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Basildon HLDFs

South West Billericay
Development Framework

14/07/2017

Pell Frischmann

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1. INTRODUCTION

1.1 BACKGROUND

1.1.1 Between January and March 2016, the Council carried out public consultation on a Draft Local Plan setting out proposed strategic policies, allocations and development management policies to cover the period to 2034. It proposed to accommodate 15,260 new homes and 49ha of employment land; 9,100 and 11ha respectively of which would be from land removed from the Green Belt. The Draft Local Plan set out 21 development allocations that would deliver much of this growth, including:

- Gardiners Lane (GL) H7 – Proposals for 660 homes, 12-16ha of employment land and 6-8ha of open space;
- East Basildon (EB) H13 and E8 – Proposals for a total of 2,300 new homes, 5.5ha of employment land (+49.5ha safeguarded for employment), 75ha of open space, local centres, primary school provision and a new grade separated junction on the A127 at Pound Lane/Cranfield Park Road to the East of Basildon and Burnt Mills; and
- South West Billericay (SWB) H20-23 - Proposals for a total of 950 homes and an integrated highway relief route.

1.1.2 Pell Frischmann has been commissioned by Basildon Borough Council (BBC) to prepare high level development frameworks (HLDFs) for the above three sites in order to create a high level framework for each strategic site area to set out the overall development concept and development principles, as well as address phasing and other key delivery issues.

1.2 OBJECTIVES

1.2.1 Each Framework has the following common objectives:

- a) To prepare a deliverable and viable high level Development Framework for each strategic location having explored and tested the vision and development policy objectives for the area;
- b) Review the key site promoter objectives and examine ways to accommodate these alongside policy objectives set out in the Draft Local Plan, and advise of where incompatibility risks overall location delivery;
- c) To establish an initial design framework for the area's development exploring
 - a. land use parameters,
 - b. density,
 - c. legibility, and
 - d. safety.
- d) This should allow the continuation of detailed master planning work, as part of Local Plan implementation, post 2018, or outline planning application stages and beyond;
- e) Promote high quality, locally distinctive design in residential, commercial and infrastructure proposals with a view to achieving more sustainable forms of development;

- f) Establish outline proposals to incorporate practical strategies for delivering high quality urban design and other requirements such as renewable energy generation, protection and enhancement of biodiversity, landscapes and flood and water management;
- g) Set out locations and requirements for essential infrastructure, facilities and services and present concept options as to how these could be located within the development to ensure they are integrated into new communities, whilst offering, where feasible expanded services for existing communities;
- h) Set out locations for development including housing, employment, and service/retail, and also for open space and other green infrastructure provision; and
- i) Advise on areas that could be developed as distinct areas without compromising the delivery of the strategic area as a whole, or are dependent on other areas of the strategic location coming forward first.

1.2.2 South West Billericay Area comprises four sites located around the periphery of the Billericay where the principle of housing development has been promoted through the Draft Local Plan and the Policies Map.

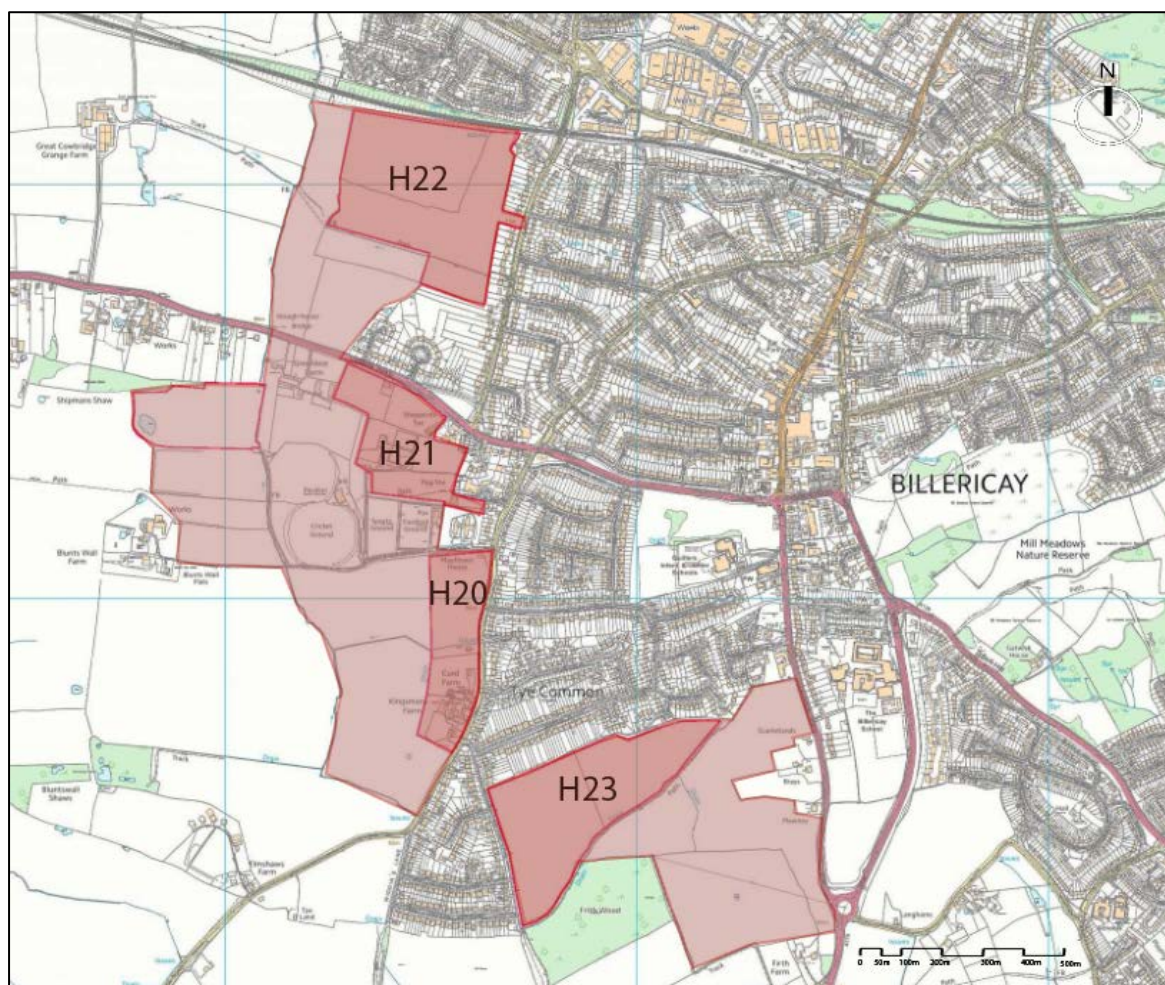


Figure 1-1: SWB HLDF study area including allocations within Draft Local Plan

1.3 SOUTH WEST BILLERICAY HLDF PURPOSE

- 1.3.1 In addition to the land parcels identified in Draft Policies H20, H21, H22 and H23, the Policies Map includes an indicative route for the South West relief road. These sites are currently within the Green Belt, and not available for development purposes at this time.
- 1.3.2 Highway and Mitigation Modelling concluded the cumulative impacts of development need to be addressed through the phasing and the delivery of the South West relief road. The purpose of the Local Plan is to make provision for the homes and infrastructure needed to serve the area as a whole.
- 1.3.3 This report outlines a high level development framework which aims to better articulate how the land in this location could be brought forward to deliver the policy requirements of the Local Plan and better illustrate the requirements of the Local Plan on the Policies Map. The development framework also assesses how best to incorporate a relief route and a new primary school into the development location, including considering whether additional land would be required to achieve it.

2. CONTEXT

2.1 PLANNING POLICY

2.1.1 The following section sets out the planning policy context within which the Development Framework has been prepared, and which will in turn inform future planning application(s) on the site. This included existing national planning policy, saved

National Planning Policy Framework (March 2012)

2.1.2 The National Planning Policy Framework (NPPF) was adopted in 2012, it came into effect immediately superseding the 2011 draft and all other planning guidance (except on waste).

2.1.3 The NPPF sets out the Government's expectations and requirements from the planning system. It is meant as high- level guidance for local councils to use when defining their own personal local and neighbourhood plans. This approach allows for the planning system to be tailored to reflect the needs and priorities of individual communities.

2.1.4 The NPPF defines the delivery of sustainable development through three roles;

- Planning for prosperity (an economic role);
- Planning for people (a social role); and
- Planning for places (an environmental role)

2.1.5 It notes that to achieve sustainable development, these roles should be sought jointly and simultaneously through the planning system.

2.1.6 At the heart of the NPPF is a presumption in favour sustainable development, which *'should be seen as a golden thread running through both plan making and decision taking.'*(para 14).

Draft Local Plan (January 2016)

2.1.7 This document sets out an initial draft of a new Local Plan for Basildon Borough that will provide the planning framework for the future growth and development until 2034. It also sets out the strategic, allocation and development management policies that will be applied to ensure that individual development proposals contribute positively towards the plan.

2.1.8 The following Draft Local Plan Policies are particularly relevant to the development of the South West Billericay;

- Policy SD1 Strategic Approach to Sustainable Development in Basildon
- Policy SD2 Settlement Hierarchy and the Distribution of Growth
- Policy SD3 Presumption in Favour of Sustainable Development
- Policy TS1 Transport Strategy
- Policy TS2 Improvements to Carriageway Infrastructure
- Policy TS3 Improvements to Footpaths and Cycle Infrastructure
- Policy TS4 Improvements to Public Transport Infrastructure and Services

- Policy TS5 Safeguarded Areas for Transport Improvements
- Policy TS6 Managing Congestion
- Policy TS7 Safe and Sustainable Access
- Policy TS8 parking Standards
- Policy TS9 Access for Servicing
- Policy H1 Housing Strategy
- Policy H2 Specialist Accommodation Strategy
- Policy H20 Land west of Tye Common Road, Billericay
- Policy H21 Land south of London Road, Billericay
- Policy H22 Land west of Mountnessing Road, Billericay
- Policy H23 Land east of Frithwood Lane, Billericay
- Policy H30 The Location of Residential Development
- Policy H 33 The Size and Type of New Homes
- Policy H 34 Affordable Housing Provision
- Policy DES1 Achieving Good Design
- Policy DES2 Urban Character Areas
- Policy DES4 High Quality Buildings
- Policy DES5 High Quality Public Realm
- Policy HC1 Leisure and Recreation Strategy
- Policy HC5 Community Facilities
- Policy GB1 Strategic Approach to Green Belt Protection
- Policy GB2 Green Belt Extent
- Policy GB4 New Development in the Green Belt
- Policy CC1 Responding to Climate Change
- Policy CC2 Flood Risk and Drainage Management
- Policy CC4 Managing Flood Risk in New Development
- Policy CC7 Renewable Energy Infrastructure
- Policy NE1 Green Infrastructure Strategy
- Policy NE5 Development Impacts on Ecology and Biodiversity
- Policy NE6 Development Impacts on Landscape and Landscape Features
- Policy NE 7 Pollution Control and Residential Amenity
- Policy IMP 1 Implementation Strategy
- Policy IMP 3 Phasing of Development
- Policy IMP 4 Piecemeal Development

Housing and Economic Land Availability Assessment (HELAA)

2.1.9 The HELAA is a key component of the evidence base that will support the Basildon Borough Council's Local Plan production and its approach to the delivery of housing and employment development within the Borough.

- 2.1.10 The HELLA simply determines which sites are currently considered suitable, available and achievable for potential housing and economic development. This information will then be carried forward into the Local Plan process for consideration alongside other factors, such as the findings of other evidence base documents and the Councils development strategy.
- 2.1.11 The main roles of HELAA is to;
- Identify sites and broad locations with potential for development;
 - Assess their development potential; and
 - Assess their suitability for development and the likelihood of development coming forward (the availability and achievability).

Basildon Borough Planning Obligations Strategy SPD

- 2.1.12 On Friday 14th August 2015 Basildon Borough Council formally adopted the Planning Obligations Strategy as a Supplementary Planning Document (SPD). The SPD is now a material consideration in the determination of relevant planning applications within the Basildon Borough.
- 2.1.13 The purpose of the Planning Obligations Strategy is to provide updated guidance to industry professionals, landowners, developers and residents as to the type and level of planning obligations (financial and non-financial) the Council could seek as part of applications for planning permission.
- 2.1.14 The Community Infrastructure Levy (CIL) is a charge which local authorities can place on developers to help fund infrastructure needed to support new development in their areas. It will partially replace the existing Section 106 system. The Council does not have an adopted Local Plan and does not have an adopted CIL. Until the Council adopts a CIL it will continue, subject to the restrictions in regulation 123(2) and (3) to negotiate Section 106 contributions where necessary to offset the impact that new development will have on the local community.

2.2 DRAFT LOCAL PLAN SW BILLERICAY SITE POLICIES

Policy H20 Land west of Tye Common Road

- 2.2.1 The site to the west of Tye Common Road is identified on the Policies Map to be developed to provide around 160 high quality homes at a density of 30 dwellings per hectare, with a multi-functional open space landscape buffer to the western and southern boundary of the site.
- 2.2.2 The policy identifies that first phase of the development should include vehicular access from Tye Common Road, including extending this road north-westwards to connect with the relief road specified in Policies H21 and H23.

Policy H21 Land south of London Road

- 2.2.3 The site to the south of London Road is identified on the Policies Map to be developed to provide around 180 high quality homes at a density of 30 dwellings per hectare, with a multi-functional open space landscape buffer to the western boundary of the site.
- 2.2.4 The policy identifies that vehicular access should be from London Road, at a point where a junction can be provided to also serve site H22. A road should extend southwards to connect with the relief road specified in Policies H20 and H23.

Policy H22 Land west of Mountnessing Road

2.2.5 The site to the west of Mountnessing Road is identified on the Policies Map to be developed to provide around 280 high quality homes at a density of 30 dwellings per hectare, with a multi-functional open space landscape buffer to the western boundary of the site.

2.2.6 The policy identifies the vehicular access should be taken from the London Road, at a junction of the southern relief road specified in Policies H20, H21 and H23.

Policy H23 Land east of Frithwood Lane

2.2.7 The site to the east of Frithwood Lane is identified on the Policies Map to be developed to provide around 330 high quality homes at a density of 30 dwellings per hectare, with a multi-functional open space landscape buffer running east-west to the south of the development area, linking to Frith Wood.

2.2.8 The policy identifies that vehicular access should be secured from both Laindon Road and Frithwood Lane, linked by a spine road forming part of the southern relief road specified in Policies H20 and H21. The spine road, and the off-site improvements should be delivered during the first phase of development.

Policy H20, H21, H22, H23 Infrastructure requirements

Development on these sites must be supported by sufficient infrastructure and:

1. Be phased to align with any improvements required to accommodate growth within the drainage network or at the water recycling centre;
2. Make provision on-site/off-site for pre-school and primary school requirements;
3. Contribute towards GP services within Billerica to serve the residents;
4. Contribute towards improvements to the local and strategic highway network where they relate to the site(s); and
5. Contribute towards improvements towards cycling and public transport in order to facilitate a model shift towards sustainable transport modes.

