for new development and landscaping to help mitigate its visual impact (i.e. lighting) of the park and ride. There is also the opportunity for greater cycle and footpath connections to the park and ride and land safeguarded for its extension.

Drainage

- 4.30 There is the opportunity to integrate SuDs into the landscaping strategy for the sites and for an attenuation basin near Site 3c to form part of the wider landscape strategy.

Built form

- 4.31 There is the opportunity to provide a development that draws upon some of the features of the local area to reinforce those and help define the sense of place.



Opportunities.

5 Design Objectives & Principles

5.1 This Masterplan Framework Document has been informed by local and national policy as well as an iterative design process which has involved the Council.

Chelmsford Local Plan May 2020

- 5.2 Relevant polices of the local plan include:
- 1. STRATEGIC POLICY S1 – SPATIAL PRINCIPLES
 - 2. STRATEGIC POLICY S2 – ADDRESSING CLIMATE CHANGE AND FLOOD RISK
 - 3. STRATEGIC POLICY S4 – CONSERVING AND ENHANCING THE NATURAL ENVIRONMENT
 - 4. STRATEGIC POLICY S6 – HOUSING AND EMPLOYMENT REQUIREMENTS
 - 5. STRATEGIC POLICY S9 – INFRASTRUCTURE REQUIREMENTS
 - 6. POLICY DM1 – SIZE AND TYPE OF HOUSING
 - 7. POLICY DM4 – EMPLOYMENT AREAS AND RURAL EMPLOYMENT AREAS
 - 8. POLICY DM13 – DESIGNATED HERITAGE ASSETS
 - 9. POLICY DM14 – NON-DESIGNATED HERITAGE ASSETS
 - 10. POLICY DM15 – ARCHAEOLOGY
 - 11. POLICY DM16 – ECOLOGY AND BIODIVERSITY
 - 12. POLICY DM17 – TREES, WOODLAND AND LANDSCAPE FEATURES
 - 13. POLICY DM18 – FLOODING/SUDS
 - 14. POLICY DM19 – RENEWABLE AND LOW CARBON ENERGY
 - 15. POLICY DM23 – HIGH QUALITY AND INCLUSIVE DESIGN
 - 16. POLICY DM24 – DESIGN AND PLACE SHAPING PRINCIPLES IN MAJOR DEVELOPMENTS
 - 17. POLICY DM25 – SUSTAINABLE BUILDINGS
 - 18. POLICY DM26 – DESIGN SPECIFICATION FOR DWELLINGS
 - 19. POLICY DM27 – PARKING STANDARDS

5.3 The local plan sets out the following design objectives and principles for the sites with regard to the Chelmsford Local Plan.

STRATEGIC GROWTH SITE POLICY 3b – EAST CHELMSFORD – LAND NORTH OF MALDON ROAD (EMPLOYMENT)

Land to the north of Maldon Road as shown on the Policies Map, is allocated for a office/business park. Development proposals will accord with a masterplan approved by the Council to provide:

Amount and type of development:

- Around 5,000sqm (net) new Use Class B1 floorspace, or other appropriate B Use Classes
- Stand-alone early years and childcare nursery.

Site masterplanning principles:

Movement and Access

- Main vehicular access to the site will be from a new junction at Maldon Road/Sandford Mill Lane
- Provide a well connected internal road network
- Provide pedestrian and cycle connections including access to the Sandon Park and Ride.

Historic and Natural Environment

- Preserve or enhance the character or appearance of the Chelmer and Blackwater Conservation Area
- Protect important views into and through the site from across the Chelmer Valley
- Create a network of green infrastructure
- Mitigate the visual impact of the development
- Provide suitable SuDs and flood risk management
- Minerals Resource Assessment
- Undertake an Archaeological Assessment.

Design and Layout

- Provide a coherent network of public open space, formal and informal sport, recreation and community space within the site.

Site infrastructure requirements:

- Land (circa 0.13 hectares) for the physical provision of a stand-alone early years and childcare nursery (Use Class D1) in consultation with the Local Education Authority
- Safeguard land for the future expansion of Sandon Park and Ride site
- Provide appropriate improvements, as necessary, to the local and strategic road network as required by the Local Highways Authority
- Appropriate measures to promote and sustain travel through sustainable modes of transport.

STRATEGIC GROWTH SITE POLICY 3c – EAST CHELMSFORD – LAND SOUTH OF MALDON ROAD

Land to the south of Maldon Road as shown on the Policies Map, is allocated for a residential development. Development proposals will accord with a masterplan approved by the Council to provide:

Amount and type of development:

- Around 100 new homes of mixed size and type to include affordable housing.

Site masterplanning principles:

Movement and Access

- Main vehicular access to the site will be from a new junction at Maldon Road/Sandford Mill Lane
- Provide a well connected internal road network
- Provide pedestrian and cycle connections which may include access to the Sandon Park and Ride.

Historic and Natural Environment

- Minimise the impact on Cross Wood, the tree belt that lines the site to the north and north west
- Create a network of green infrastructure
- Mitigate the visual impact of the development including the electricity pylons and the sub-station to the east of the site
- Provide suitable SuDs and flood risk management
- Preserve or enhance the character or appearance of the Sandon Conservation Area
- Preserve and where appropriate enhance the setting of the Graces Cross listed building
- Retain the WWII pillbox to the east of the site and provide interpretation boards
- Undertake a Minerals Resource Assessment
- Undertake an Archaeological Assessment.

Design and Layout

- Development should front onto Molrams Lane, Maldon Road and the open space to the east
- Provide a coherent network of public open space, formal and informal sport, recreation and community space within the site
- Remove low voltage electricity lines from within the site and install electricity cables underground.

Site infrastructure requirements:

- Provide appropriate improvements, as necessary, to the local and strategic road network as required by the Local Highways Authority
- Appropriate measures to promote and sustain travel through sustainable modes of transport
- Provide new and enhanced cycle routes, footpaths, Public Rights of Way and bridleways where appropriate
- Financial contributions towards primary and secondary education and early years and childcare provision as required by the Local Education Authority, and towards community facilities such as healthcare provision as required by the NHS/CCG
- Provide, or make financial contributions to, new or enhanced sport, leisure and recreation facilities
- Where appropriate, contributions from developments will be secured towards mitigation measures identified in the Essex Recreational disturbance Avoidance and Mitigation Strategy (RAMS) which will be completed by the time the Local Plan is adopted. Prior to RAMS completion, the authority will seek contributions, where appropriate, from proposed residential development to deliver all measures identified (including strategic measures) through project level HRAs, or otherwise, to mitigate any recreational disturbance impacts in compliance with the Habitats Regulations and Habitats Directive.

GROWTH SITE POLICY 3d – EAST CHELMSFORD – LAND NORTH OF MALDON ROAD (RESIDENTIAL)

Land to the north of Maldon Road as shown on the Policies Map, is allocated for a residential development. Development proposals will accord with a masterplan approved by the Council to provide:

Amount and type of development:

- Around 50 new homes of mixed size and type to include affordable housing.

Site masterplanning principles:

Movement and Access

- Main vehicular access to the site will be from a new junction at Maldon Road/Sandford Mill Lane
- Provide a well connected internal road network
- Provide pedestrian and cycle connections which may include access to Sandon Park and Ride.

Historic and Natural Environment

- Preserve or enhance the character or appearance of the Chelmer and Blackwater Conservation Area
- Protect important views into and through the site from across the Chelmer Valley
- Create a network of green infrastructure
- Mitigate the visual impact of the development
- Provide suitable SuDs and flood risk management
- Retain the WWII pillbox in the northern part of the site and provide interpretation boards
- Undertake a Minerals Resource Assessment
- Undertake an Archaeological Assessment.

Design and Layout

- Provide a coherent network of public open space, formal and informal sport, recreation and community space within the site.

Site infrastructure requirements:

- Provide appropriate improvements, as necessary, to the local and strategic road network as required by the Local Highways Authority
- Appropriate measures to promote and sustain travel through sustainable modes of transport
- Provide new and enhanced cycle routes, footpaths, Public Rights of Way and bridleways where appropriate
- Financial contributions towards primary and secondary education and early years and childcare provision as required by the Local Education Authority, and towards community facilities such as healthcare provision as required by the NHS/CCG
- Provide, or make financial contributions to, new or enhanced sport, leisure and recreation facilities
- Where appropriate, contributions from developments will be secured towards mitigation measures identified in the Essex Recreational disturbance Avoidance and Mitigation Strategy (RAMS) which will be completed by the time the Local Plan is adopted. Prior to RAMS completion, the authority will seek contributions, where appropriate, from proposed residential development to deliver all measures identified (including strategic measures) through project level HRAs, or otherwise, to mitigate any recreational disturbance impacts in compliance with the Habitats Regulations and Habitats Directive.