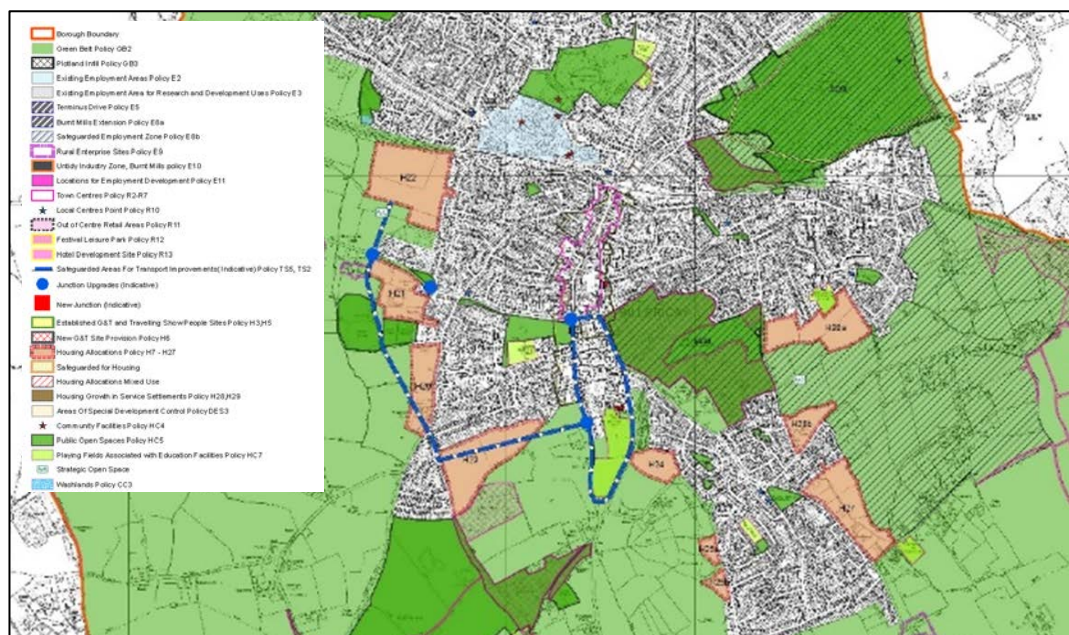


Figure 2-1: Sites H20, H21, H22, H23 in the Draft Local Plan Policies Map context

3. ANALYSIS OF THE SITE

This section of the High Level Development Framework sets out a site analysis of SW Billericay and covers the following:

- Location and Surrounding Area
- Site Ownership
- Archaeology and Heritage Assets
- Ecology
- Landscape and Topography
- Flood Risk and Drainage
- Highways and Access
- Infrastructure, Services and Utilities
- Social Infrastructure

3.1 LOCATION AND SURROUNDING AREA

3.1.1 The Basildon Borough Urban Characterisation and Design Review concluded it was evident that Basildon Borough is an agglomeration of distinct character areas which have built up over time to create the vibrant, attractive towns that currently exist; and it is difficult to establish a single cultural identity for the whole Basildon Borough as it is an area of contrasts with historic town centres, New Town development, areas of open countryside, small villages and Plotland settlements, as well as a unique and biodiversity rich wildlife habitat in the form of the Thames Estuary marshes.

3.1.2 The sites sit within Character Area 2 Modern Billericay. The area includes the site of the Late Iron Age Roman settlement located in and around Billericay School, and the modern housing estates to the eastern and western side of Billericay. The area remained rural until the 20th century when it became fully built-up. A large part of the zone was developed for residential and educational use in the early 1970s.

3.1.3 Historic Billericay is the nearby commercial core, with buildings occupied mostly as shops and offices especially along the High Street, with some private dwellings. Traditional buildings are small and low, contrasting sharply with the tall and bulky steel framed buildings of the twentieth century, different in style, but more importantly different in scale and bulk. Despite many alterations over the years, the High Street still retains enough of its historic buildings to preserve the appearance of a small market town of late medieval origin.

3.2 SITE OWNERSHIP

3.2.1 The four sites are under different ownerships, and are currently being promoted by the site owners' agents and /or developers. The broad indication of these interests is illustrated in Figure 3-1. The land ownership /interest extends beyond the sites' boundary promoted in the Draft Local Plan and shown below.

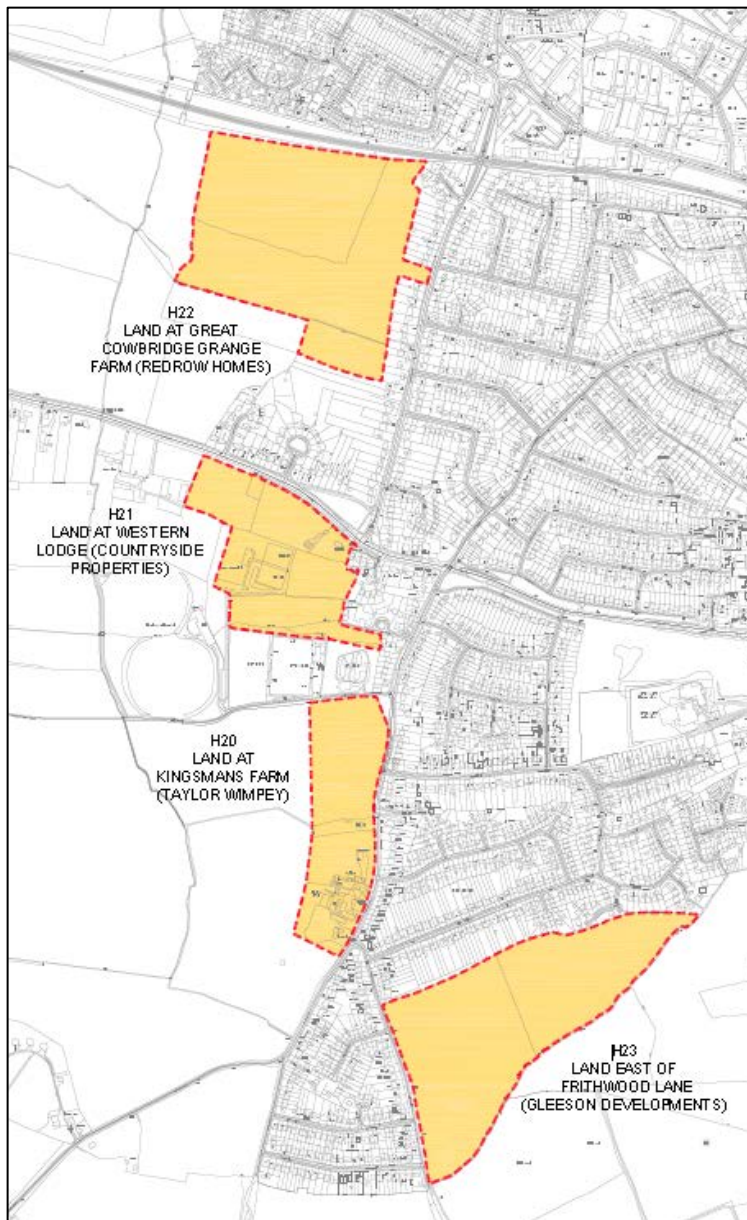


Figure 3-1: SW Billericay sites' interest

3.3 ARCHAEOLOGY AND HERITAGE ASSETS

- 3.3.1 Twentieth century residential housing is the dominant characteristic for this area. The area includes the site of the Late Iron Age Roman settlement located under and around Billericay School.
- 3.3.2 Within a short walking distance of the sites the historic core of Billericay forms the centre of this area, which lies within the Conservation area boundaries. The archaeology evidence for the area is predominately associated with the development of the town in the medieval and postmediaeval periods.

3.4 ECOLOGY

- 3.4.1 A high level desktop study was undertaken to identify any environmental designations in the local vicinity. Basildon Borough Ecological Surveys document prepared by Land Use Consultants (LUC) in January 2016 was consulted.
- 3.4.2 The collective sites in South West Billericay lie within potential SSSI Impact Risk Zone area, therefore consultation with Natural England is required for:
- Pipelines, pylons and overhead cables;
 - Any transport proposals including road (excluding routine maintenance).
- 3.4.3 In addition all sections of the site are within Green Belt land and immediately adjacent to the southern boundary of site H23 there is Ancient Woodland.
- 3.4.4 There are no Natura 2000 sites (SPAs or SACs) or Ramsar Sites within Basildon Borough. However, three SPA designations have been noted in relatively close proximity to the borough boundary, including Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) SPA, Benfleet and Southend Marshes and Thames Estuary and Marshes SPA.
- 3.4.5 The following nationally designated site was identified within 1km of the sites:
- Mill Meadows LNR - the designation covers those parts of the site not designated as a SSSI (not within 1km). It supports grassland, woodland and scrub mosaic supporting two red data book invertebrate species.
- 3.4.6 The following Local Wildlife Sites are also located within 1km of the sites:
- Bluntswall Shaws ancient deciduous woodland;
 - Laindon Common - ancient acid grassland, and also supports populations of a rare arboreal ant *Lasius brunneus*;
 - Frith Wood - ancient deciduous woodland;
 - Little Burstead Common - Site supports a mosaic of habitats including mixed woodland, grassland and several ponds. Rare species recorded here include long-winged cone-head bush cricket and the hoverfly *Cheilosia griseiventris*;
 - Little Burstead Wood LWS - Inter-connected chain of three mixed deciduous (potentially ancient) woodland;
 - The Wilderness - Relict ancient woodland with several small ponds supporting populations of notable plant species such as bitter vetch; and
 - Bluntswall Wood - ancient deciduous woodland.
- 3.4.7 A number of protected species on the National Biodiversity Network (NBN) Gateway have been identified in the local vicinity, these include:
- Great Crested Newts - Approx. 2.4km to the north-east. Some connectivity;
 - Bats - approx. 1.3km to the north-east;
 - Otters - approx. 2.5km to the south west. Connectivity overland and by water.
- 3.4.8 Records of protected and/or notable species identified within the Site included:
- Waxwing (site 20);
 - Eurasian badger (site 22).

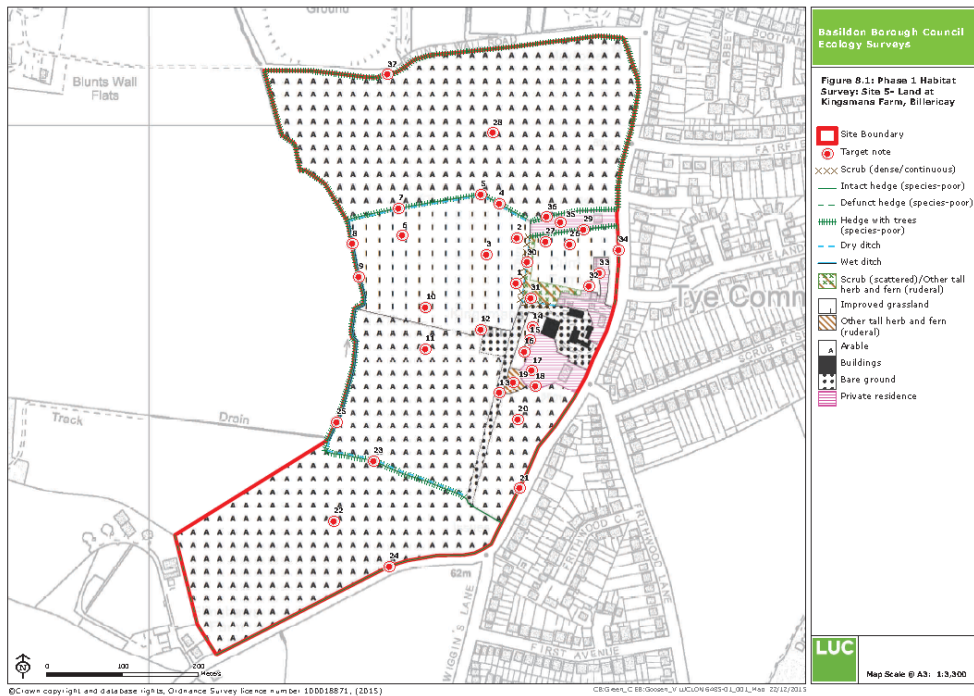


Figure 3-2: Ecological Survey Site 5 (inc.H20), LUC, January 2016

3.4.9 **H20** and the adjacent land comprise of agricultural land with smaller areas of improved grassland used for horse paddocks and buildings associated with farms and private properties along Tye Common Road. Overall the site was considered by LUC of relatively low ecological value, although with potential to support a number of protected species.

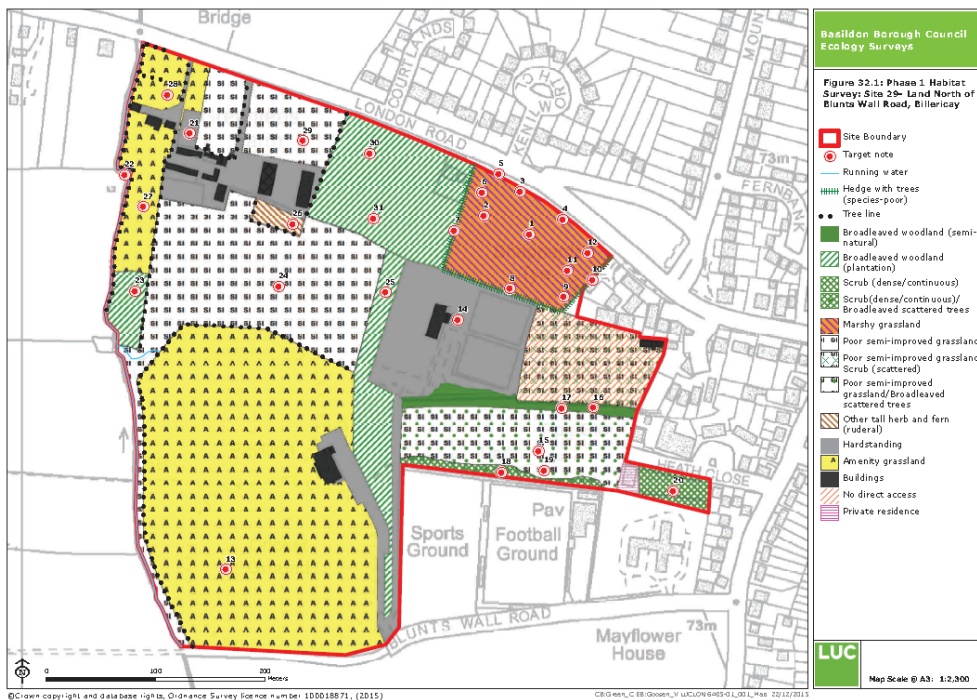


Figure 3-3: Ecological Survey Site 29 (inc.H21), LUC, January 2016

3.4.10 **H21** and the adjacent land comprise a mixture of amenity sports facilities, agricultural land and small areas of grassland and scrub. Overall the site was considered by LUC

of relatively low ecological value, being dominated by highly managed and species poor habitats. Localised areas or features are of greater value and provide some opportunities for wildlife, such as the hedgerows, woodland and more species rich or structurally diverse grasslands.

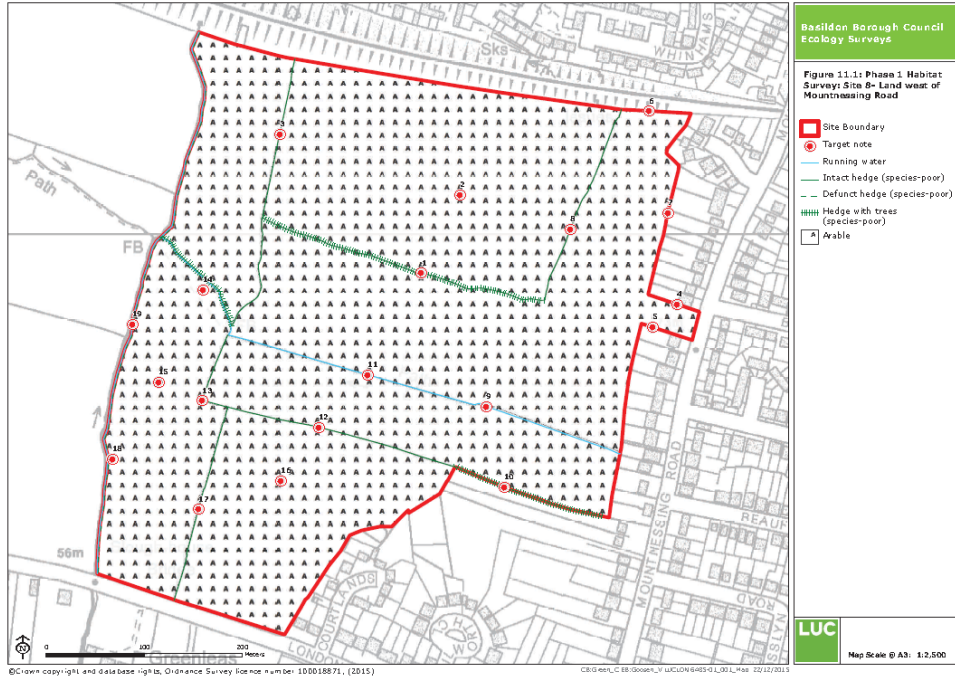


Figure 3-4: Ecological Survey Site 8 (inc.H22), LUC, January 2016

3.4.11

H22 and the adjacent land currently supports arable farmland with hedgerows and a small stream running centrally through the Site. LUC's view was the Site in general supports relatively common and widespread habitats of low intrinsic value, with their value mainly relating to the species which they may support.

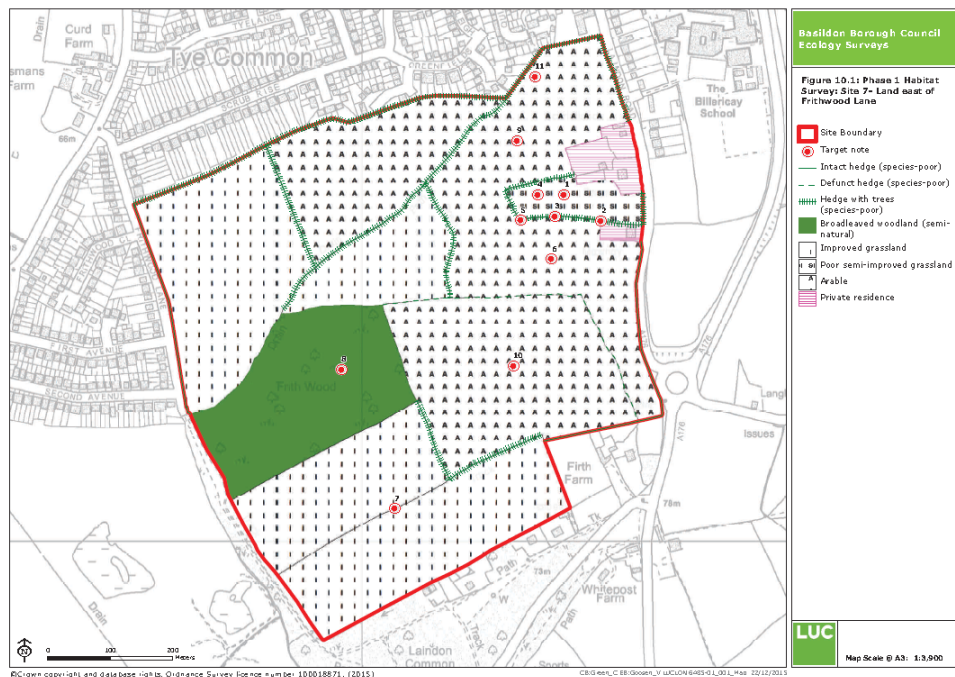


Figure 3-5: Ecological Survey Site 7 (inc.H23), LUC, January 2016

3.4.12 **H23** and the adjacent land comprise agricultural land, with areas of improved grassland ley and arable fields. The northern part of the Site is used informally for recreation (mainly dog walkers). A network of hedgerows runs throughout the Site, with a small area of woodland to the west. LUC advised the northern part of the site considered to be the least sensitive in terms of future development, with less sensitive habitats present and also being already subject to recreational disturbance. The southern part of the site supported several sensitive habitat features (including a LWS identified as ancient woodland and mature trees, hedgerows and a potential ephemeral pond). Ancient woodland is particularly sensitive and subject to high levels of protection within planning policy.

3.4.13 In conclusion LUC considered that residential development may be delivered at these sites (H20-H23) without significant adverse ecological impacts on the assumption that:

- Any proposals are informed by detailed ecological survey, to inform impact assessment and the avoidance and mitigation of impacts.
- Mitigation measures are developed to address any identified impacts on protected and notable species, as informed by the above surveys.
- Proposals should seek to retain ecological connectivity through the site, in particular as provided by hedgerows and treelines.
- Measures are developed to avoid impacts on the Frith Wood LWS and ancient woodland, as well as adjacent LWS's.
- Incorporation of green infrastructure within the development, and ensuring habitats are managed to benefit wildlife in the long-term.



Figure 3-6: Ecological Survey Site 34 /additional site, LUC, December 2016

- 3.4.14 Land at Greenleas Farm, South of London Road was surveyed by LUC as part of the additional sites. The Site is adjacent to agricultural fields (grassland and arable) to the south and west, with a mosaic of grassland, woodland and residential gardens to the north and east. The area also supports a network of hedges.
- 3.4.15 Although habitats within the Site are relatively common and widespread, the mosaic of habitat provides opportunities for a range of notable and/or protected species, with good ecological connectivity provided by hedge and tree habitat. LUC concluded it was considered that residential development could not be delivered at this Site without significant adverse ecological impacts associated with habitat loss, and potential impacts on protected species.

3.5 LANDSCAPE AND TOPOGRAPHY

Topography

- 3.5.1 **H20** site comprises a tabular parcel of land, directly west of Tye Common Road. The site is approximately 6.5ha, 500m north to south and 150m east to west. The site elevation falls from 73m in the northeast, to 65m in the southwest, (gradient 2%). The site area comprises Kingsmans Farm and Curd Farm at the eastern boundary, and a limited amount of arable areas immediately surrounding the farms.
- 3.5.2 **H21** site comprises a tabular parcel of land, directly west of Tye Common Road. The site is approximately 6.5 hectares in area, 500m from north to south and 150m east to west. The site elevation falls from 73m in the northeast, to 65m in the southwest (gradient 2%). Kingsmans Farm and Curd Farm at the eastern boundary, and a limited amount of arable areas immediately surrounding the farms.
- 3.5.3 **H22** site comprises a regular approximately square parcel of land approximately 14 hectares in area. The site is approximately 400 m from north to south and 400 m from east to west. It comprises open arable fields. Site ground elevation rises from 55m aOD at the western boundary to 73 m aOD at the eastern boundary (gradient 4.7%)
- 3.5.4 **H23** site comprises a regular approximately triangular parcel of land approximately 12 hectares in area. It is approximately 350m north to south and 600 m east to west. The site comprises open arable fields. Site ground elevation falls from 90 m aOD at the eastern corner to 70 m aOD at the western boundary (gradient 3.8%).

- 3.5.5 The historical land use recorded on-site is recorded as arable/ pasture and incidental leisure, whilst the historical land use off-site is a mix of residential and arable /pasture.
- 3.5.6 Using the British Geological Society database the Superficial deposits have been identified as either Head (clay, silt, sand and gravel) or none. The bedrock has been identified as London Clay Formation, mostly clay, some silt and sand.
- 3.5.7 Superficial deposits, the overlying Head deposits of clay, silt sand or gravels, are classified by the Environment Agency as “Secondary Undifferentiated”. Secondary Aquifers include a wide range of rock layers or drift deposits with an equally wide range of water permeability and storage. The classification is unlikely to impact on any future development.



Figure 3-7: SW Billericay sites' topography

Landscape

3.5.8 Outline Landscape Appraisals were carried out by The Landscape Partnership (LP) as part of the emerging Local Plan evidence base. The following are extracts from the respective assessments.

3.5.9 The assessment of landscape sensitivity and capacity by LP was undertaken in two stages. The first stage comprised an assessment of the overall sensitivity and capacity of the area, while the second stage comprised an assessment of the variations in landscape sensitivity and capacity within the site itself. This stage identified areas of the site with a lower landscape sensitivity due to local variations in site characteristics.

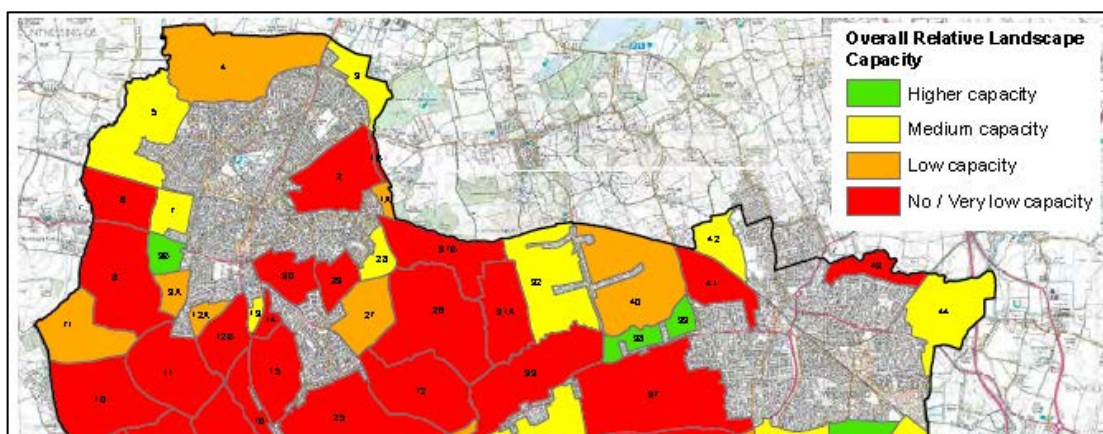


Figure 3-8: Relative capacity of Green Belt to accommodate development – SWB

3.5.10 The sites form part of landscape character area LCA 11 West Billericay Wooded Farmlands - a gently undulating, elevated arable landscape with scattered blocks of woodland. Small ribbon developments or isolated farmhouses. The elevated land allows some open long distance views, where not contained by woodland.

3.5.11 Basildon Borough had subsequently commissioned site level outline landscape appraisals; in order to identify more specifically those areas of the site where development could occur without significant impact on the landscape. The findings for the SW Billericay sites have informed the Development Framework and are summarised below.

3.5.12 **H20** landscape assessment identified the area to the south and west of Kingsmans /Curd Farm was more closely associated with the rural area to the south and west than the urban edge of Billericay to the north and north-east. It identified the eastern edge of the site having potential to be developed without causing significant adverse landscape and visual effects, as it relates well to the existing urban edge of Billericay. Surrounding development to the east, recreation facilities to the north and mature tree belts and woodland blocks, provide some visual containment to the area and also provide a suitable context for proposed development. It concluded that development in this location could form an appropriate extension to Tye Common Road and, with mitigation planting, form a stronger edge to the Green Belt.

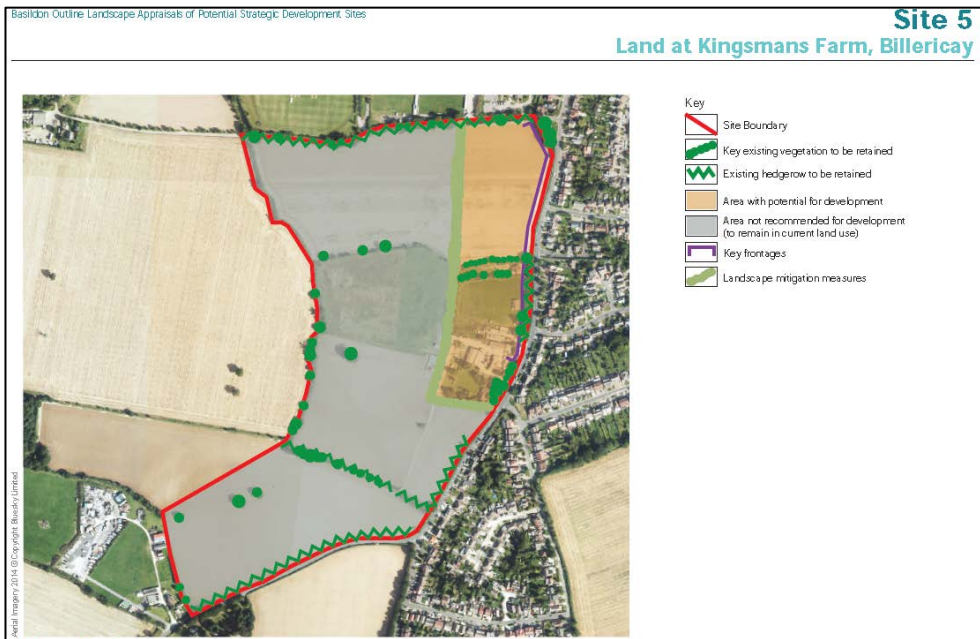


Figure 3-9: Landscape Appraisals (H20) Development Potential

3.5.13

H21 Landscape assessment recommended for the western side of the site including the Billericay Cricket Club, plant nursery and residential property with large grounds at Greenleas Farm to be retained, as this area has greater visibility from London Road and the public footpath across open agricultural land to the west and the character is more closely associated with the open arable landscape to the west and north. It identified the eastern end of the site has potential to be developed without causing significant adverse landscape and visual effects.

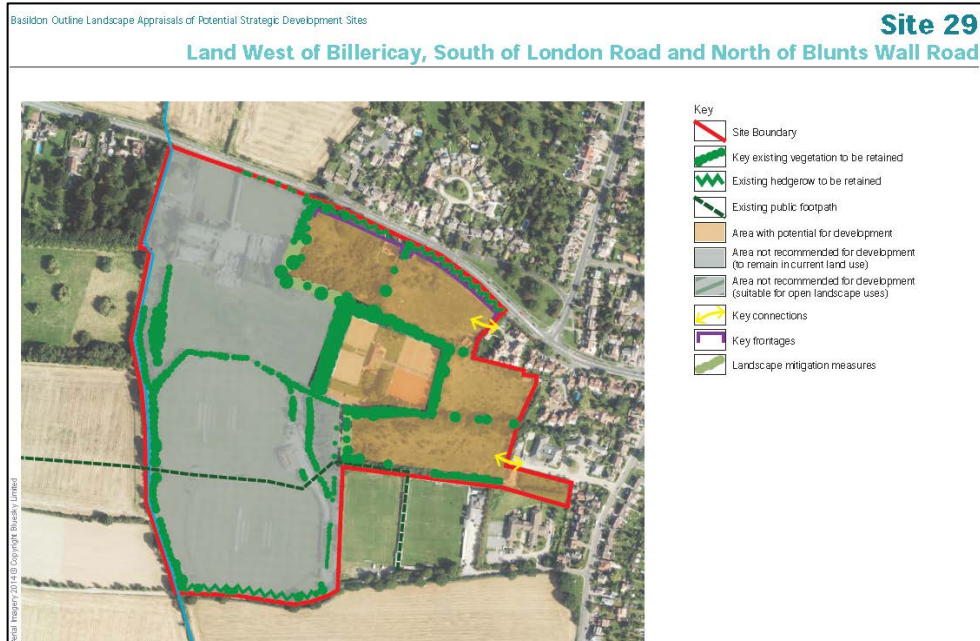


Figure 3-10: Landscape Appraisals (H21) Development Potential

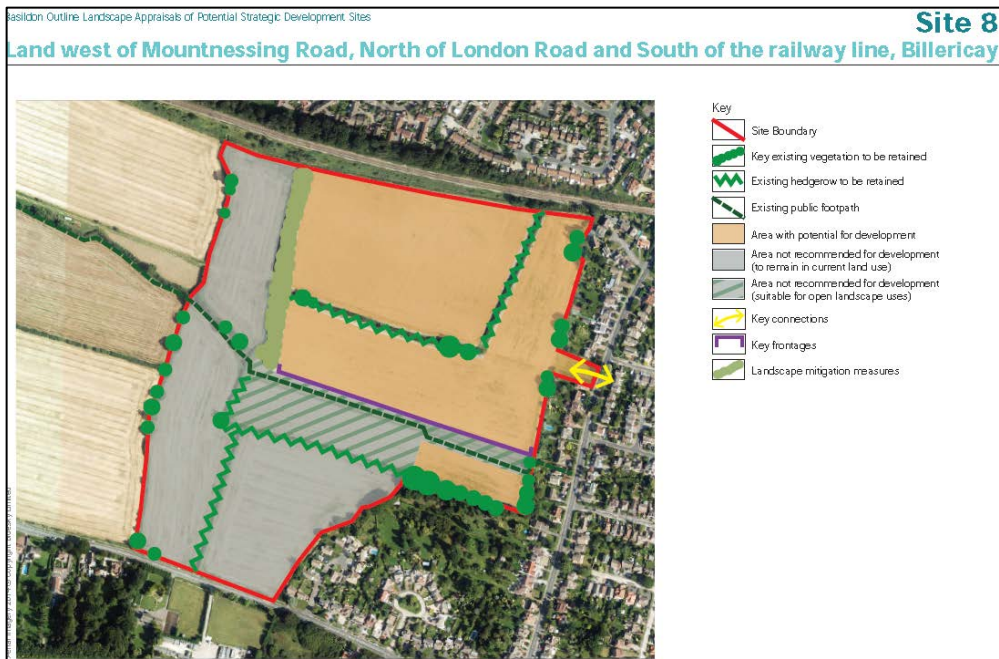


Figure 3-11: Landscape Appraisals (H22) Development Potential

3.5.14 **H22** Landscape assessment recommended the western fringe of the site and open land adjacent to Courtlands to be retained as this area is visible from parts of the surrounding landscape. It also maintained the narrow central field should be kept free from built development due to its proximity to the A129. It identified the eastern end has potential to be developed without causing significant adverse visual effects, as this part of the site is associated with the existing urban edge.