National Design Guide
Planning practice guidance for beautiful, enduring and successful places

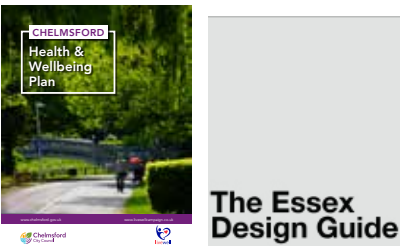


**Making Places -
Supplementary Planning Document**

Consultation Draft



March 2020



5.4 There is a range of relevant supplementary planning policy and guidance at both national and local level which will need to be taken into consideration for the development of the Sites.

5.5 Overarching the best practice guidance is the National Planning Policy Framework (NPPF) and Consultation Draft NPPF 2021 which sets out the Government's planning policies for achieving well designed and sustainable development in England. The key elements of the NPPF relevant to the proposals are summarised below:

- Achieving sustainable development;
- Delivering a wide choice of high quality homes;
- Promoting healthy communities; and
- Requiring high quality, beautiful and sustainable buildings and places.

5.6 Relevant best practice guidance includes:

1. Consultation Draft National Design Code (2021)
2. Building for a Healthy Life (2020)
3. Making Places SPD (2020)
4. Self-build and Custom Build Design Code Template (2020)
5. Living with Beauty (2020) BBBBC
6. The Sustainable Drainage Systems Design Guide For Essex (February 2020)
7. Essex Green Infrastructure Strategy (2020)
8. The National Design Guide (2019)
9. Chelmsford Health and Wellbeing Plan (2019)
10. The Essex Design Guide (EDG) - online
11. Sustainable Drainage Systems Design Guide (2016)
12. Active Design Sport England (2015)
13. Secured by Design
14. The Setting of Heritage Assets 2nd edition
15. Essex Vehicle Parking Standards (2009)
16. ECC Development Management Policies (2011)

17. Manual for Streets and Manual for Streets 2(2007/10)
18. A Sense of Place: design guidelines for development near high voltage overhead lines
19. NPPG
20. Livewell Development Accreditation

5.7 The Essex Planning Officers Association (EPOA) supports the use of Health Impact Assessments (HIA) for residential developments over 50 homes and non-commercial spaces over 1000sq metres. This tool provides an assessment of the above key areas featured in the EDG and ensures that both the positive benefits to health are promoted whilst raising awareness of the potential unintended consequences on health to the development team. As neither use of the EDG or HIA is statutory, it is proposed that acknowledgement should be through a voluntary accreditation scheme available for any scale of housing scheme within the County of Essex. The assessment is undertaken by the Essex Quality Review Panel (EQRP). Development assessed on a credit-based scoring process on the following principles:

- Design of homes and spaces
- Active environment and connectivity
- Environmental Sustainability
- Supporting Communities
- Access to healthier food environments
- Improving access to education, skills and employment

5.8 Redrow Homes will consider the ways in which it has complied with the Livewell Accreditation Scheme at detailed planning application stage.

Summary

5.9 Informed by the vision, context appraisal, the NPPF, National Design Guide, CCC objectives, and Redrow Home's 'Designing A Better Way Live' best practice guidance, our overarching design objectives and principles can be summarised at Table 1.

Table 1: Overarching Masterplan Design Objectives and Principles	
1.	A place: Create an identifiable place. Build to impress. Delivery of a high quality and locally distinct new development that is responsive, attractive and sensitive to the setting of the three sites; through the arrangement of streets and landscape corridors
2.	Promote a sustainable development , adopting best practices as an integral part of lifestyle, encouraging people to walk and cycle. Create a permeable block structure that affords a great degree of connectivity and choice of routes. Provide a landscape and built environment that promotes sustainable living, the preference for walking
3.	A mixed use community. Places to go and things to do. Deliver a range of accommodation, commercial and community uses and open spaces that will help foster a strong sense of community, provide for potential skills development, training and employment opportunities that will emerge as part of the development. Co-locate and provide commercial/employment opportunities and a stand-alone early years and childcare nursery (ECC advise 56 places). Provide affordable housing along with a range of accommodation to provide a balanced community. Ensure that through management and built form/style, the quality of the environment is equal across tenures. Ensure equal accessibility open spaces to enable all members of society to take part in sport and physical activity, and have access to communal resources
4.	Ensure the development is successfully integrated and well connected to the surrounding area, linking into existing footpaths and cyclepaths, accessible to local shops and the existing community. Provide footpaths that connect into existing paths and will connect into Site 3a and Sandon Park Ride. Have regard to the setting of the Conservation Areas identified earlier. Under-grounding the overhead power lines through Site 3c. Integrating the footpaths through Sites 3d and 3b. Provide for safe and direct routes to schools
5.	Promote inclusive design and provide access for all members of the community. Ensure that there are equal opportunities to access open spaces and that groups ,such as by age or tenure, are not disadvantaged accessibility by design. Well designed streets and spaces support and sustain a broader variety of users and community activities
6.	Improve quality of life, health and wellbeing , through the design of buildings and spaces. Capitalising on the site and surrounding green assets and provision of new uses, creating a high quality spaces for social interaction. Ensure that as many dwellings as possible within a perimeter block approach benefit from a dual aspect in terms of light, or for apartments, avoid a north aspect. Provide access to attractive/useable private and communal open space
7.	Safe, easy, direct and attractive pedestrian and cycle movement within the development and beyond. Streets and landscape corridors designed as places not just for vehicle movement or parking. Design street spaces to be pedestrian and cycle friendly, through traffic calming and detailed design of materials and landscaping - to create streets for people. Routes within green infrastructure should be safe, attractive and direct
8.	Deliver quality homes. With regard to Redrow's 8 principles and Building for a Healthy Life, be energy efficient and respond to climate change through the design of buildings and building fabric, use of materials and approach to drainage. Promote energy efficiency with the dwelling. Provide for change in the use of accommodation such as home working/ flexible home space, changing garages to accommodation
9.	Minimising the impact of the development on the environment by encouraging conservation, management and the recycling of natural resources. Using the area of land constrained by the gas wayleaves to create a landscaped green corridor. Using natural processes to protect places from flood risk. Using green infrastructure to assist in reducing Carbon in the atmosphere
10	Provide multi-functional green infrastructure , a living network of green spaces, water and environmental features. A well-connected ecosystem network by creating and enhancing habitats and natural features, increasing biodiversity. Natural and semi-natural open space including reinforced/compensation woodland and hedgerow planting; and local open space / strategic open space

6 Design Concept

- 6.1 Informed by the previous analysis and the design objectives and principles set out previous; the follow paragraphs describe the design concept for Sites 3b, c and d with reference the design concept for Site 3a as provided by Hopkins Homes from their Stage 1 presentation.
- 6.2 The figure below identifies the potential network of strategic routes that would help integrate the development areas into the surround context. These indicative routes seek to improve existing paths/ cyclepaths and facilitate convenient connections between them. They include a bridleway sharing existing lanes (such as Brick Kiln Road) and cyclepaths, which from Sandford Mill Lane could be afforded access to the Site 3a country park to the west subject to the masterplanning of this area.



Potential Strategic Footpath, Cycle and Equestrian Routes - wider allocation area.

6.3 The figure below illustrates existing landscape features, the hedgerows and woodland that bound Sites 3a, b, c and d, the existing green wedge, proposed country park and green corridors through Sites 3c and 3d along wayleaves and within the pylon corridor. The woodland plantation along Maldon Road, existing and proposed hedgerow connect the larger landscape spaces - the park, green wedge and proposed green corridors along

the pylons and wayleave through Site 3c. Together, they provide a framework for shaping the green infrastructure for the wider allocation area.

6.4 The design concept seeks to use existing landscape features and corridors to connect into the wider landscape and to provide a structure for the development, paths, cyclepaths and bridleways.



Potential Strategic Landscape Framework- wider allocation area.