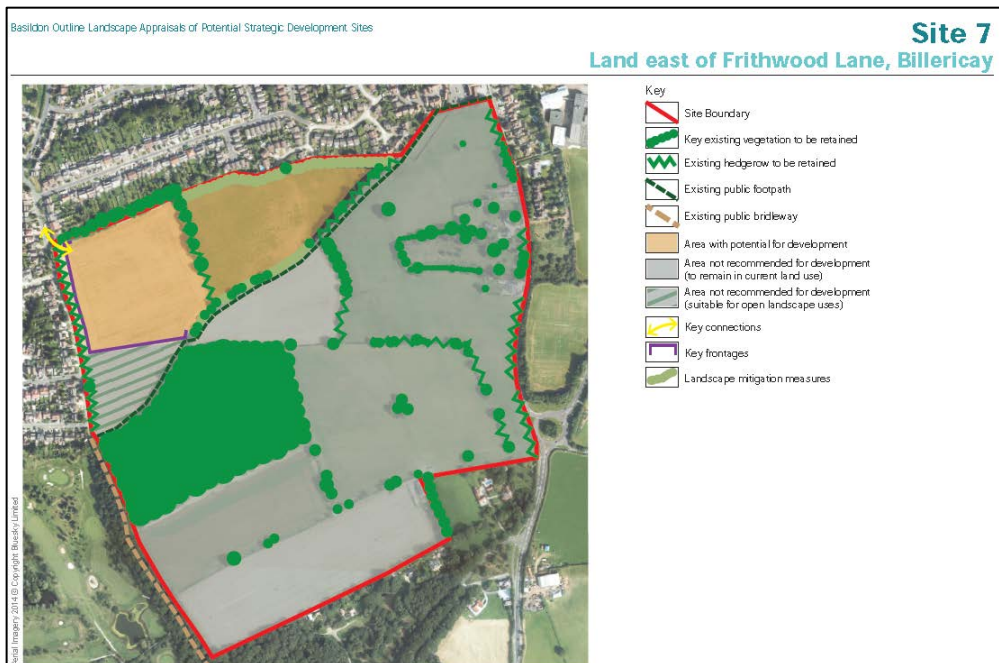


Figure 3-12: Landscape Appraisals (H23) Development Potential

3.5.15 **H23** landscape assessment recommended the elevated landscape to the north-east of the site to be retained as agricultural landscape with existing occasional dwellings, as this area is widely visible from the public footpath and provides long distance views

across the countryside to the south-west. Frith Wood Ancient Woodland should be retained for its landscape and ecological value and the visual containment, and any proposed development would need to be sufficiently offset from this area so as not to cause any disturbance to the value of the woodland.

3.6 FLOOD RISK AND DRAINAGE

- 3.6.1 Sites H20, H21, H22 and H23 are shown to be all entirely within Flood Zone 1, having a probability of flooding of less than 0.1% in any given year. The Sequential Test has therefore been passed. Note that the flood extents of the Mountnessing Brook have not been assessed to the south of the railway line, where the watercourse is defined as being an 'ordinary watercourse'. As part of a Sequential Approach development should be set back from the western edge of H22. Further investigation for fluvial flood risk may be required for this area, which should also take into account the appropriate climate change allowance.
- 3.6.2 This area is not described within the SWMP as being in a Critical Drainage Area (CDA). The Environment Agency FMfSW identifies key surface water flow paths that contribute to the ordinary watercourses in the area. These tend to follow existing ditch lines and around Curd Farm and Kingsmans Farm. Any future development will need to take these flow routes into account, such as setting development back from the open ditches to mitigate the risk of flooding.
- 3.6.3 Drainage systems should be designed with adequate capacity to manage the 1% AEP storm event including climate change. Sustainable drainage systems (SuDS) should be used throughout any proposed development where possible. The use of infiltration SuDS must be explored as the primary means of dealing with the sites surface water runoff in accordance with the SuDS hierarchy. BGS mapping suggests that the majority of the area is 'probably compatible' for infiltration SuDS, although ultimately onsite testing will be necessary. The design will need to consider exceedance flow routes.
- 3.6.4 A Flood Risk Assessment (FRA) will need to be prepared in accordance with the NPPF and local policies. This will describe flood risk from all sources as well as providing recommendations to manage flood risk. The FRA should also provide outline surface water drainage management strategies suitable for the site.

3.7 HIGHWAYS AND ACCESS

Policy

Essex Transport Strategy

- 3.7.1 The Essex Transport Strategy sets out an overall vision for transport provision in Essex. It aims to deliver 'a transport system which supports sustainable economic growth and helps deliver the best quality of life for the residents of Essex'. In order to deliver this vision, the plan seeks to achieve five broad outcomes:
- Provide connectivity for Essex communities and international gateways to support sustainable economic growth and regeneration;

- Reduce carbon dioxide emissions and improve air quality through lifestyle changes, innovation and technology;
- Improve safety on the transport network and enhance and promote a safe travelling environment;
- Secure and maintain all transport assets to an appropriate standard and ensure that the network is available for use; and
- Provide sustainable access and travel choice for Essex residents to help create sustainable communities.

Essex Highways - Basildon Borough Local Plan Highway Impact Assessment, 2014

3.7.2 As part of the Local Plan process BBC previously commissioned the '*Basildon Borough Local Plan Highway Impact Assessment, 2014*'. The report provides an assessment of the two Local Plan development options put forward by BBC on the key links and junctions within the borough up to the year 2031. The assessment is based around specific modelling of Basildon, Billericay and Wickford areas with key junctions and links forming the study area.

3.7.3 The development options are outlined below:

- **Option A:** 22,700 houses + 68 Ha Green Belt potential employment land and use of existing employment sites;
- **Option B:** 16,000 houses + 11 Ha Green Belt potential employment land and use of existing sites.

3.7.4 Major Junctions that will be affected by the development of the SW Billericay sites include:

- **A129 London Road/ High Street /Sun Street** – The Sun Street approach is already over capacity in both the AM and PM peaks and inevitably the additional traffic in the development options would only exacerbate this issue.
- **A129 Sun Street /Chapel Street** – Lengthy queues from the High Street /Sun Street junction would to a greater degree extend through the junction and impact on its operation.
- **A129 Southend Road /A176** – The A176 approach would potentially function at a level high above capacity in the Option A and B AM and PM peak scenarios. Southend Road would also break capacity in the AM peak of Option A.
- **A129 London Road /Mountnessing Road** – The increase in the volume of traffic on London Road and in particular the increase in right turners into Mountnessing Road would cause lengthy queues on all approaches at the junction in all option tests.

3.7.5 The report concluded that several of the junctions in Billericay would exceed capacity in the 2031 development scenarios, as a number of approaches have minimal spare capacity in the 2011 base scenarios and also largely a consequence of the Billericay existing road network being rather constrained. Any additional traffic resulting from the future year scenario testing would be likely to exacerbate these problems and also cause other congestion hotspots. The report suggests that it is likely that minor

junction improvements could be made to the junctions worst affected and the possibility for re-routeing traffic in the town could also be considered.

Basildon Council – Technical Note on 2031 Billericay Mitigation Modelling

3.7.6 The following junction and highway improvement scheme options were appraised by Essex Highways as to their ability to mitigate the adverse impacts on the road network caused by background growth (i.e. growth in other Borough's and Districts) and growth as a result of housing and employment allocations in the Basildon Borough Local Plan:

- A signalised junction layout at Sun Corner;
- Removal of the one-way restriction on Laindon Road at the junction with the A176 (with subsequent impact appraisal on surrounding junctions);
- A left-turn filter lane from Laindon Road to the A129 London Road at Sun Corner, with existing roundabout and removal of restriction on Laindon Road;
- A signalised junction layout at Sun Corner with removal of restriction on Laindon Road and a left-turn filter lane;
- A roundabout at the junction of Mountnessing Road and the A129; and
- A western link road between the A129 London Road and the A176.

3.7.7 Within the transport model, the junction at the A129 London Road /Tye Common Road /Western Road junction was the only junction that remained over capacity following the traffic mitigation proposals. This was due to the limited scope for infrastructure improvements to mitigate traffic growth at that junction. Also, other mitigation solutions that improve the Mountnessing Road /London Road junction would move traffic more expediently towards this junction. However, it is possible that some of the flows currently experienced could be due to traffic taking alternative routes north out of Billericay in order to avoid the High Street and some of the mitigation options explored around the Sun Corner area could alleviate the capacity issues at this junction.

3.7.8 An option was tested for the construction of a 'South West relief road', which would allow traffic heading west along the A129 to avoid this junction, and indeed the centre of Billericay entirely, including the Sun Corner junction. It was concluded this may satisfactorily alleviate the capacity issues at this junction but further modelling would be required in order to determine the exact impact of such a scheme.

3.7.9 For the SW relief road to be brought forward potential funding would need to be available including potential successful bids by the Highway Authority to the South East Local Enterprise Partnership. It is also considered due to the higher land values in the Billericay area, there is greater opportunity to secure financial contributions to infrastructure provision through the planning application process and such a scheme may well be viable in this regard. It was therefore recommended that the SW relief road should also be pursued through the Local Plan process but a cost benefit analysis of such a scheme would be required to provide the justification.

Existing Highway Access

3.7.10 The town of Billericay is served by two main roads, the A129 that extends in the east-west direction and A176 /Laindon Road, which provides connection to the south. Both roads intersect in the town centre at the southern end of the B1007 High Street at a roundabout junction known as Sun Corner. This arrangement is far from ideal as

all transit traffic is routed via the town centre, even though the majority of it has neither origin nor destination there. Consequently, significant levels of congestion exist throughout the town with investigations into options for road capacity improvements at this junction requiring significant land take whilst not being without associated safety challenges.

- 3.7.11 The provision of an earlier described SW relief road is considered the most viable mitigation measure, and is considered further later in this report.

Pedestrian Accessibility

- 3.7.12 As the sites all have at least one side that bounds a built up area, there are opportunities for pedestrian movement from and between the sites.
- 3.7.13 The section of Tye Common Road which is within reach of sites H20, H21 and H23 a pedestrian footway is present on the eastern side, connecting these sites with Billericay town centre.
- 3.7.14 The A129 has good quality pedestrian facilities with a footway on the northern boundary, offset from the main carriageway by grass verge, dropped kerbs, lighting columns and pedestrian refuge islands are also present.

Cycle Facilities

- 3.7.15 A map showing the local cycle routes is shown in Figure 3-13, it can be seen that only one designated cycle path is located within the vicinity of the sites. National Cycle Route 13, as shown by the orange line, runs along Laindon Road and connects Tower Bridge with Fakenham Norfolk.

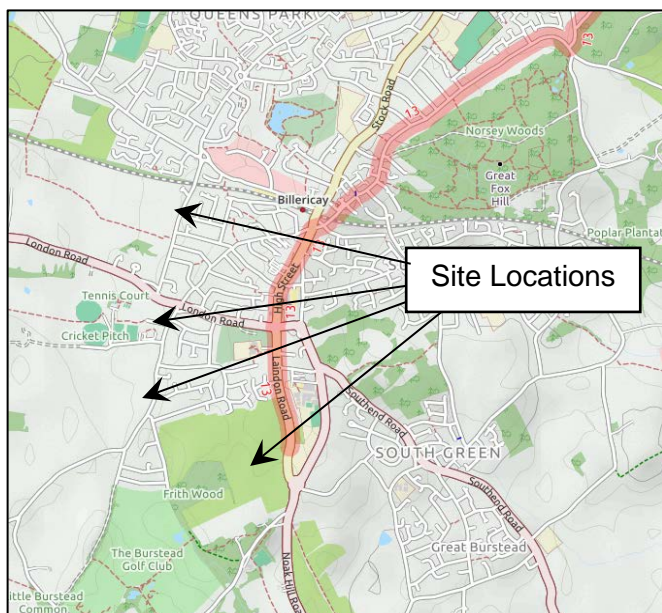


Figure 3-13: Cycle routes in the sites' vicinity

- 3.7.16 According to the Chartered Institute of Highways and Transportation (CIHT) it is suggested that cycling is a suitable alternative to replace car trips for journeys of under 5km. Using the Tye Common Road /Western Road /A129 junction and an approximate centre of the sites, notable locations within 5km of the site include Billericay town centre and Billericay rail station.

Public Transport

3.7.17 **Bus** - Bus stops are located along the length of Tye Common Road which are conveniently located for sites H20 and H23, along London Road for sites H21 and H22 and along the A129. The route descriptions and frequencies are outlined in the table below.

Route	Route Description	Frequency (minutes)				Last Bus
		Weekday			Saturday	
		AM	Daytime	PM		
256	Basildon - Billerica	Tuesdays and Thursdays only, 3 services per day			3 services per day	14:57
9	Basildon - Brentwood	15-25	30	-	30	18:29
251	Basildon - Brentwood	30	30	-	30	18:24
12	Billerica Rail - Wickford	60	60	-	60	17:53
100	Chelmsford - Lakeside	15-20	15	15-20	15-20	23:45

3.7.18 A map showing the local bus routes has been provided in Figure 3-14.

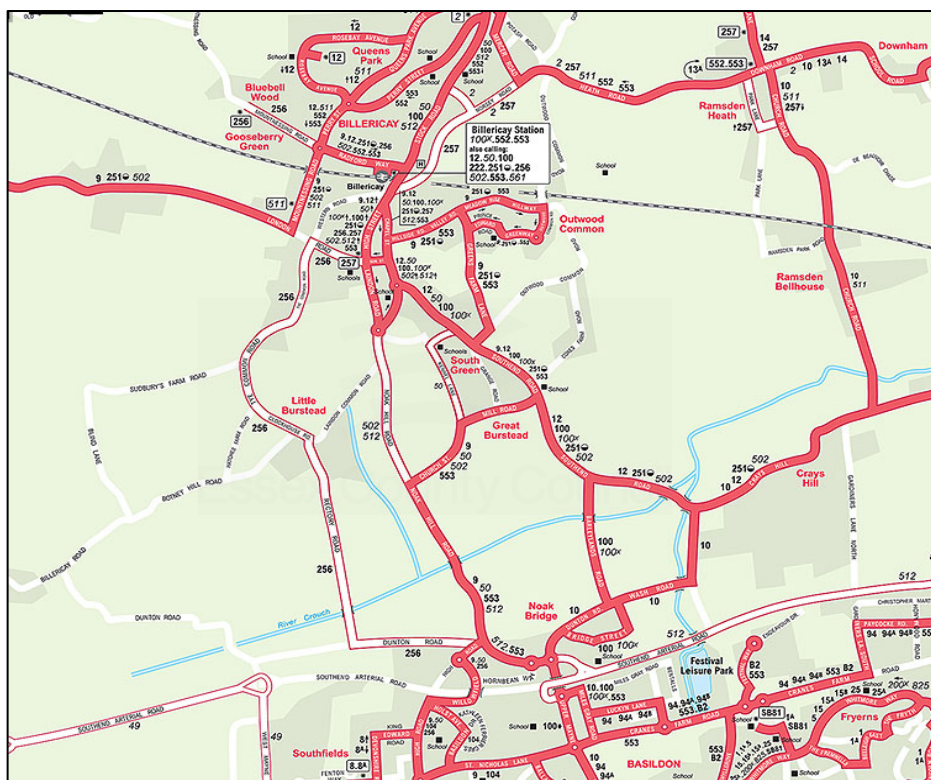


Figure 3-14: Bus routes in the sites' vicinity

- 3.7.19 Rail - The nearest railway station is Billericay Railway Station which is located approximately 1km north west of the Tye Common Road /Western Road /A129 junction. Billericay Railway station is on the Shenfield to Southend Line and is managed by Greater Anglia; it provides access to Liverpool Street station in London and Southend Victoria. There are 180 sheltered cycle parking spaces and 346 car parking spaces available allowing for multi-modal journeys.
- 3.7.20 Crossrail /Elizabeth Line from Shenfield - From summer 2017, Billericay residents benefit from the new trains introduced between Shenfield and Liverpool Street, in advance of fully operational Elizabeth Line in December 2019. At peak time, Shenfield station will be served by 12 Elizabeth line trains an hour in each direction.

3.8 INFRASTRUCTURE, SERVICES AND UTILITIES

- 3.8.1 Separate utilities reports are based on information obtained from the Utility Service providers. It should be noted that this is frequently not up to date where recent changes and developments have caused diversions, relocation or reinforcements to distribution systems.

Utilities Summary

- 3.8.2 Gas (sites H20, H21, H22, H23) - The area gas supply is provided by National Grid Gas. Blunts Wall Road to the north has a low pressure (LP) connection from Tye Common Road running along the north side of the road. A LP main also runs along the east side of Tye Common Road. There are LP services to properties within the periphery of the H20 (not indicated) but no mains crossing the site area. To the west of the H20 is a 457 ST LHP (High Pressure) main. The H21 site has a medium pressure (MP) main along the north side and two low pressure (LP) mains along the south side. The 457 ST LHP main runs from north to south along the western boundary of the site and appropriate safety distance will need to be maintained in construction planning. Site H22 has medium and low pressure supply pipelines in Mountnessing Road to the east of the site. The 457 ST LHP main runs from north to south along the western boundary of the site and appropriate safety distance will need to be maintained in construction planning. Site H23 has an LP main in Scrubs Rise serving properties there. This connects to a LP main along the west side of Frithwood Lane. There is a major 457mm ST LHP high pressure main (Billericay Branch) running along the rear of the houses on the south side of Scrub Rise which turns south along Frithwood Lane within the H23 site boundary.
- 3.8.3 Electricity (sites H20, H21, H22, H23) - Electrical power is provided by UK Power Network (UKPN). Within H20 the high voltage (HV) system is indicated on poles and runs from Blunts Wall Road south along the west boundary of the site. An HV branch cuts east across the site area between Curd Farm Bungalow and Curd Farmhouse towards Tye Common Road. A substation (Blunts Wall Road) is located at the junction of Blunts Wall Road and Tye Common Road with HV supplies along the road from the north. An HV supply is indicated running below ground along the west side of Tye Common Road to Tyelands substation. Adjacent to Site H21 UKPN have an extra high voltage (EHV) up to 33kV service running along the north side of London Road. There is an HV service (11kV) running along the south side of London Road for

approximately the length of the H21 site. At the west end of the site it crosses to the north side of the road. An HV service runs along Heath Close to the Pumping Station at the west end. This appears to have a pole mounted transformer. An HV service is shown which crosses the site area diagonally from the west football pitch to the Pumping Station. To the north of the H22 UKPN have an HV service which crosses under the rail line, turns east and then south along the eastern site boundary on poles. There is an HV service running down the east side of Mountnessing Road. Some connections to the residential areas appear to have pole mounted transformers and some are served from Mountnessing Road substation. Scrub Rise appears to have a below ground low voltage (LV) distribution at the northeast (Greenfields) end changing to a pole distribution along the south eastern part. Frithwood Lane appears to have similar pole LV distribution connected to an HV supply from First Avenue with a pole transformer. There does not appear to be any services crossing the H23 site.

3.8.4 Telecoms (sites H20, H21, H22, H23) - The telecoms data available shows services provided by BT Openreach. Adjacent to H20 site BT Openreach have services to the south side of Blunts Wall Road and the east side of Tye Common Road with a short section on the west of this road between the Cherrytrees and Fairfields Road junctions. A mobile phone mast is indicated to the west of the site. Site H21 has BT services along the south side of London Road. There is also a service to the tennis court clubhouse along the entry road. The BT Openreach drawings indicate no services within the H22 site area. As would be expected, there are services in Mountnessing Road. The BT Openreach drawings indicate services along the north side of Scrub Rise and the east side of Frithwood Lane along the H23 site frontage. The network is shown as entering the H23 site for part of this route.

3.8.5 Water (sites H20, H21, H22, H23) - Water is provided by Essex & Suffolk Water. There are connections to 34", 36" and 40" water mains running to the west of the H20 site. The drawings indicate a 9" Asbestos Cement (AC) main running in Tye Common Road from a connection to a 400mm PVC main at the junction with Heath Close to the north. At the west end of Heath Close in Site H21 there is a major pumping station with a connection to a 355PE main running east along Heath Close to a connection to distribution mains in Tye Common Road and connections to 34", 36" and 40" ST mains running to the south. These mains run approximately along the west boundary of the H20 site. In the centre of the site area is a cathodic protection ground bed for the pipelines. A 1" supply is connected from this to the football ground. This supply runs through the south-east corner of the H22 site. There is a 9" AC main to the west side of Mountnessing Road adjacent to Site H22, changing to 9" PVC south of the junction with The Mullions. 2 No major treated water mains, 34" and 36" ST, also run down gardens of properties to the east side of the road and turn into the road to continue south just south of the junction with The Mullions. There is a 4" CI main running along the east part of London Road from Tye Common Road. This reduces to a 3"CI main east of the connection to Kenilworth Close. A 3" PE main is connected to this to run south to the Tennis Courts. The route of this is noted as approximate but it does pass through the site area. Adjacent to Site H23 there is a 6" AC main indicated to the north side of Scrub Rise with connections into the cul-de-sacs to the south, fed from the 9"AC main in Tye Common Road. A 3" Cast Iron (CI) main connects from the

Scrub Rise main south along Frithwood Lane enlarging to a 4" CI main along the H23 frontage.

- 3.8.6 Foul Drainage (sites H20, H21, H22, H23) - Foul drainage is provided by Anglian Water (AW). From the junction with Blunts Wall Road there is a 150VC sewer flowing south along Tye Common Road. There is also a pumped rising main (225 CI) flowing north to connect to the gravity system adjacent to the junction with Heath Close to the north. The H21 site does not have any foul drainage immediately adjacent. The local residential developments are served by a local system of drainage with pumping stations and rising mains to the sewer in Tye Common Road. A 300mm CO sewer is installed diagonally through the northeast corner of the H22 site flowing north. This collects from the network serving properties in the residential areas around Mountnessing Road. At the east end of Scrub Rise the foul sewer flows north from Greenfields to Tyelands to connect to the sewer in Frithwood Lane. This sewer has a depth to invert of 1.11m at the nearest point to the site. A 150mm VC sewer is also installed along Scrub Rise flowing from east to west to connect to the sewer in Frithwood Road. The sewer in Frithwood Road is 150mmVC, enlarging to 225mmVC and turns west into First Avenue. A separate section of the network runs along the southern part of the Frithwood Road site frontage as a 150mm VC which turns west into Second Avenue. The network flows to a pumping station at the rear of Wiggins Lane properties.
- 3.8.7 Surface Water Drainage (sites H20, H21, H22, H23) - Surface water drainage is provided by Anglian Water (AW). A 375 CO main sewer crosses Tye Common Road from Tyelands to run into the land around Curd Farm Bungalow, passing to the north east of the property to a discharge to a drainage ditch to the north of Carrick House. In Tye Common Road from adjacent to Curd Farm Bungalow is a 150VC sewer flowing north. This joins a 450mm sewer from the north at Cherry Trees and connects to an outfall to the north of Carrick House. In Tye Common Road from adjacent to Curd Farm House is a 150VC sewer flowing south. This joins 600mm sewer from Frithwood Lane and continues south as a 675 dia flowing to an outfall to a drainage ditch at the junction of Tye Common Road and Wiggins Lane. In regard to the H21 site London Road has a 225VC sewer flowing west. This is located on the south side of the road for much of the site frontage and then crosses to the north side. In regard to the H22 site 450mm CO sewer is installed diagonally through the northeast corner of the site flowing north from the eastern boundary to an outfall at the northern boundary. Further south a 600mm CO sewer from the Mountnessing Road residential area discharges to an outfall to a water course crossing the site area from east to west. In regard to the H23 a surface water sewer runs along Greenfields /Scrub Rise from east to west. At the east end of the site this is 225mmVC. It runs northwest to connect to the sewer in Tye Common Road. A 525mm connection is indicated from the site area running north through the property of No 68 Scrubs Rise to connect to the sewer in Scrub Rise. The use of this connection is not indicated. There are no surface water sewers in Frithwood Lane adjacent to the site.

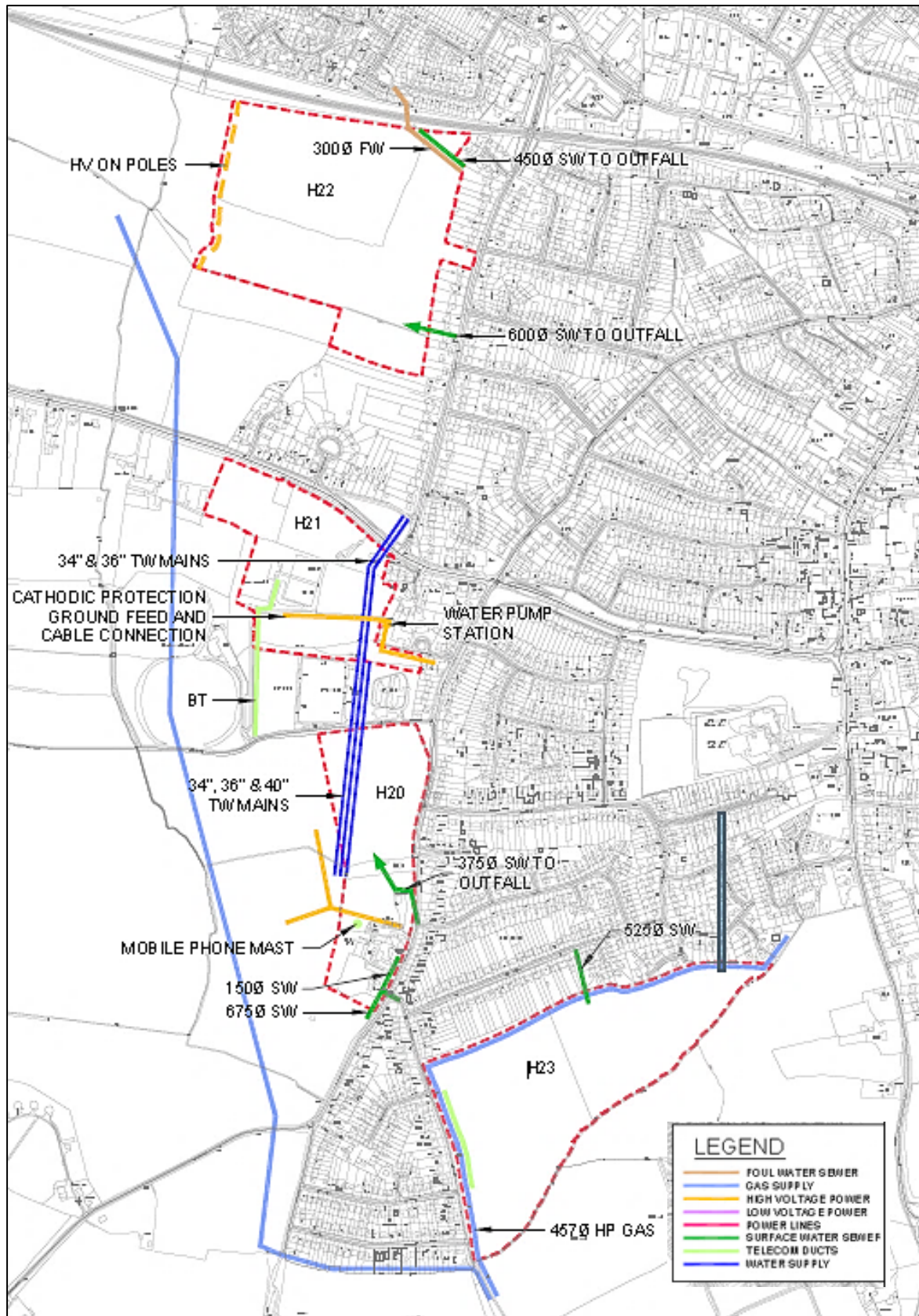


Figure 3-15: Utilities high level constraints summary

3.9 SOCIAL INFRASTRUCTURE

The Local Education Authority's priority is to ensure that any new provision is as close to new areas of growth as possible to ensure sustainability.

Early Years and Childcare Provision

- 3.9.1 ECC has provided information on existing capacity and requirements for each allocated site, based on their respective Wards. The information is based on the Autumn 2016 sufficiency data and gives an overview of the additional childcare which would be needed based on the shortfall that there would be through the delivery of this development. This however does not include for any shortfalls by the additional funded hours for 3-4 year olds from September 2017.
- 3.9.2 All sites would require either specific additional EYCC provision on their own or combined if other developments in the Wards are taken forward (be it the other suggested sites or Preferred Sites in the Draft Local Plan).
- 3.9.3 In South West Billericay Burstead Ward and Billericay West Ward even though there are some 93 vacancies of EYCC funded places, it is estimated that an additional 86 places will be needed to meet demands arising from future growth.
- 3.9.4 ECC continues to work with BBC to ensure EYCC needs are appropriate and adequately assessed as preparation of the new Local Plan continues.

Primary School Provision

- 3.9.5 ECC divides Basildon into four planning groups, namely Basildon East, Central & West, and a separate group for "Crays Hill". The respective consultation sites fall within the Billericay (Basildon Group 1) planning group, with the nearest primary school to the sites being number 4, Quilters Infant and Junior Schools.
- 3.9.6 In their response to the Draft Basildon Local Plan Public Consultation, ECC have outlined their approach to assessing education needs of the future Local Plan. The approach provides an overview of the potential theoretical capacity to expand, before new school provision is required if any development is proposed.
- 3.9.7 *Appendix 1 Status of Theoretical Capacity for expansion within existing school sites (November 2016)* concludes there are limited expansion options in Area 1 (Billericay), and that additional primary school provision will be required if any housing is proposed within this area.
- 3.9.8 Further clarifications from ECC confirmed a 2FE primary school would be required in Billericay, to cater for the future residents of the cumulative development.

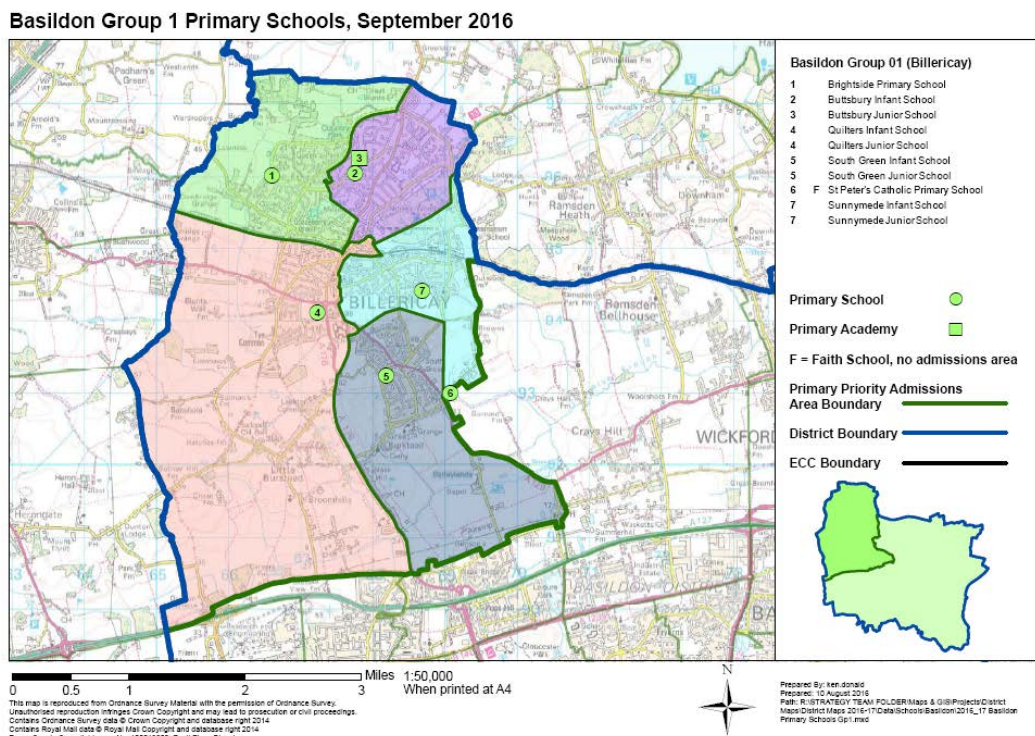


Figure 3-16: Basildon Group 1 Primary Schools

Secondary School Provision

3.9.9 Planning for secondary school places is managed across all three towns, as there is a significant amount of pupil movement. Given the overall quantum of growth of at least 15,000 in the Plan and the level of cross flow of pupils, mainly out of Basildon to Billericay and Wickford, there will be a need to provide 2 new secondary schools in Basildon settlement area, as well as expansions over the plan period.

4. DEVELOPMENT CONSTRAINTS AND OPPORTUNITIES

4.1 CONTEXT

4.1.1 The South West Billericay sites have the potential to contribute to significant, strategic housing growth of in excess of 900 new homes as part of a sustainable proposal to support the emerging Local Plan objectives. It will deliver residential-led development proposals and supporting community uses (education, health and strategic open space), together with a strategic highway relief route that will ease congestion in town centre and facilitate new development.

4.1.2 There are some characteristics that have influenced the content of the Development Framework and will need to be taken into account when considering future development.