Concept Masterplan

- 6.5 The Concept Masterplan focuses upon the structural elements to inform the development proposals for the allocation Sites. The Concept Masterplan:
- 1. Provides a concept for structure for the layout of uses and key links informed by the opportunities for the strategic site allocations
 - 2. Illustrates the location of green spaces and corridors which afford a setting for the development, sustainable drainage, biodiversity and recreation along and connected to the key links
 - 3. Promotes an accessible development. Facilitates a layout structured around people first, of key footpath and cycle connections between attractive homes and open spaces, the children's day nursery, employment opportunities and the wider context
 - 4. Provides a structure for development blocks, informed by the context appraisal that will integrate development into the pattern and grain of the wider community and provide a safe and attractive environment
 - 5. Provides the structure for new paths, cyclepaths that blends seamlessly with the existing and new network and a bridleway through Site 3b
 - 6. Provides a landscape structure and boundaries that integrate SuDs that are familiar and will reinforce the local context, using the Site constraints and opportunities to create a network of green corridors and reinforcing existing hedgerow alongside new compensatory tree planting including along Molrams Lane
 - 7. Enhances the ecological value of the Sites through connecting open spaces to nature and existing trees and hedgerows to achieve a biodiversity net gain
 - 8. Facilitates future cycle and footpath links to Site 3a. Facilitate bridleway access to NCN R1 and therein BW20 to the east, potentially Site 3a country park to west
 - 9. Creates a place informed by its context



Concept Masterplan.

Key

- Strategic Sites
- Site 3a
- Employment area
- Stand-alone early years and childcare nursery (ECC advise 56 places)
- Residential areas
- Sandon Park and Ride extension
- Green infrastructure/POS
- Woodland planting and Cross Wood
- Existing trees (surveyed)/woodland
- Strategic footpath/cyclepath/links
- Indicative strategic footpath/ cyclepath/links Site 3a
- Existing cycle route on / off road
- Existing cycle route walk bike
- Pill box in landscape setting
- Junctions to facilitate access
- Vehicular access/egress
- Limited vehicle access/egress to small residential area - potential self build - from Molrams Lane. No through link to wider site 3c
- Bridleway
- Potential bridleway link
- SuDs integrated into green infrastructure

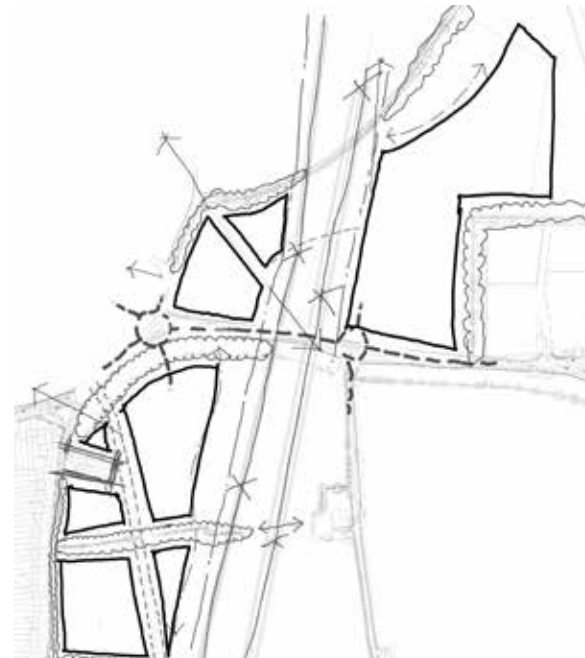
Below: Spatial connections / destinations along strategic footpath/cyclepath/ links within and beyond Sites

- Park and ride / safeguarded extension
- Stand-alone early years and childcare nursery / Sandon School
- Open spaces
- Residential areas

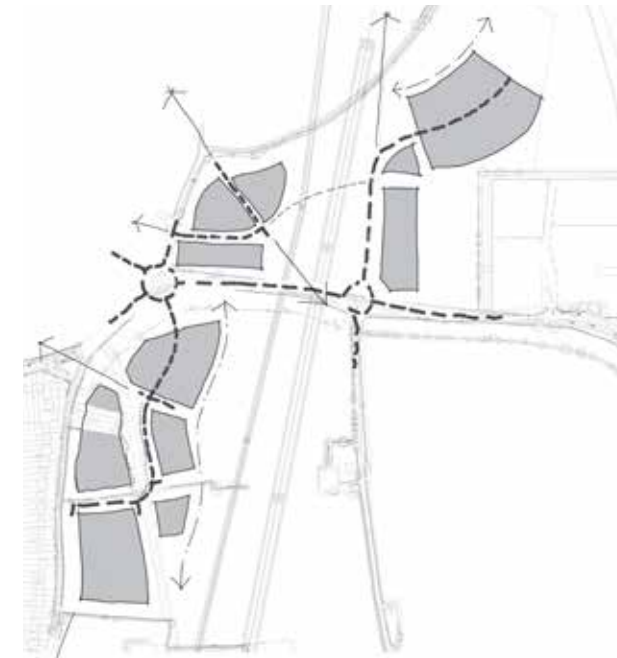
7 Framework Masterplan

Evolution

7.1 Engagement with Planning and Urban Design Officers at CCC has been instrumental in forming the design concept and underlying framework for the layout and distribution of land uses. Over some 24 months Redrow Homes has engaged with CCC and ECC, the local community, residents and design review to resolve this Development Framework Document. The images across the following pages illustrate some of the key 'milestones' in the evolution of the Framework Masterplan.



Determining links, framework, development areas by features, edges, constraints and opportunities. The linear eastern edge boundary to Site 3c is a feature that was returned to following clarification of the Allocation Boundary



Refining the Framework, shaping development areas by corridors, links. Exploring the pattern of development



Testing the block structure/landscape structure. Green corridors informed by existing landscape features including views, hedgerow, woodland and pill boxes structure the movement network and layout of blocks. Aligning key routes to corridors. Green corridors provide a succession of views into and through the development area providing for a highly legible layout



The draft Masterplan Framework as presented to stakeholders and the local community at workshop events



The Masterplan Framework as presented to design review, stakeholders and which informed public consultation during November/December 2020 and January 2021
























A Sense of Place

- 7.2 NPPF Para 127 states that development should:
- “establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit”*
- 7.3 Paragraphs 63 and 163 of the NDG state that well-designed places have:
- compact forms of development that are walkable, contributing positively to well-being and placemaking;
 - accessible local public transport, services and facilities, to ensure sustainable development;
 - recognisable streets and other spaces with their edges defined by buildings, making it easy for anyone to find their way around, and promoting safety and accessibility;
 - memorable features or groupings of buildings, spaces, uses or activities that create a sense of place, promoting inclusion and cohesion; and
 - Careful consideration needs to be given to placemaking, local distinctiveness and the character of new homes and buildings.
- 7.4 With reference to the above, our vision, and the context appraisal earlier, the underlying elements of placemaking are set out as follows:
- 7.5 TThe Framework Masterplan (far right) is considered to create a strong sense of place that reinforces the existing 'distinctive' characteristics of its context at the edge of Great Baddow and Sandon. The masterplan shapes the development within the allocation areas to create a place informed by the surrounding context.
- 7.6 The retention of, and integration of existing footpaths binds the layout in the historic movement patterns. The inclusion of heritage assets into open spaces and views provides for memorable connections to the story of this area. The creation of new connections and integration of existing creates an integrated place.
- 7.7 The masterplan maintains a strong landscape character retaining and reinforcing hedgerow boundaries and woodland, recognising the contribution these features

- make to the local area. The masterplan retains an open view into the site from Molrams Lane. There will be views over and between buildings and landscape. The landscape strategy will support a sustainable, green environment affording improvements to the existing bio-diversity. Green infrastructure accommodates space for amenity, ecology and biodiversity where they can enhance existing features, and drainage. The following pages describe the land uses, structure and principles of development proposed at Sites 3b, c and d. Space for recreation and play can be accommodated within the structure within convenient walking distance of residents.
- 7.8 The combination of housing, employment and the childrens day care centre, along with the multi use open spaces will make for an active and vibrant place.
- 7.9 The residential areas are structured by green infrastructure and footpath/cycle routes. They are shaped around the landscape and movement corridors having regard to the site constraints and opportunities. The employment areas are located to wrap around the Sandon Park and Ride. They frame attractive landscaped spaces to the north that provide a reinforcement of the existing edge visible from the conservation area to the north. Within the employment area, a nursery - child day care site - is located at the intersection of a number of routes through the northern sites. The landscape areas provide space for planting to mitigate the effect of development upon views through Site 3b, provide space for SuDs flood management.
- 7.10 The architecture will be attractive and draw appropriately upon the local landscape a common traditional architectural style, respecting where appropriate the scale and proportions of the existing built forms which itself is varied. As described by the density and heights plans, the massing and scale of the buildings, articulated by a varied roof form will provide for an interesting street scene that is consistent with the local variety.
- 7.11 The extension to Sandon Park and Ride is shown west of the previous extension, within close walking distance of the bus terminal. It has the capacity to accommodate a further 600 cars. It will be screened by development to the north and west, and allows for buffer planting along Maldon Road.