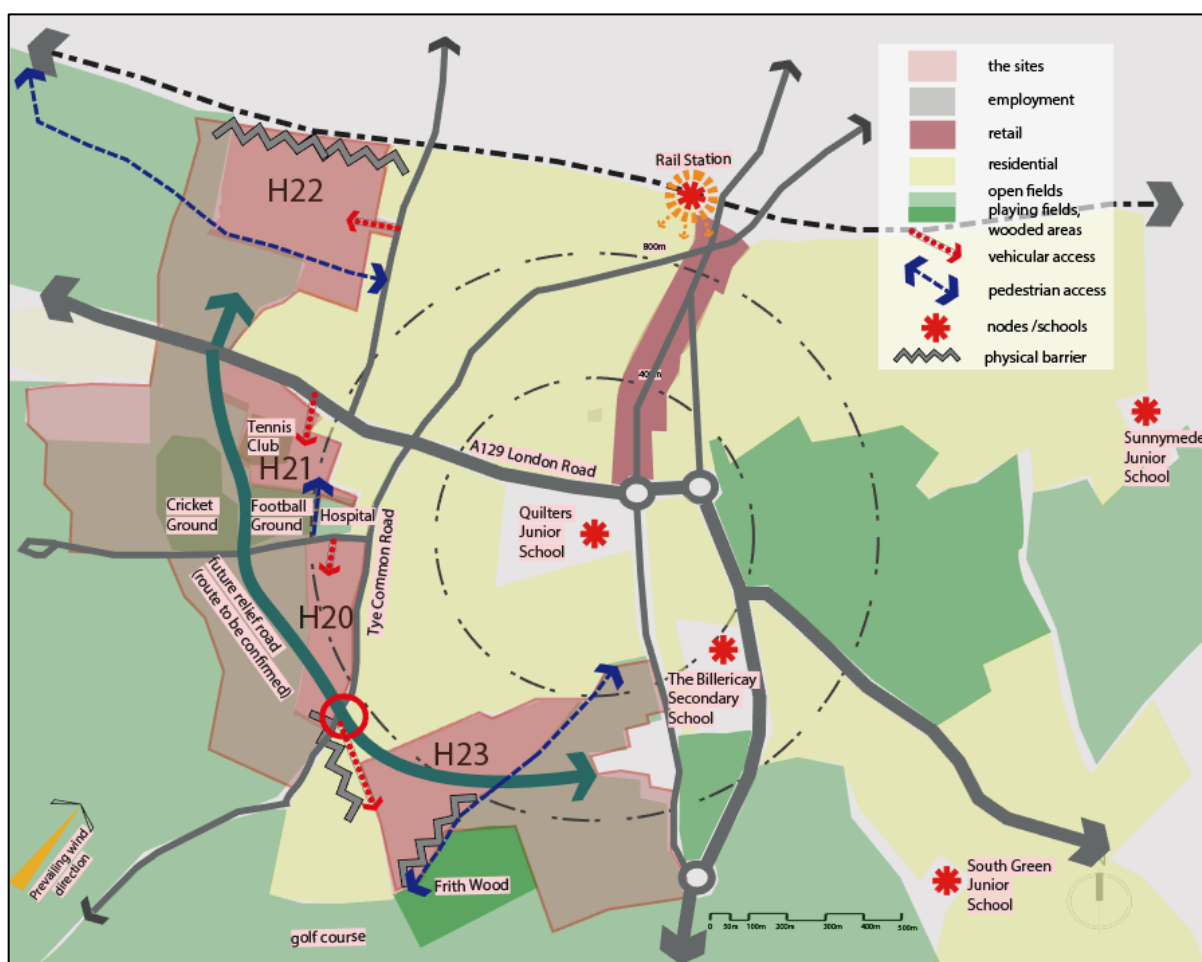


Figure 4-1: SW Billericay Opportunities and Constraints

4.1.3 Some of these constraints and opportunities are highlighted in Figure 4.1 above and are listed on the following page.

4.2 KEY CONSTRAINTS

- Multiple sites and site owners /promoters
- Individual development of housing sites does not take future infrastructure into consideration
- Balancing the impact of the proposed allocations on the landscape and Green Belt
- Frith Wood (ancient woodland) to the south borders H23 allocation
- Existing residential properties along the southern alignment of the new SW relief road
- Traffic congestion in Billericay town centre, in particular at Sun Corner junction
- Current traffic arrangements of Laindon Road and A176, queueing near Billericay School
- Railway embankment to the north of H22 restricts access to the site
- Existing overhead powerlines and other utility corridors

4.3 KEY OPPORTUNITIES

- Comprehensive and coordinated approach - phased delivery of the SW relief road in line with housing allocations to provide the homes and infrastructure needed
- Better definition of urban /rural interface in the context of the allocations
- Opportunities for the SW relief road to address major issues elsewhere in central Billericay
- Opportunities for provision of a range of housing options, including % of affordable homes
- Retain and enhance key hedgerows, trees, tree groups and other landscape features where wildlife may be prevalent in accordance with draft policy NE5
- Good level of local services, including sports pitches /tennis courts
- Integrate open space provision with new landscape buffers to open fields
- Integrate pedestrian routes with the existing public footpaths.

5. HIGH LEVEL DEVELOPMENT FRAMEWORK EVOLUTION

5.1 VISION

- 5.1.1 The Development Framework for the sites has evolved following consultation with key stakeholders including BBC officers, ECC Education and Highways, and the land promoters themselves.
- 5.1.2 The Development Framework shows the creation of new residential neighbourhoods for Billericay, providing new homes, education provision, health facilities and green spaces, as detailed in draft policies H20 to H23.
- 5.1.3 The Development Framework incorporates the SW relief road, as proposed in the Draft Local Plan, and examines its relationship with the adjacent sites to enable landowners working together to deliver the various stretches of the route alongside their development proposal.
- 5.1.4 The Development Framework integrates with the existing landscape and ecological features, enhancing strategic green infrastructure with new open space strategic gap between the settlements, and using these features as key structuring elements in the framework.

South West Billericay requires a deliverable and viable high level Development Framework to enable comprehensive development including new residential areas and connected public open spaces, with high quality urban design and the new relief route spine road providing ease of vehicular access; and other requirements such as renewable energy generation, protection and enhancement of biodiversity, landscapes and flood and water management.

- 5.1.5 The new residential developments will be an extension to the community of Billericay and retain the town's characteristics and the newly expanded community's sense of identity, which will include high quality, locally distinctive design, and a sensitive scale in keeping with the context.
- 5.1.6 A development that delivers a sustainable and balanced community through the provision of a wide range of housing types and tenures including affordable homes that meet housing need and demand in the Borough.
- 5.1.7 A development in which recreation acts as a focal drive for both the new and present residents of Billericay, encompassing a wide range of facilities and activities from formal active recreation sports uses to more passive informal walks.
- 5.1.8 A development with the minimum impact on the environment which recognises the existing pressures on the natural environment, the need to conserve resources and includes strong links between the communities, biodiversity, heritage, and the natural features of the site and its surroundings.

- 5.1.9 A development that is an exemplar in terms of the use of sustainable construction techniques and renewable and low-carbon energy supply.
- 5.1.10 A development in which good public transport, pedestrian and cycle facilities provide a realistic alternative to the car and where roads do not present a significant barrier to the integration of communities and the access to services and the wider countryside.
- 5.1.11 A development which provides for the needs of the new communities without detriment to the existing, through the inclusion of education, health, infrastructure and community facilities and in which the location of such services and facilities provides lively focal points.

5.2 DEVELOPMENT PRINCIPLES

- 5.2.1 A series of development principles to guide the proposals have been established for the sites, based on the emerging Local Plan policy requirements and master planning good practice guidance. They are also used as a basis upon which the development framework options are assessed, in addition to the viability testing.

Environment	Planning	Design	Infrastructure
Topography, climate and wind direction	Proposals for a total of 950 (160+180+280+330) homes and an integrated South West relief road	Prevent coalescence between settlements by maintaining Green Belt visual buffer between Billericay and Little Burstead	Deliver an appropriate and feasible network solution to serve both the new development and the existing community
Flooding and drainage	Allocate land to provide for specialist accommodation, including care homes	Multifunctional open space network providing Activity for all	Flexibility and changeability
Framework sustainability including travelling to facilities	Development on these sites must be supported by sufficient highways infrastructure to ensure that the development is sustainable	Compatibility between uses, community cohesion, colocation of community facilities	Ensure social infrastructure is there to support local community and its growth, including a new primary school as identified
Landscape capacity able to accommodate the level of growth	Landscape buffers should be provided to the western and southern boundaries of H20, H21, H22 and to the northern boundary of H23	Set parameters to improve the quality of the built environment and make the area a secure and welcoming place	Traffic safety; high quality of streets and spaces
Other physical constraints - e.g. powerlines, land ownership	Plan for appropriate social infrastructure including local centres, primary school etc.	Connected walking and cycling routes and walkable communities	Distribution of services and utilities

Environment

- 5.2.2 *Topography, climate and wind direction* - the development's visibility from major highways should be mitigated by careful landscape screening of residential buildings and prominent roof forms. The level of street lighting will be appropriate for a semi-rural location, in line with the standards of the Highway Authority.
- 5.2.3 *Flooding and drainage* - Sites H20, H21, H22 and H23 are shown to be all entirely within Flood Zone 1, having a probability of flooding of less than 0.1% in any given year. Any future development should be set back from the open ditches to mitigate the risk of flooding.
- 5.2.4 *Framework sustainability including travelling to facilities* – New facilities should be placed at easy reach of residential development, e.g. 10 to 15-minute walk. Development will be required to comply with the highest standards of sustainable design and construction and the developers will be expected to complete a Sustainability Statement and meet the requirements of Strategic Policy CC1 by incorporating on site renewable energy equipment to reduce predicted CO₂ emissions.
- 5.2.5 *Landscape capacity able to accommodate the level of growth* - A clear landscape (and green infrastructure) strategy is an important element of the Development Framework for this site and should be set out at early stages. The Local Plan landscape assessments will be used to guide the site layout and design and should be incorporated into a Landscape and Visual Impact Assessment which will inform detailed design of the proposal ahead of submitting a planning application.
- 5.2.6 *Other physical constraints - e.g. powerlines, land ownership* – the proposals will avoid any physical constraints if possible, however the new SW relief road alignment passes through rather constrained Frithwood Lane lined with residential properties, as well as through the residential part of Kingsmans Farm. Some land acquisition is likely to be required to deliver the highway route, in addition to the land sterilised due to overhead powerlines or water mains.

Planning

- 5.2.7 *Policy H20, H21, H22, and H23 proposals aim to deliver a total of 950 (160+180+280+330) homes and an integrated highway relief route.*
- 5.2.8 *Allocate land to provide for specialist accommodation, including care homes.* Affordable housing should be indistinguishable from market housing in terms of design, and to be dispersed across the site. They should be designed to the Homes and Community Agency design and sustainability standards or their equivalent.
- 5.2.9 *Development on these sites must be supported by sufficient highways infrastructure to ensure that the development is sustainable* – Delivery of the SW relief road will be key in unlocking these development sites and must be considered in the development phasing.
- 5.2.10 *Landscape buffers should be provided to the western and southern boundaries of H20, H21, H22 and to the northern boundary of H23* – appropriate landscape should form part of the transition zone from a rural to urban landscape.
- 5.2.11 *Plan for appropriate social infrastructure* including local centres, primary school etc. to serve new and the existing development.

Design

- 5.2.12 *Prevent coalescence between settlements by maintaining Green Belt visual buffer between Billericay and Little Burstead.* In case of H23, its southern edge is particularly sensitive to any new development as it might affect this green gap between the settlements, as well as the visual perception of the gap from major highways. Any reduction of the visual gap should not compromise the separation between the settlements and the overall openness.
- 5.2.13 *Multifunctional open space network* providing Activity for All within the landscape buffers at the sites' edges, and pedestrian and cycle linkages connecting recreational facilities should be part of the proposals.
- 5.2.14 *Compatibility between uses, community cohesion, colocation of community facilities* - there must be good pedestrian and cycle links from the proposed developments into Billericay High Street in order to support the aims of social cohesion. Landscape buffer should be provided between any new housing and the countryside.
- 5.2.15 *Set parameters to improve the quality of the built environment and make the area a secure and welcoming place* – as the new housing development will be immediately adjacent to the existing residential areas of Billericay, a close relationship to adjacent areas is an important aspect of the Development Framework, however the new housing should exhibit its own character and design.
- 5.2.16 *Connected walking and cycling routes and walkable communities* should be encouraged by linking existing open spaces. There are a number of green infrastructure assets, e.g. existing sports grounds, Frith Wood, which provide an opportunity to create a network that links to these assets, contribute to conserving and enhancing the natural environment, and provide access to high quality open space for the present and future residents. The rights of way through and around the sites should be retained and integrated into the housing development. There should be minimal road crossings of the existing footpaths to preserve habitat potential and the landscape. Improvements to the existing ProW network must be provided to encourage sustainable options for travel.

Infrastructure

- 5.2.17 *Deliver an appropriate and feasible network solution* to serve both the new development and the existing community by delivering the SW relief road to serve the proposed development areas as well as relieve the congestion in the town centre and access to existing residential areas. There is already good access from to the sites to existing bus routes and stops, but there might be a need for additional bus stops to serve the new homes.
- 5.2.18 *Flexibility and changeability* to cope with the increasing housing growth and demand for highways capacity over the Plan period.
- 5.2.19 *Ensure social infrastructure is there to support local community and its growth* - part of the requirement for the developers in providing homes at this site will be to contribute

financially towards the provision of a new primary school and community services in Billericay.

5.2.20 *Traffic safety; high quality of streets and spaces* - There should also be good pedestrian and cycle ways into the existing town centre and the railway station.

5.2.21 *Distribution of services and utilities* - The overall approach to the Development Framework utility infrastructure is to provide the capacity for future development in conjunction with BBC sustainability goals identified within BB Draft Local Plan.

5.2.22 Appropriate SuDS should be implemented within any new development where technically feasible. This will ensure that the drainage concept and design is considered at an early stage, allowing space to manage surface water, improve water quality and provide amenity space and enhance biodiversity value. Pre-application discussions with the Local Planning Authority, as well as Essex County Council as Lead Local Flood Authority, are recommended to establish an appropriate surface water drainage strategy and SuDS design for the site.

5.3 OPTIONS

5.3.1 This chapter describes the Development Framework options for a total of 850 to 1760 homes and a primary school on the sites H20, H21, H22 and H23 in South West Billericay, illustrated on the diagrams below.

Table 5-1: Development Options Summary

Option 1 – 848 homes (30dph)	Option 2 – 1,210 (30dph)	Option 3 – 1,760 (30dph)
H20 – 139 homes	H20 – 306 homes	H20 – 491 homes
H21 – 146 homes	H21 – 156 homes	H21 – 247 homes
H22 – 330 homes	H22 – 378 homes	H22 – 476 homes
H23 – 233 homes	H23 – 370 homes	H23 – 370 homes
South West Relief Road to the east of the Cricket Club	South West Relief Road to the east of the Cricket Club	South West Relief Road to the west of the Cricket Club
2FE Primary School	2FE Primary School	2FE Primary School
		Former cricket ground redeveloped - 176 homes
		New cricket ground

5.3.2 It is proposed that the Local Plan allocates the land in this area in accordance with the Preferred Development Framework, which identifies the locations for new housing and their relationship with the existing settlement and the SW relief road. The Development Framework does not include detailed design of the highway or the guidance on or provide layouts of the housing areas. This is because the finer level of detail with regard to principles of design, layout and appearance would be determined for each of the individual sites at the planning application stage.

5.3.3 The Development Framework has sought to identify the most appropriate locations for new homes and the provision of specific community services and facilities, given the sites' constraints. As a result the quantum of homes varies at the three options presented herewith. The Development Framework addresses different needs of the expanded community whilst considering the opportunities provided by them to meet the overall requirements of the South West Billericay development and the Local Plan.

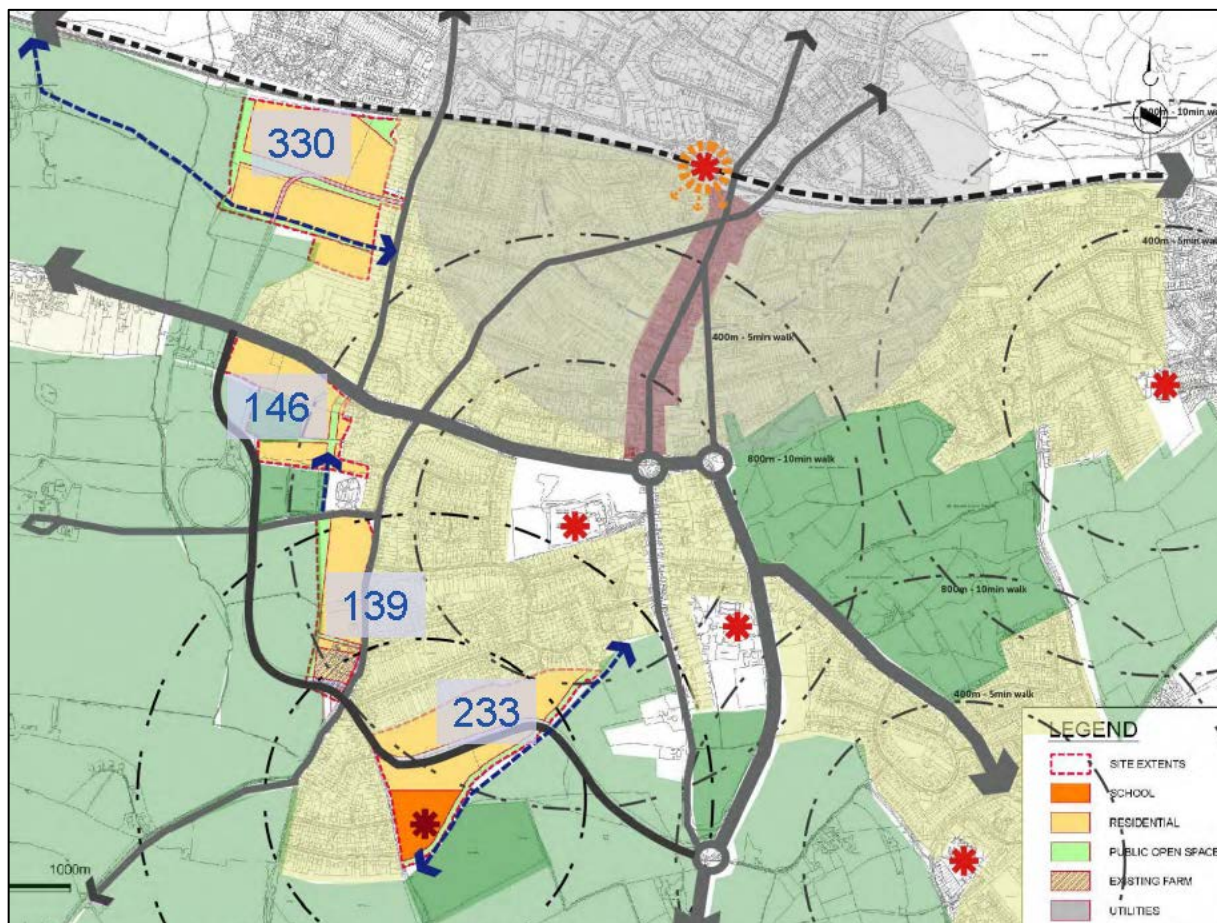


Figure 5-1: Option 1 SWB HLD showing distribution of proposed residential units

- 5.3.4 **Option 1** takes as the starting point the areas identified “suitable for development” in the Outline Landscape Appraisals. As the earlier undertaken Highways Mitigation Modelling by ECC had identified the delivery of the SW relief road would be required to enable development in this location, a new distributor road to service the proposed residential development and ease the congestion in the town centre, guided by the approximate route identified in the Draft Local Plan is proposed.
- 5.3.5 In addition to the constrained Frithwood Lane (H23) and the physical location of Kingsmans Farm residential building (H20), the alignment of the new Distributor Road is limited by the location of the existing cricket pitches and Billericay Town FC playing fields (to the south of H21).
- 5.3.6 In Option 1 and Option 2 the proposed alignment of the new Distributor Road is to the east of the existing cricket pitches, whilst in Option 3 the new road runs to the west of the present cricket pitches.
- 5.3.7 Option 1 delivers 848 residential units at 30 dpha on 28.25 ha, falling short of the combined total of 950 units for the sites H20 to H23 as defined in the Draft Local Plan. However, as many modern developments are built at slightly higher densities, should the Option 1 density be increased to 35 dpha, this would generate 989 residential units and would meet the requirements of the Draft Local Plan.

- 5.3.8 Billericay Cricket Club, Billericay Town F.C. and the Lawn Tennis Club remain at their current locations and continue to perform a key recreational role in the area.
- 5.3.9 Public open space shown on the options are the areas sterilised by major utility corridors or accommodate existing footpaths and drainage ditches. Further open space including play areas will be defined at the detailed master plan stage within the gross residential allocations.
- 5.3.10 All the sites are within 10 to 15-minute walk from Billericay Railway Station and within easy access to facilities found in Billericay High Street.
- 5.3.11 Quilters Infant and Junior School is within a 10 to 15-minute walk of the sites. Billericay Secondary School is within a 15-20-minute walk from the sites. Detailed design should ensure direct and safe walking and cycle routes are provided to access schools and other facilities within High Street.
- 5.3.12 The total of residential units for Option 1 of 848 generates a demand for 254 primary and 76 early years' school places. Additional capacity is proposed as a 2FE primary school at the southern end of H23, with a landscape buffer to the adjacent Frith Wood.

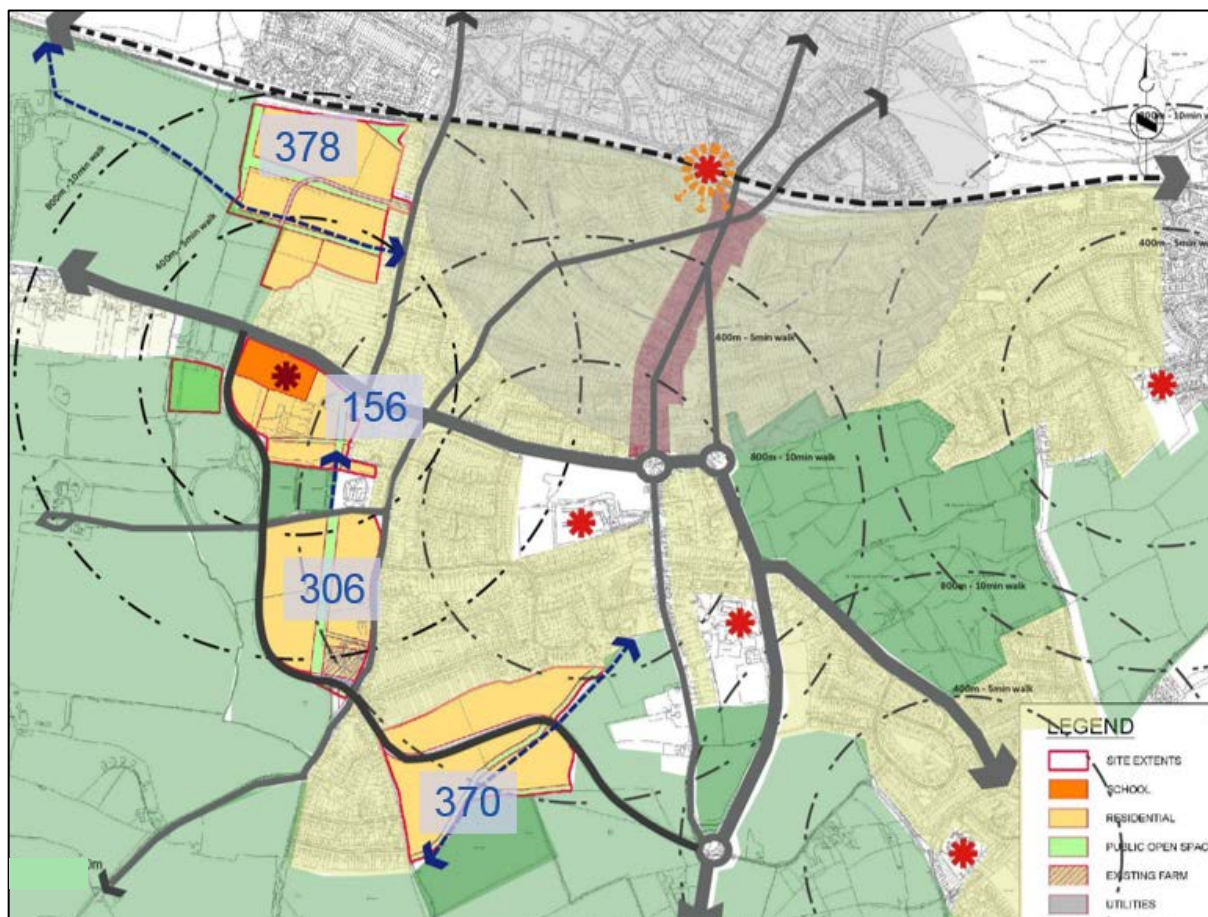


Figure 5-2: Option 2 SWB HLDF showing distribution of proposed residential units

- 5.3.13 **Option 2** proposals maximise the new SW relief road frontage by extending the development of H20 westwards, extending the area of H21 slightly westwards to the new road frontage and relocating the Tennis Club to the west of the new road, extending the area of H22 south of the public footpath between the new road and existing housing, and extending the area of H23 south of the existing public footpath.

- 5.3.14 Option 2 delivers 1,210 residential units at 30 dpha on 38.30 ha. However, as many modern developments are built at slightly higher densities, should the Option 2 density be increased to 35 dpha, this would generate 1,411 residential units.
- 5.3.15 Billericay Cricket Club and Billericay Town F.C. remain at its current location and continue to perform key recreational role in the area. The Tennis Club land is made available for residential development and the Club is relocated to the west of the new Distributor Road, north of the Cricket Grounds.
- 5.3.16 Combined total of residential units in Option 2 yields 363 primary school places and 109 early years' school places. Additional capacity is proposed as a 2FE primary school in the north-west corner of H21, with the school site adjacent to the A129 London Road. This primary school location would ensure better walking catchment areas for the existing and proposed population of south west Billericay.

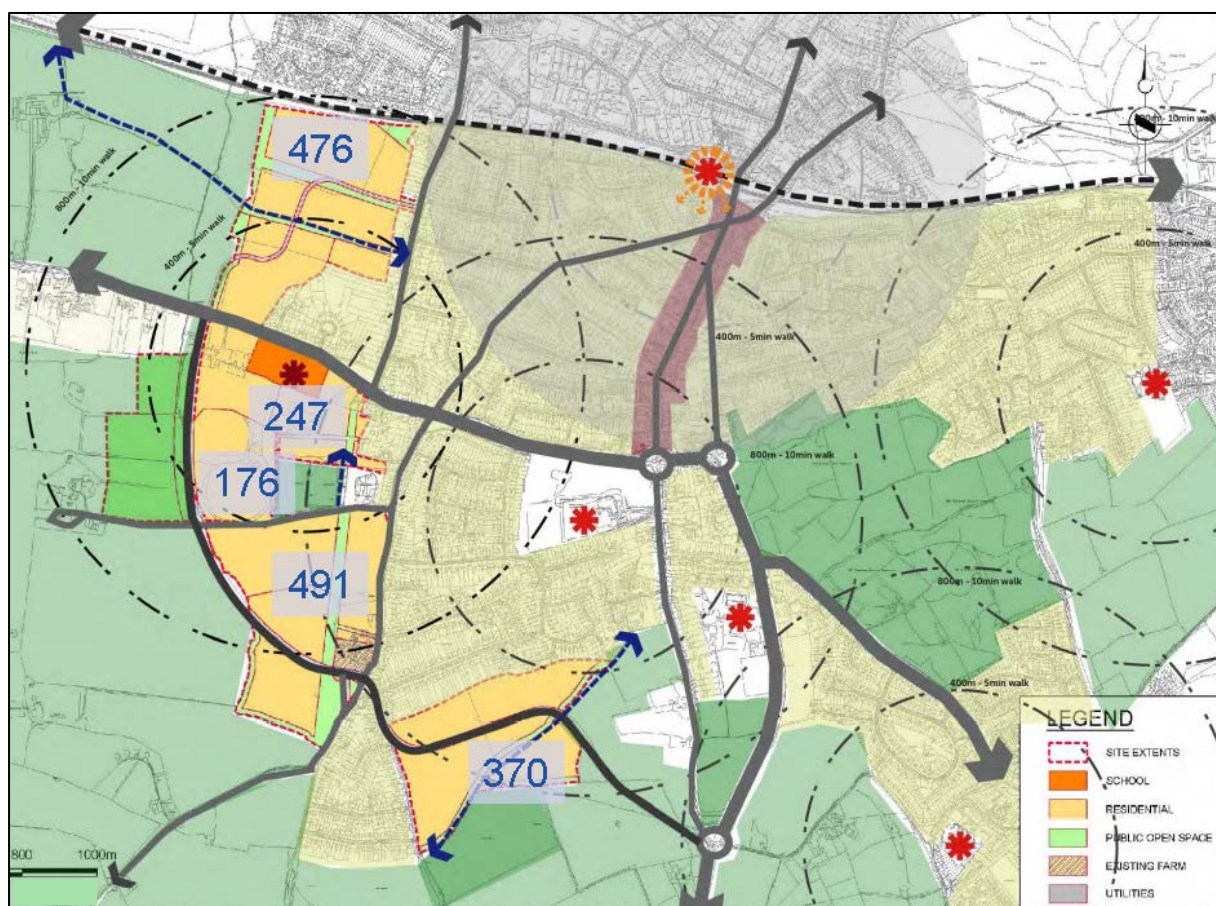


Figure 5-3: Option 3 SWB HLDF showing distribution of proposed residential units

- 5.3.17 **Option 3** proposals consider the impact of the new SW relief road routed to the west of the current Cricket Grounds.
- 5.3.18 The proposals extend the development area of H20 further westwards, including the area south of the new SW Relief Road and west of Tye Common Road. The Cricket Pitches and Tennis Club are relocated to the west of the new relief road, extending the developable area of H21 westwards to the new road frontage. The developable area of H22 south of the public footpath has been extended further to the frontage of London Road, as this area would form new built edge gateway to Billericay arriving by car from the west.

- 5.3.19 Option 3 delivers 1,760 units at 30 dpha on 58.69 ha. Should the Option 3 density be increased to 35 dpha, this would generate in excess of 2,000 residential units.

5.4 STAKEHOLDER ENGAGEMENT

- 5.4.1 Two stakeholder events, one with the external and one with the internal BBC and ECC stakeholders, were held in February 2017. At the workshops PF outlined the policy objectives, constraints and opportunities for the site, as well as presented a preliminary set of development options for the area. Feedback from the workshops helped shape the final set of development options.
- 5.4.2 The external stakeholder workshop was attended by representatives of development companies, planning agents or consultants with an interest in parts of the site.
- 5.4.3 The development framework options favoured by the audience were Option 2 and Option 3; understandable as Option 1 had a lower level of development proposed and most of the attendees had an interest in the land on site.
- 5.4.4 The attendees raised concerns at the extent of the new infrastructure required to deliver the development, in particular of the new roads and how the funding will be provided, e.g. how contributions from the developments will be determined.
- 5.4.5 The developer representatives in the audience commented that the densities of 30 dwellings per hectare used were too low considered that most of recent residential developments they had delivered were at 35 to 40 dwellings per hectare density. It was agreed to test increasing the density to 35 dpha.
- 5.4.6 ECC Spatial Planning, ECC Highways and ECC Education Planning were consulted throughout the optioneering process and have provided valuable feedback; in particular on the SW relief road route and the education provision location and provision planning.
- 5.4.7 The internal stakeholder workshop was attended by BBC planning policy and regeneration officers and ECC Development Surveyor representing Independent Living housing.
- 5.4.8 ECC is working in partnership with district councils and leading specialist housing providers to deliver new Independent Living housing in Essex. This type of housing allows people over 55 with care needs to live in their own homes with the peace of mind in knowing there is 24 hour care and support on site. It was considered whether South West Billericay sites would be suitable for this type of housing.
- 5.4.9 The presentation delivered at the events is included in the Appendices.

5.5 DEVELOPMENT FRAMEWORK EVALUATION

- 5.5.1 The three final options were evaluated in how well they meet the objectives set earlier and described in 5.2. A summary is shown on the following page.
- 5.5.2 Option 3 scores the highest in the evaluation and forms the basis of the Preferred Development Framework. A separate viability appraisal will validate this recommendation for the Local Plan allocation for the SW Billericay sites.