A Healthy Place that promotes Well-Being

- 7.12 The Framework Masterplan has been designed to create a new, balanced community which meets local housing need, enhances green infrastructure and provides additional infrastructure for the benefit of the occupants and of the local public. High-quality dwellings (as measured by M4 (2,3) and the NDSS) and employment space provision are designed around generous amounts of green space and new planting. The inclusion of formal and public open space with green corridors will provide a range of beneficial health effects. Where appropriate, by applying careful design and use of suitable technology and materials, the Development will offer an effective response to energy poverty and reducing energy consumption.
- 7.13 Following completion of the new community and once operational, the employment floorspace provision will provide permanent jobs and could afford opportunities for training and apprenticeships. The community will also indirectly support roles for maintenance of public open spaces and landscaping as well as for highways, utilities and other service provisions. The child day nursery facility within the centre of the employment provision, will serve the occupiers of the community and local public.
- 7.14 Access considerations promote active and sustainable travel, including attractive and safe cycling and pedestrian facilities that connect to the wider area. Travel packs for residents will set out the available sustainable travel options; and a Travel Plan will include objectives, targets and monitoring of movements. A welcome pack that includes details of local Farmers' Markets to support access to healthy food.
- 7.15 The Development will be designed in accordance with the principles set out by 'Secured by Design' to ensure the future residents feel secure and promote an inclusive community.
- 7.16 The following pages describe the component features of the Framework Masterplan.

- Key**
-  Allocation Site areas
 -  Employment
 -  Stand-alone early years and childcare nursery
 -  Residential
 -  Sandon Park and Ride extension
 -  Pill boxes
 -  Green infrastructure
 -  Indicative locations for play areas
 -  Surface water attenuation basins
 -  Suds basin beyond Site 3c - part of wildlife, bio-diverse corridor along hedgerow
 -  Woodland
 -  Street trees
 -  Carriageway
 -  Shared space/driveways/lanes
 -  Cyclepath/footpath
 -  Cyclepath undesignated within carriageway
 -  Potential link to Sandon school (eastern edge of Molrams Lane) beyond masterplan area
 -  Bridleway
 -  PROW and indicative footpaths
 -  Crossing
 -  Bus stop
 -  NCN R1
 -  Potential bridleway link to BW30 and existing route Brick Kiln Road



Land Use

7.17 The Land Use Masterplan illustrates the general disposition of land uses and key infrastructure of the Framework Masterplan. Overall, the Framework Masterplan will deliver development areas, open spaces, highway works, new footpath, cyclepaths and bridleway.

Site 3b (10.66 ha)

- Circa 0.27 ha for a stand-alone early years and childcare nursery;
- Circa 3.74 ha for business use employment within flexible plots/buildings and a strong landscaped setting;
- Circa 1.45 ha for the western extension to the Sandon Park and Ride (circa 600 spaces);
- Circa 0.22 ha highways infrastructure Maldon Road access; and
- Circa 4.98 ha of green infrastructure.

Site 3c (7.2 ha)

- Circa 4.35 ha of residential development;
- Circa 0.13 ha highways infrastructure Maldon Road access; and
- Circa 2.72 ha of green infrastructure.

Site 3d (2.8 ha)

- Circa 1.9 ha of residential development;
- Circa 0.1 ha highways infrastructure Maldon Road access; and
- Circa 0.8 ha of green infrastructure.



Land Use Masterplan.



Land Use Development:

- Circa 0.27 ha for a stand-alone early years and childcare nursery;
- Circa 3.74 ha for business use employment within flexible plots/buildings and a strong landscaped setting;
- Circa 1.45 ha for the western extension to the Sandon Park and Ride (circa 600 spaces)
- Circa 6.25 ha of residential development
- Circa 0.45 ha highways infrastructure Maldon Road access



Land Use Open space:

- Circa 8.5 ha of green infrastructure which comprises:
 - Circa 4.43 ha: Natural and semi-natural open space including reinforced/compensation woodland and hedgerow planting; and
 - Circa 4.07 ha: Local open space / strategic open space (suitable for community orchard, allotments, play space, green space, parks and recreation grounds)

Access and Integration

7.18 The Framework Masterplan and the emerging strategy for Site 3a are designed to integrate with the principal cycle and public transport connections outlined earlier. In addition the Framework Masterplan will help facilitate improved bridleyway connections which could extend to the country park subject to the masterplanning of Site 3a and the country park as shown on the plan right and across the page.

7.19 Informed by the earlier analysis, the principal routes shown opposite and across the page are:

- A** Existing links north-south to Chelmsford City Centre and Chelmer Village
- B** Existing cycle routes east-west via The Bingey towards Great Baddow local centre and beyond, Chelmsford City Centre
- C** Cycle route towards Chelmsford city centre along the bus lane of west bound carriageway of Essex Yeomanry Way

Cyclepaths/footpaths/bridleway

7.20 There are seamless link through the site for pedestrians and cyclists in accordance with LTN 1/20 for the benefit of pedestrians and cyclists which connect also to bus stops - existing and prposed relocated. The principal pedestrian and cycle movement corridors follow convenient and attractive paths through the development area. These routes connect to the wider network of footpaths and cycle routes identified earlier. Strategic cycle/footpath routes connect Sandon Park and Ride, the employment area and stand-alone early years and childcare nursery to Sites 3a, b,

c and d and NCN R1. They could also integrate existing and proposed paths and cycle routes alongside Maldon Road as part of the Site 3a masterplan.

- 1:** There are routes north south that connect to NCN R1 and link to Sandon Park and Ride and south towards Sandon School. To the south beyond Site 3c, if agreement with the identified landowner / school is possible, a direct link on the eastern side of Molrams Lane to the school can be provided. If a connection is not possible then a crossing will be needed which can be dealt with under s278 works (a crossing is identified).
- 2:** There is an east-west route from Site 3a towards the employment areas and park and ride. This intersects with the north south routes. Through Site 3d the cycle route is along a street owing to the expected very low volume of vehicular through traffic.
- 3:** There is a direct east-west route along Maldon Road between the park and ride and Molrams Lane.
- 4:** There is a link from the top of Molrams Lane into Site 3c. This also connects north into the Site 3a Masterplan.

On-road cycle route

Off-road cycle route

Bridleway

Cycle lane

Bus lane

Walk your bike

Cycle friendly road

On-road suitable for experienced cyclists

Cycle parking

School

Hospital

Toucan / Pelican crossing

Train station

One way

National Cycle Network route number

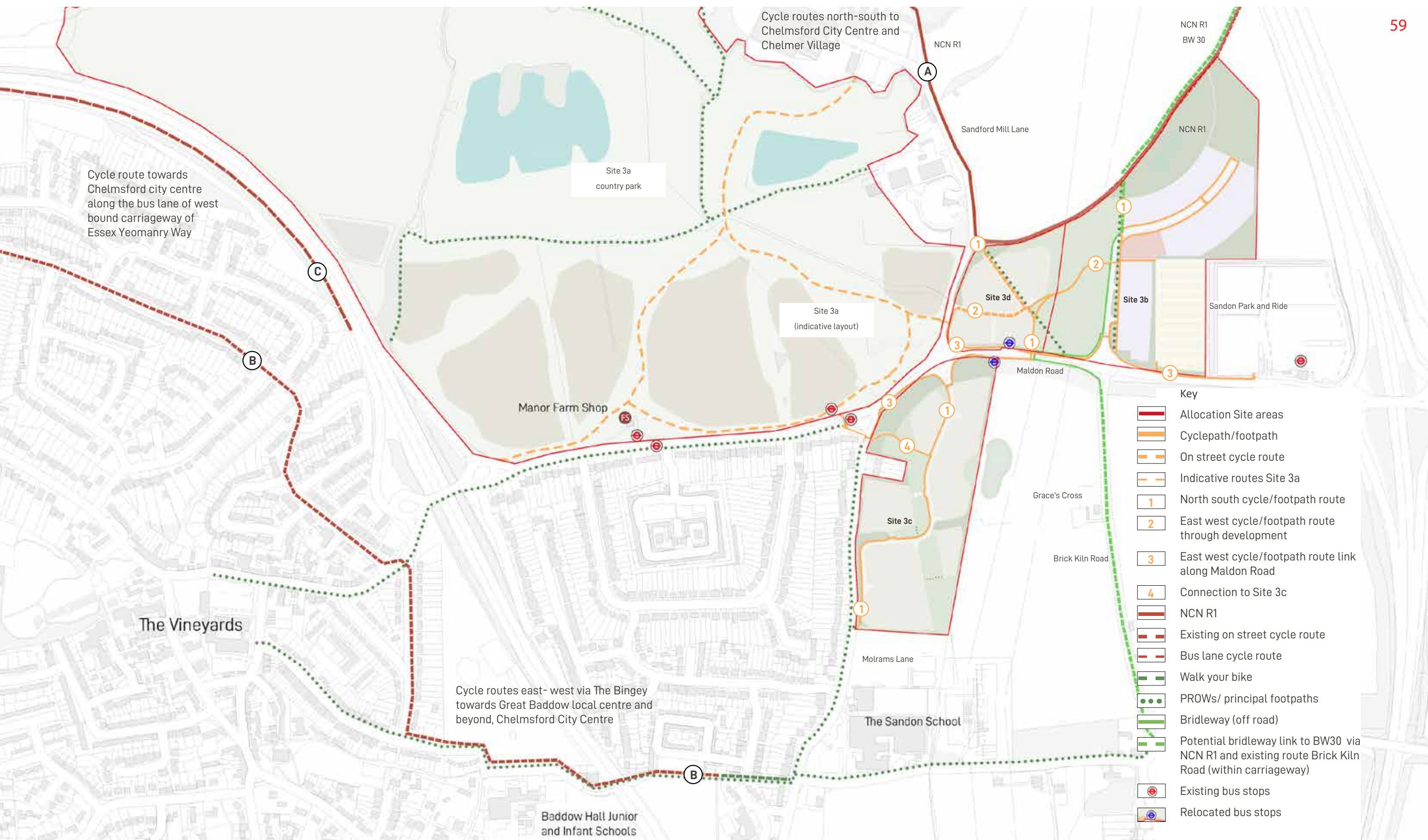
Cycle shop

Retail area

Indicative and Existing Strategic Movement: Cyclepaths, Footpaths and Bridleway.

7

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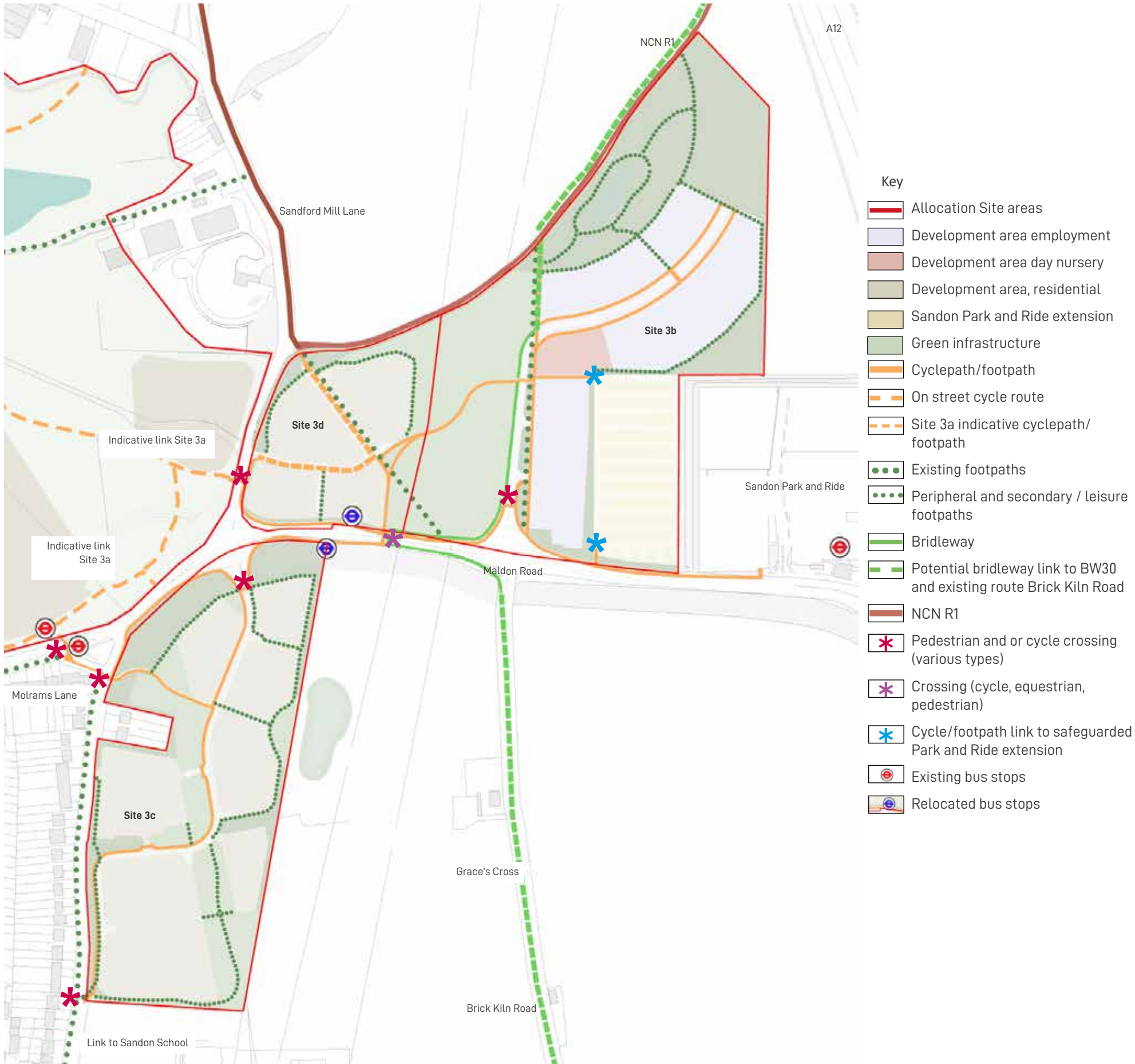


Indicative and Existing Strategic Movement: Bus Stops, Cyclepaths, Footpaths and Bridleway.
The illustrative masterplan for Site 3A has been provided by Hopkins Homes Stage 1 Presentation and is for indicative purposes only.

- 7.21 There are two crossings on Maldon Road, which coincide with bus stops. The Brick Kiln Road bus stops will be moved to lay-bys either side of the eastern arm of the 5-arm roundabout. The bus stops will both have new shelters / appropriate facilities to be confirmed with ECC.
- 7.22 Improvements are shown to the junction with Maldon Road and Molrams Lane, removing one of the split junctions and replacing it with a shared space that serves the immediate houses and as a cyclepath link.
- 7.23 Upgrading the existing footpath through Site 3b to a accommodate a cyclepath and brideway provides connectivity between the park and ride/employment/ children's day nursery and NCN R1.
- 7.24 Subject to the requirements of the Sandon Park and Ride operation, there are potentially footpath and cyclepath connections into the safeguarded park and ride extension site from Site 3b through the employment area which will link into the wider network of routes and from Maldon Road.
- 7.25 Footpaths at the edges of the built areas and through the open spaces will provide for further permeable routes.

Bridleways

- 7.26 A brideway is shown north-south through Site 3b running alongside the proposed cyclepath/footpath and access road. It links Sandford Mill Lane to Brick Kiln Road via a Pegasus crossing on Maldon Road, providing a mix of on carriageway and off carriageway routes.
- 7.27 The shared Maldon Road crossing will require a 3m for two-way horse movements and 5m x 10m holding areas to wait to cross.
- 7.28 There is the potential to extend the proposed brideway route towards the proposed Site 3a country park subject to the masterplanning of Site 3a.



Movement: Cyclepaths, footpaths and brideway. Crossing points

Streets

- 7.29 Vehicles will principally access and egress the Sites via new roundabout junctions on Maldon Road, and once within the sites there will be a permeable, traffic calmed environment.
- 7.30 The permeable perimeter block structure supports a connected hierarchy of street spaces. It will be made legible by picking up on views, creating new sequences of spaces, and through enclosure by buildings and landscape. For Sites 3c and 3d, central primary streets connect to the proposed roundabout on Maldon Road. These lead into the development areas from which there is a lower hierarchy of streets and spaces within the residential areas. A central boulevard through Site 3b facilitates access to the employment units and the children's day centre/nursery.
- 7.31 Connected streets via shared spaces and driveways will facilitate easy servicing and refuse collections and enable frontages to address public spaces and the peripheral edges of the Sites wherever possible.



Movement: Streets.

Green Infrastructure

7.32 The Framework Masterplan provides for a significant amount of multi-functional green infrastructure to meet the needs of the development (8.5 ha - excluding area around SuDs basin east of Site 3c). The green infrastructure provides a living network of green spaces, water and environmental features - the natural landscape, trees and hedgerow. The strategy will deliver a well-connected ecosystem network by creating and enhancing habitats and natural features, increasing biodiversity.

Landscape corridors

7.33 Landscape corridors reinforce existing landscape features such as the retained trees and hedgerow, safeguard wayleaves such as through Site 3c and between Sites 3d and 3b, and define movement corridors. The corridors also retain and protect the setting of the pill boxes.

7.34 The landscape corridor to the north of Sites 3b and 3d provides a natural edge to the built form that will help screen and layer views across the site from Sandford Mill Lane. Within this corridor, the landscaped open space at the Site 3b basin would have public access with benches for the public. The landscape corridor to the east of Site 3c provides a tree planted and hedgerow boundary alongside a continuous footpath/ shared space to provide for frontage development. The landscape corridor to the west of Site 3d provides a natural edge to the built form that draws the planting along Sandford Mill Lane south. Within the corridors, public footpaths and play areas will connect with the surrounding network, developing a truly permeable development with varied experiences along the journey.



Green Infrastructure.

Gas easement/overhead line safety zones

- 7.35 The figure right highlights the safety zone and gas easements through Site 3c and the principal overhead line cable swing through Site 3b. The gas easement and the cable swing 'wayleave' lines are accommodated within areas of strategic and local open space. The low voltage cable through Site 3c will be under-grounded.

Open space provision

- 7.36 Local Plan Policy S9 states that infrastructure necessary to support new development must provide or contribute towards ensuring a range of green and natural infrastructure, net gain in biodiversity and public realm improvement. The policy requirement (Appendix B, Tables 12 and 14) is 19sqm per dwelling of 'Local Open Space' (allotments, play space, green space) and 40sqm per dwelling of 'Strategic Open Space' (parks and recreation grounds).
- 7.37 Informed by the indicative capacity for development, Site 3d requires circa 950sqm of local open space and 0.2 ha of strategic open space; and Site 3c requires 0.19 ha and 0.4 ha of open space respectively. Together, the sites require access to 0.2 ha of local open space and 0.6 ha of strategic open space. The exact composition of open space will be determined at the application stage. The framework masterplan's indicative provision of open space is described below and demonstrates that the Sites can deliver in excess of the policy requirements for open space to support health and wellbeing.

Site 3b

- 7.38 Site 3b provides circa 4.98 ha of green infrastructure of which 3.0 ha is primarily for drainage, natural and semi-natural open space, including compensation / reinforced woodland and hedgerow planting. The green infrastructure measures includes planting belts and buffers along Maldon Road and the enhancement of planting along Sandford Mill Lane to help provide visual containment to the development. Planting on the higher ground adjacent to the park and ride will ultimately provide a backdrop to the built form and street tree planting along the access road provides further opportunity for planting to break up the built form.



Gas Easement Overhead Line Safety Zones.

7.39 The residual 1.98 ha of green infrastructure is suitable for strategic open space / parkland having regard to the guidance within 'A Sense of Place: design guidelines for development near high voltage overhead lines' prepared by National Grid / Transco. The space allows for wide views across the Chelmer valley to be retained and maintains a visual connection to wider landscape. The open space and the areas of open space around the basin will be accessible to informal and formal footpaths, the bridleway and cyclepaths.

Site 3c

7.40 Site 3c provides circa 2.72 ha of green infrastructure, of which circa 1.2 ha is primarily natural and semi natural open space, including reinforced woodland and new hedgerow planting and circa 1.52 ha is residual local open space - 0.5 ha of which lies outside of the gas main outer safety zone. Indicative play areas are located outside of the gas main outer safety zone. At the eastern boundary to Site 3c there is a circa 5m landscape corridor for hedgerow and tree planting, consistent with the prevalent boundary character, to afford an appropriate transition between development and landscape. The corridor widens around the pill box and the proposed attenuation basin to the east which will be included into the landscape infrastructure to facilitate delivery of Site 3c. The basin can be tied in with the open space provision around the Pill box as forming a walking route and an interesting site feature. The corridor also widens to the south east to ensure there remains visual and physical separation from Sandon village. Hedgerows along Molrams Lane, to the southern boundary and through the middle of the Site are retained except to facilitate access.

Site 3d

7.41 Site 3d provides circa 0.8 ha of green infrastructure of which 0.23 ha is primarily natural and semi-natural open space, including reinforced woodland and hedgerow planting and 0.57 ha of residual local open space. The green infrastructure incorporates landscape compensation measures along Maldon Road, comprising new hedgerow and trees, and planting belts and buffers along the edge of the Site. Along the western boundary, hedgerow/tree planting will need to provide natural surveillance to encourage use of the adjacent open space.



Natural and Semi-Natural Planting at the Site Boundaries.

Play

- 7.42 Open space will incorporate casual amenity space for walking and cycling such as along the wayleave corridor through Site 3c, and socialising along with more formal recreation opportunities such as at the play areas. Where appropriate play areas will incorporate the principles of natural play using sustainable materials.

Natural and semi-natural planting

- 7.43 Other than to facilitate access in accordance with the objectives of the masterplan the intention is to first retain trees and hedgerow where ever possible and augment existing planting as appropriate. Hedgerows/ mature trees and new planting will provide a framework for the development and alongside sustainable drainage will create a variety of wildlife habitats.
- 7.44 Formally arranged street trees will form part of the character of the development. Tree planting throughout the residential parcels will aid navigation, frame views and break up the mass of the residential development whilst connecting existing habitat areas to the buffers on the edge of the site. Street tree planting provided in groups or clusters will typically consist of three trees, and will generally be spaced every 10-20m. The detailed design of street tree planting will consider potential conflicts such as service corridors, highway standards, public safety, lighting requirements, owner liability and adoption strategies. Care should be taken to ensure that planting will not cause management problems. Each street tree should have capacity to mature without impeding on adjoining infrastructure. Planting will take into account ground conditions, service routes and foundation design to avoid conflict.

- 7.45 New planting within the public open spaces will go to the heart of the residential development, breaking up the building mass when viewed from outside the site. Planting will provide connectivity with existing, off-site habitats and enhance the site for ecology and biodiversity. There will be a presumption towards native species although it is acknowledged that pure natives are not always appropriate to the denser development frontages.

Cross Wood

- 7.46 Subject to detailed design, the proposed western access arrangements may require the loss of up to circa 0.13 ha of Cross Wood. To compensate the loss of trees to facilitate access, there is envisaged: tree management of Cross Wood to address the issues identified earlier with new plantation woodland and new tree planting. As indicated, the new planting can be provided within areas of natural and semi natural open space along the north western edge of Site 3c adjacent to Molrams Lane (circa 0.12 ha); along the eastern boundary to Site 3c (circa 0.07ha) and to the north of Site 3b (circa 1.0ha).

Biodiversity

- 7.47 The scheme will seek to achieve a minimum of 10% in biodiversity net gain. A biodiversity management plan, as part of future applications will provide details of the anticipated net gain in biodiversity across the sites. Management strategies for the Sites will be holistic and designed to:
- Integrate landscape across the development and respond to local character;

- Incorporating features of the same or higher biodiversity value as those affected by development - such as hedgerow and woodland. Ensure that lost or damaged features are not replaced by features of lower biodiversity value through management and consideration of species and habitat;
- Develop improved and legible connections between the new planting and the existing vegetation to create connections to support and protect species movement; and
- Manage existing wildlife by creating opportunities for it to be extended and enhanced. Seek ecological enhancements wherever possible, such as native tree and hedge planting, integral bird and bat boxes.

Drainage

- 7.48 The preferred approach for the Sites is to create as naturally, and sustainable draining solution as possible having regard to the site constraints and opportunities. Water drained to attenuation will do so at a controlled rate to ensure greenfield levels of run-off. This will include a controlled infiltration system designed to cater for the 1:100 year flood event in accordance with national guidance. The Sustainable Drainage System (SuDS) within the scheme will therefore comprise wet/ dry attenuation basins and subject to detailed design could also include the following measures as may be appropriate to the development areas:
- Swales providing both conveyance and water quality treatment stages for the surface water; and
 - Recycling of roof water via water butts located in the rear gardens of all plots.



- 7.49 The strategy proposes two attenuation basins, one located to the east of Site 3c and the other to the north of the employment units in Site 3d. Informed by the indicative capacity of the sites, the illustrative basins are a reasonably indication of the size to accommodate a 1 in 100 year rainfall event, plus a 40% allowance for climate change.
- 7.50 For Site 3c the basin is located in a natural low point marginally outside of the allocated area in order to enable a gravity fed connection from the development areas to the basin and to avoid the pill box. The land required for drainage is deliverable as additional to the allocation, the exact boundary to be determined through a planning application. Trying to accommodate the basin into the allocated area would result in potentially less sustainable localised pumped arrangements in order to bring the surface water from the southern areas against the natural topography. The basin forms a natural depression within the adjacent landscape that will not be farmed. It will become a landscape habitat that, afforded by its proximity to the proposed landscaping along the boundary to Site 3c, forms part of the wider bio-diverse corridors to be afforded by the proposals and could be integrated into the open space provision associated with the pill box.
- 7.51 For Sites 3b and 3d, the basin falls within a natural low area within the 3b allocation area. Here the approach creates the opportunity for habitats and amenity space that could include seating and peripheral walks, integrated into the wider green infrastructure. The management of the SuDs will be resolved through subsequent planning applications.
- 7.52 Foul sewerage will be treated on-site by means of foul pumping to be resolved at the detailed stage.



Block Structure

- 7.53 The indicative block structure is informed by the landscape framework, the key movement links, the pattern and grain of the surrounding context identified earlier and the Concept Masterplan. The structure affords a coherent network of public open space, formal and informal sport, recreation and community space within the Sites. The relationship to Site 3a is indicatively shown overleaf.
- 7.54 The blocks afford flexibility in terms of dwelling types and create a clear definition of public and private space, ensuring that public space can be passively overlooked. Blocks are aligned to retain and create views through the sites, footpaths and existing hedgerow as identified previously, and the landscape corridors.
- 7.55 Along Molrams Lane development addresses the street from behind the retained hedgerow which will provide for a new landscape corridor and soften the transition between existing and new development. Gaps in the edge will afford connections east into the new community.
- 7.56 Along the eastern boundary of Site 3c, a lower density of built form set behind hedgerow will respect the landscape setting of the listed building and the prevalent pattern of development.
- 7.57 At Site 3d the pattern of development is shaped by the footpath that crosses through the area and a future link from Site 3a through to the children's day care nursery, the employment uses and Sandon Park and Ride.
- 7.58 At Site 3b, the employment units and the childcare nursery are sited within a landscape setting defined by the topography and landscape corridors. A central access road provides the opportunity for frontage development, with parking and servicing principally behind the buildings. Around the buildings landscaping would blend into the surrounding countryside.

Views

- 7.59 There are a number of views through the development areas that are retained in landscape corridors and the block structure to aid legibility and placemaking.
- 7.60 Views through Site 3d follow the existing footpath and the new link into the site to the proposed crossing of Maldon Road and east towards the employment area and children's day nursery.



- 7.61 Views through Site 3b follow the existing footpath and from the central access road, visually connecting the development east towards Site 3d. Keynote buildings, such as the children's day centre can provide a focus for views.
- 7.62 The views through Site 3c draw upon existing landscape features, using the hedgerow and trees to define memorable features along key routes. Views beyond the site boundaries connect to the countryside to the east.

Community safety

- 7.63 All new developments will create pleasant environments for residents so that the quality of life is not undermined by crime or the fear of crime with strong influence from Secured By Design and similar national guidance. The following measures can deter crime and create a safer place to live:
- Well-defined routes through the development, with spaces and entrances designed to maximise convenient movement;
 - Layouts which maximises natural surveillance to the public open spaces, parking areas and houses;
 - Layouts which aims to promote a sense of ownership, respect, territorial responsibility and community, with a mix of different house types and sizes to encourage different age groups into the new community; and

- 7.64 Details design which will incorporate well-designed security features with the dwellings themselves.

Density

- 7.65 The Density Plan illustrates how the Framework Masterplan responds to landscape features and surrounding context. This plan should be read alongside the Heights Plan to inform the potential scale and massing.
- 7.66 The medium density residential areas could be characterised by a mix that could include apartments and terraces whereas lower density areas would have a greater number of detached dwellings. Generally, there is a gradation of density away from the countryside edges towards the existing urban edge to the west. The indicative density bands reflect the local context



Density.

and could support a balanced community with a mix of dwelling types and tenure.

- 7.67 To reduce the visual impact of built development on views from the north and the edge of the conservation area, the medium density employment areas could be characterised by larger, two storey buildings set into the lower part of Site 3b and screened by the existing and enhanced planting along Sandford Mill Lane/NCNR1. The lower density areas would be characterised by lower buildings and two storey buildings concentrated along the lower contours of the density band, allowing for trees on the upper slopes to be seen above the roof tops.

Height

- 7.68 The height of the development will respect the existing characteristics of the surrounding area as described earlier. The majority of houses will be between 2 and 2.5 storeys with key landmark buildings up to 3 storeys (employment buildings to the equivalent of).
- 7.69 The eventual heights of business units will need to have regard to the setting of the Conservation Area and the Green Wedge to the north, the proposed mitigation planting and any Landscape and Visual Impact Assessment submitted at planning application stage.
- 7.70 Variation in eaves and ridge height will add interest to the skyline and street scene and create a legible framework for the community, aiding place making.

Landmark and keynote buildings

- 7.71 Within the block structure, distinctive buildings by virtue of design and/or height, scale and massing can aid legibility and define the character of development. The principal locations around the new junctions aid wider legibility, terminate views from the links leading eastward towards the sites from Site 3a.





Sustainability: Energy Efficiency and Climate Change

7.72 Redrow have been rated as a Top 3 Housebuilder in the UK for Sustainability and have won a gold award for the fourth year in a row by the Next Generation benchmark. The Benchmark rigorously evaluates the annual progress the homebuilding sector has made in delivering sustainable development.

Sustainability

- 7.73 At a site wide level, transport measures will include:
- Provision of sustainable transport facilities within easy walking distance of residents;
 - Attractive and practical pedestrian/cyclist routes; and
 - Travel planning and travel information packs, to encourage new residents to travel by more sustainable alternatives than the private car, including links to the Park and Ride site.

Climate Change

7.74 Our Carbon Target is to reduce the carbon intensity of our construction operations and offices by 10% by 2022 (2017 baseline). While our actual emissions have increased over time, which is expected due to the continuous business growth and an increase of 13% in delivery of new homes from the previous year, we have reduced our direct emissions intensity (tCO2e per 100m² of homes built) by 21% since 2013. In 2019, our emissions intensity decreased by 2.4% compared to 2018 and we are on course to meet our 2022 target. As a company, we have been disclosing our carbon emissions and reduction activities to the Carbon Disclosure Project (CDP) annually since 2010. In the most recent submission, we were awarded a B grade which reflects the progress we have made by measuring awareness, management and actions taken on climate change.

7.75 The climate change adaptation measures include:

- Improving the ability of buildings to adapt to climate extremes by reducing water consumption, reducing overheating and improving ventilation; and
- Landscape strategy to include significant new planting and SuDS features that help to provide natural cooling and channel surface water runoff and assist in reducing Carbon in the atmosphere.

7.76 The proposed designs will meet sustainable methods of construction in accordance with the Building Regulations. This approach will result in a residence that consumes reduced amounts of energy, resulting in benefits for the environment through reduced greenhouse gas emissions and better adaptation to climate change. The sustainability strategy will be based on providing well designed energy and water efficient homes, set within an external environment that seamlessly links with the built form and is adaptable to the future needs of residents. At the application stage, energy demand measures will include:

1. Thermally efficient, easily controlled, well designed and orientated buildings; A fabric first approach, resulting in dwellings with lower energy consumption
2. The layout of plots and buildings that seek to maximise the benefits of passive solar design
3. Roof structures that maximise the surface area with a southerly orientation to allow for the potential installation of solar technology
4. The design of the dwellings to accommodate home working, which will also reduce the need to travel. This includes the need to ensure that new homes have connections to superfast broadband readily work from home. This may include suitable space within habitable rooms, or specific rooms for home offices
5. Energy efficient lighting both within private homes and in public spaces
6. Energy performance meters as provided by utilities companies

7.77 To alleviate the effects of climate change and flood risk on our developments, we incorporate Sustainable Urban Drainage Systems (SuDS) on most of our developments, which are designed to mimic the natural drainage of

surface water by managing rainfall, whilst also often providing habitats for wildlife. Water measures will include:

- Sustainable Urban Drainage Systems to manage surface water run off through attenuation ponds;
- Water butts to harvest rainwater; and
- Water efficiency measures to reduce consumption.

Waste and Recycling

7.78 To fully de-carbonise by 2050 and keep global heating to below 1.5 degrees, the building and construction sector must tackle the emissions created from the entire building lifecycle. We understand that significant reductions in construction waste can reduce greenhouse gas emissions and in turn help to tackle climate change, which is why we're committed to reducing the quantity of waste going to landfill. Last year 98% of our waste was recycled or reused, and there has been a significant reduction in the construction waste we produced over the past three years. We're now actively working to reduce waste levels even further over the coming years.

7.79 Redrow Homes have been working with The Community Wood Recycling Scheme to increase the reuse of waste wood. The Community Wood Recycling Scheme is a network that provides an efficient collection service for excess wood, with the aim of saving resources by reusing and recycling waste timber. The Community Wood Recycling Scheme also operates as a Social Enterprise, by creating jobs and volunteering options for disadvantaged people.

7.80 The storage and collection of waste will be arranged so that it does not adversely effect the character or appearance of the development:

- There should be a dedicated storage area on an area of hardstanding for collection;
- There should be easy access between the storage area and the collection point;
- Storage areas to the front of a site to be integrated and well screened; and
- Detached stores should be covered and should be at least 5m away from flats and houses to minimise noise disturbance to residents during use and collection.





8 Conclusion

This Development Framework Document for Sites 3b, 3c and 3d has evolved from an understanding of the local context and the growth requirements of Chelmsford City Council. The Sites will integrate with the wider allocation and existing landscape and townscape.

The design approach will provide an exceptionally high-quality living and working environment and create a development opportunity for future generations to benefit. It will also guarantee the very timely delivery of new houses in the initial years of the new local plan.

Table 2 overleaf illustrates how the Framework Masterplan will achieve the design objectives set out earlier.

Opposite page: Framework Masterplan Sites 3b, 3c & 3d
Site 3a and country park in context.

Table 2: Overarching Design Objectives and Principles and how these will be delivered.	
1. A place: Create an identifiable place. Build to impress. Delivery of a high quality and locally distinct new development that is responsive, attractive and sensitive to the setting of the three sites; through the arrangement of streets and landscape corridors	i.e. A masterplan structured by the existing features and connections/new connections. A place that draws upon local character to inform design. Use existing footpaths to structure the layout of Site 3d. Recreate a field boundary to the east of Site 3c. Using pill boxes within the sites as a positive feature that connect with past and the history of the local area
2. Promote a sustainable development , adopting best practices as an integral part of lifestyle, encouraging people to walk and cycle. Create a permeable block structure that affords a great degree of connectivity and choice of routes. Provide a landscape and built environment that promotes sustainable living, the preference for walking	i.e. A layout that encourages walking and cycling to reach local services, to Sandon Park and Ride/local bus stops to access Chelmsford and Great Baddow
3. A mixed use community. Places to go and things to do. Deliver a range of accommodation, commercial and community uses and open spaces that will help foster a strong sense of community, provide for potential skills development, training and employment opportunities that will emerge as part of the development. Co-locate and provide commercial/employment opportunities and a stand-alone early years and childcare nursery (ECC advise 56 places). Provide affordable housing along with a range of accommodation to provide a balanced community. Ensure that through management and built form/style, the quality of the environment is equal across tenures. Ensure equal accessibility to open spaces to enable all members of society to take part in sport and physical activity, and have access to communal resources	i.e. The employment area and children's day care nursery are located to be accessible to all. Cyclists and pedestrian connections into the park and ride. Through the realisation of the development, there will be opportunities for employment in construction and following completion, employment opportunities and potential for skills development and training within the E class uses; and associated with the management of the green infrastructure
4. Ensure the development is successfully integrated and well connected to the surrounding area, linking into existing footpaths and cyclepaths, accessible to local shops and the existing community. Provide footpaths that connect into existing paths and will connect into Site 3a and Sandon Park Ride. Have regard to the setting of the Conservation Areas identified earlier. Under-grounding the overhead power lines through Site 3c. Integrating the footpaths through Sites 3d and 3b. Provide for safe and direct routes to schools	i.e. Multiple footpath and cycle links into Molrams Lane and development that faces across the street. Links east from Molrams Lane into the new open spaces afforded by the development. Provide for an attractive and convenient route that connects through the Sites and integrates with existing cycle and footpaths leading to local services, community uses, the country park and schools. There are future links to Site 3a created by the proposed infrastructure
5. Promote inclusive design and provide access for all members of the community. Ensure that there are equal opportunities to access open spaces and that groups ,such as by age or tenure, are not disadvantaged accessibility by design. Well designed streets and spaces support and sustain a broader variety of users and community activities	i.e. Locating new community uses (open space and children's day care nursery) on the principal footpath and cycle routes. Open space play areas that are accessible to all areas of the development
6. Improve quality of life, health and wellbeing , through the design of buildings and spaces. Capitalising on the site and surrounding green assets and provision of new uses, creating a high quality spaces for social interaction. Ensure that as many dwellings as possible within a perimeter block approach benefit from a dual aspect in terms of light, or for apartments, avoid a north aspect. Provide access to attractive/useable private and communal open space	i.e. To provide development within a framework that provides easy access to attractive and useable open spaces within which a network of routes encourages walking and cycling. Spaces that are well-designed to be attractive and safe, functional and well maintained. Provide for useable and attractive private space
7. Safe, easy, direct and attractive pedestrian and cycle movement within the development and beyond. Streets and landscape corridors designed as places not just for vehicle movement or parking. Design street spaces to be pedestrian and cycle friendly, through traffic calming and detailed design of materials and landscaping - to create streets for people. Routes within green infrastructure should be safe, attractive and direct	i.e. Legible streets with space for cycle and footpaths that afford the most convenient routes through the Sites. To prioritise accessibility for pedestrians and cyclists with a permeable block structure that connects into the existing spatial hierarchy of routes. Direct links to bus stops, the park and ride and new facilities in the employment area
8. Deliver quality homes. With regard to Redrow's 8 principles and Building for a Healthy Life, be energy efficient and respond to climate change through the design of buildings and building fabric, use of materials and approach to drainage. Promote energy efficiency with the dwelling. Provide for change in the use of accommodation such as home working/ flexible home space, changing garages to accommodation	i.e. A masterplan structure that provides space for flexible buildings with potential to adapt. Tenure blind approach to layout and design
9. Minimising the impact of the development on the environment by encouraging conservation, management and the recycling of natural resources. Using the area of land constrained by the gas wayleaves to create a landscaped green corridor. Using natural processes to protect places from flood risk. Using green infrastructure to assist in reducing Carbon in the atmosphere	i.e. The sustainable transport measures that underpin the movement through the Sites. Using multi-functional green corridors to connect landscape features, creating wildlife and biodiverse corridors and attractive spaces for residents and workers
10 Provide multi-functional green infrastructure, a living network of green spaces, water and environmental features. A well-connected ecosystem network by creating and enhancing habitats and natural features, increasing biodiversity. Natural and semi-natural open space including reinforced/compensation woodland and hedgerow planting; and local open space / strategic open space	i.e By providing an overall landscape strategy for the Sites that creates attractive and functional spaces for residents, visitors, wildlife and bio-diversity that manages SuDs and resolves an asset to the development
11. Deliver biodiversity net gain and ecological enhancements through the provision of high quality green infrastructure to incorporate habitats of ecological value. Retaining and enhancing existing hedgerow, providing new tree planting and new green corridors that will support wildlife	i.e. By providing green infrastructure and space for planting within the development to enhance biodiversity. Integrating and enhancing existing landscape features. Semi-natural areas such as around the flood attenuation ponds provide informal recreation and protection for species and habitats. Retaining Important features such as trees and hedges of amenity or ecological value. Connecting green corridors to the existing landscape features