South West Billericay High Level Development Framework Options Evaluation					
	Guiding Principles*	Option 1	Option 2	Option 3	Comments
Environment	Topography, climate and wind direction	✓	✓	✓	Land gently rising from west to east, including level difference of some 20m across 600m length over the relief road route across site H23. Ancient wood at the southern edge of H23.
	Flooding and drainage	✓	✓	✓	No development proposed in Flood Zone 2 or 3. Existing drainage ditches retained. Opportunities for SUDS and surface water management measures.
	Framework sustainability including travelling to facilities	Ⓜ	✓	✓	All sites within 400 - 1,600m of the railway station (10 - 20 min walk) and existing facilities within Billericay High Street, Quilters Junior and Infant School, and Billericay Secondary School. In Option 1 sites H21 and H22 are further away from the proposed new primary school.
	Landscape capacity able to accommodate the level of growth	Ⓜ	Ⓜ	Ⓜ	The landscape character of the area changes with the introduction of the proposed relief road. Nevertheless, the sites currently in the Green Belt, fall within the area where urban character changes to rural open fields and many opportunities for the existing biodiversity features enhancement exist.
	Other physical constraints - e.g. powerlines, land ownership	Ⓜ	Ⓜ	Ⓜ	Some utility corridor constraints crossing the sites H20 and H21. Existing footpath at the southern edge of H22, and at the edge of H23. Multiple site promoters have agreed in principle to work together to enable delivery of the proposals and the necessary transport infrastructure.
Planning	Proposals for a total of 950 (160+180+280+330) homes and an integrated highway relief route	Ⓜ	✓	✓	Option 1 falls short of the required no. of dwellings (848@30dph) and delivers 989 dwellings only at the higher density of 35dph. Option 2 delivers approx. 1,210 (1,412) homes and Option 3 approx. 1,760 (2,054) homes.
	Allocate land to provide for specialist accommodation, including care homes	✓	✓	✓	It is understood that the proposals for H22 include a care home village at the northern part of the site.
	Development on these sites must be supported by sufficient infrastructure to ensure sustainable development	Ⓜ	Ⓜ	Ⓜ	All sites are expected to contribute towards improvements to the local and strategic highways network where they relate to the sites. In Options 1 and 2 the proposed relief route passes to the east of the cricket ground, in Option 3 to the west of the present cricket ground.
	Landscape buffers should be provided to the western and southern boundaries of H20, H21, H22 and to the north of H23	Ⓜ	Ⓜ	Ⓜ	Landscape buffers incorporated at the western and southern boundaries forming part of the open space network. Additional open space within (gross) areas of residential plots, to be determined at detailed master plan stage.
	Plan for appropriate social infrastructure including local centres, schools etc.	Ⓜ	✓	✓	Good access to services within Billericay town centre. Options 1 and 2 are likely to require one new 2FE school, whilst Option 3 would require additional 1FE expansion of an existing school.
Design	Prevent coalescence between settlements by maintaining visual buffer between Billericay and Little Burstead	✓	✓	✓	Outline Landscape Appraisal recommended a retention of a key south west to north east green corridor accommodating a tree belt, hedgerows, PRoW and open land towards Frith Wood. All development options adopt this approach.
	Multifunctional open space network providing Activity for all	✓	✓	✓	The open space accommodates multifunctional open space network facilitating a range of uses, including existing footpaths, existing or relocated playing fields, e.g. cricket pitch, football ground, tennis club. Further refinement required at detailed masterplan stage.
	Compatibility between uses, community cohesion, colocation of community facilities	✓	✓	✓	Proposed primary school location in Options 2 and 3 is collocated near the existing /relocated sports facilities, and covers greater planned population within 800m radius /10 minute walk.
	Set parameters to maintain the quality of the built environment and make the area a secure and welcoming place	Ⓜ	Ⓜ	Ⓜ	Walkable neighbourhoods within 15-20 minute walk from the train station and Billericay High Street, with safe walking /cycling routes to schools, connected by transport corridors and networks of multifunctional open space, with development density compatible with the surrounding development.
	Connected walking and cycling routes and walkable communities	✓	✓	✓	All three options ensure the walking and cycling routes connect to the existing footpaths and open space networks, providing access to schools, shops and community facilities.
Infrastructure	Deliver an appropriate and feasible network solution to serve both the new development and the existing community	Ⓜ	Ⓜ	✓	In Options 1 and 2 the proposed relief route passes to the east of the cricket ground, in Option 3 to the west of the present cricket ground. The new road is to relieve traffic congestion in town centre, deliver improved network capacity for the development growth, and act as a spine road for the sites.
	Flexibility and changeability	Ⓜ	Ⓜ	Ⓜ	The proposed relief road route is constrained by the capacity of Frithwood Ln and the location of Kingmans Farm. Further detailed feasibility and modelling is required.
	Ensure social infrastructure is there to support local community and its growth	Ⓜ	✓	✓	The area is well served by Billericay High Street and existing schools. Further local centre to be formed around the new primary school in Options 2 and 3. Facilities breakdown to be determined at detailed master plan stage.
	Traffic safety; high quality of streets and spaces	✓	✓	✓	The range of well designed and well managed streets will ensure they are safe places whether they are pedestrian friendly routes to primary schools and the town centre, or a major new spine road with safe points for pedestrians and cycles to cross.
	Distribution of services and utilities	Ⓜ	Ⓜ	Ⓜ	Quantum of development proposed will in all likelihood require reinforcement to utilities. Connectivity to networks exist. Opportunities for renewable heat and power generation, photovoltaics and sustainable construction methods.
✓	meets the guiding principle /policy objective	8	12	13	
Ⓜ	further consideration required at detailed mp stage				

*Developed from BfL12(CABE), Active Design (Sports England), UD Compendium (HCA), NPPF, BBC Emerging Local Plan policy objectives

Figure 5-4: Options Evaluation

6. PREFERRED HIGH LEVEL DEVELOPMENT FRAMEWORK

The recommended Development Framework for SW Billericay is based on the Option 3 presented earlier, with adjustments made following stakeholder workshops and feedback from BBC and ECC officers.

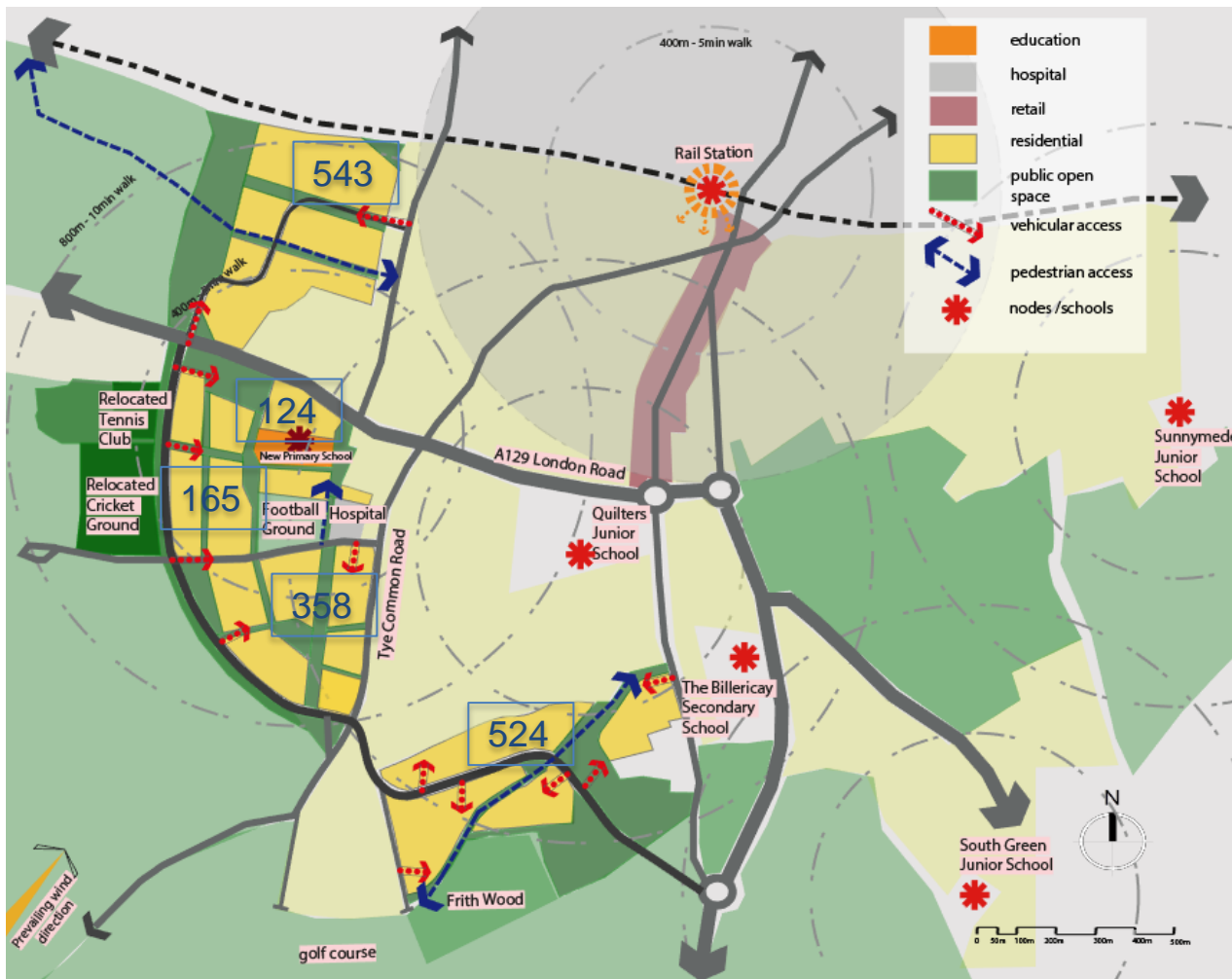


Figure 6-1: Preferred SW Billericay High Level Development Framework

6.1 FRAMEWORK CONCEPT

- 6.1.1 In line with the areas considered in the Draft Local Plan, development areas and the respective number of dwellings they yield are shown on Figure 5-5 within the wider land ownership of parcels H20, H21, H22 and H23.
- 6.1.2 The sites above will be developed to provide a combined number of dwellings of 1,714 at a density of 35 dpha, on 49 hectares of land.

SW Billerica	sqm	res. units
Preferred HLDF		
H20a	22,403	78
H20b	20,081	70
H20c	22,320	78
H20d	15,749	55
H20e	10,996	38
H20f	10,679	37
H21a	6,045	21
H21b	7,973	28
H21c	10,724	38
H21d	10,791	38
H22a	71,669	251
H22b	38,243	134
H22c	35,121	123
H22d	10,047	35
H cgr-a	19,995	70
H cgr-b	27,093	95
H23a	52,081	182
H23b	43,943	154
H23c	25,687	90
H23d	28,040	98
Residential subtotal (Ha)	48.97	
Residential units (@ average 35 dpha)		1,714
EY Child Yield**		154
Primary School Child Yield**		514
Sec. School Child Yield**		343
Primary School	2.14	
Cricket Ground relocated	52,895	
Tennis relocated	16,786	
New Roads	2.37	
H20 /POS5,6	66,165	
H21 /POS4	59,936	
H22 /POS1, 2, 3	85,428	
H23 /POS7	67,560	
POS8	63,094	
Public Open Space subt (Ha)	34.22	
Total	94.66	
**EY 0.09 ch /100 dw; Primary Sch 0.3 ch /100 dw; Sec. Sch 0.2 ch /100 dw (1FE = 210 places; 1 1/2 FE = 315 places; 2FE = 420 places; 2 1/2 FE = 525 places; 3FE = 630 p		
Open space standards		
Urban parks and gardens	7.80	
Natural and semi natural open space	11.23	
Amenity green space	5.70	
Outdoor sports facilities	6.77	
Total required for SWB	31.49	ha
Open space standards per 1,000 population		
Urban parks and gardens		1.82
Natural and semi natural open space		2.62
Amenity green space		1.33
Outdoor sports facilities		1.58
Allotments and comm gardens		n/a
Cemeteries and churchyards		n/a

Figure 6-2: Preferred SW Billerica HLDF Land Use Budget

- 6.1.3 The new SW relief road stretches from the Laindon Rd /Noak Hill Rd junction westwards through the H23 parcel and Frithwood Lane, to reach a junction with Tye Common Road. From the junction with Tye Common Road it continues north westwardly, until it meets and forms a new junction with A129 London Road. This new road will provide a south western relief route for Billericay which will reduce the need for residents of the new sites in the area from passing through the town centre as regularly. The road also forms the new edge of the development area on the western side of the town.
- 6.1.4 The highway capacity delivered by the new relief road is intended to accommodate growth in this location and improve the capacity and flow of local roads serving the rest of Billericay. New development in the area is expected to make a contribution towards the such improvements to the local and strategic road network as appropriate.
- 6.1.5 An indicative network of open spaces and pedestrian /cycle routes is shown along the existing 'rights of way' including footpaths and utility corridors. The network will connect to the existing and new community facilities including schools and recreation, and provide access to public transport routes.
- 6.1.6 Proportionate contributions towards improvements to cycling and public transport access within the area in order to facilitate a modal shift forwards active and sustainable transport modes will be required by the new developments.
- 6.1.7 A new 2FE primary school indicative location is within an easy reach in 5 or 10 minute walk (400m /800m) from all parts of H20, H21 and H22 development. All parts of H23 can be reached in a 5, 10 or 15 minute walk (400m /800m /1,200m) from Quilters Infant and Junior School.
- 6.1.8 Existing tennis club and cricket club are proposed to relocate to the western side of the new relief road, accessed off the relief road or from the upgraded Blunts Way Road.
- 6.1.9 Landscape buffers are provided to the western and southern boundaries of the development area forming a transition zone from the built environment to the Green Belt open fields or protection to the ancient Frith Wood. These landscape buffers are envisaged to be multi-functional and integrated with on-site open space, and will deliver ecological and surface water management benefits. They will incorporate any existing tree belts, field boundaries and hedgerows. The proposals will ensure the development seeks to achieve a net gain in biodiversity.

6.2 EDUCATION PROVISION LOCATION

- 6.2.1 In order to satisfy the needs of the future development in SW Billericay area, the framework proposes a new 2FE primary school in the area south of the London Road and west of Tye Common Road.
- 6.2.2 Whilst the framework education provision proposals meet the fundamental principles of being central to the population it is intended to serve and well connected to the future walking and cycling routes; it should be noted the locations shown on HLDF are indicative only. Further detail will need to be developed with the LA and ECC at the master plan /planning application stage, and the proposed education provision location(s) will need to be in full compliance with ECC Developers Guide to Contributions (revised Edition 2016) before these locations are confirmed.

6.3 PREFERRED HLDF TRAFFIC IMPACT

- 6.3.1 A multi-modal trip generation exercise has been carried out based on the TRICS trip dates and the 2011 Census Data for the Billerica area.
- 6.3.2 The preferred framework is developed from modified Option 3, and vehicular trips and public transport trips the development generates are akin to those shown for Option 3 in the Appendix C.

Table 6-1: Preferred HLDF - Vehicular Trip Generation

	Plot Area (sq.m.)	Dwelling Units	Vehicular trip generation								
			AM			PM			Daily		
			Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total
Employment											
B1 - Business Park		0	0	0	0	0	0	0	0	0	0
B2 - Industrial Park		0	0	0	0	0	0	0	0	0	0
B8 - Warehousing		0	0	0	0	0	0	0	0	0	0
Sub-Total	0	0	0	0	0	0	0	0	0	0	0
Residential											
Mixed Housing	489700	~35 1714	364	799	1212	757	565	1261	4699	4883	9567
Education											
School	21400	420	122	104	234	32	24	59	363	363	726
TOTAL	511100		486	903	1446	789	589	1320	5062	5246	10293

Table 6-2: Preferred HLDF – Public Transport Trip Generation

	Train			Bus			Bicycle		
	AM Total	PM Total	Daily Total	AM Total	PM Total	Daily Total	AM Total	PM Total	Daily Total
Employment									
B1 - Business Park	0	0	0	0	0	0	0	0	0
B2 - Industrial Park	0	0	0	0	0	0	0	0	0
B8 - Warehousing	0	0	0	0	0	0	0	0	0
Sub-Total	0	0	0	0	0	0	0	0	0
Residential									
Mixed Housing	176	294	2144	1	2	18	2	4	30
Education									
School									
TOTAL	176	294	2144	1	2	18	2	4	30

Mitigation

- 6.3.3 Although emphasis shall be placed on encouraging more sustainable modes of transport such as walking, cycling and public transport investment, highway improvements to both local and strategic network in the area will need to be made.
- 6.3.4 It was demonstrated within the emerging Local Plan evidence base Highway Mitigation Modelling that any additional traffic resulting from the future year scenario testing would be likely to exacerbate the Billericay highways network problems and also cause other congestion hotspots.
- 6.3.5 It is thus clear that improvement to the transport infrastructure is needed to accommodate the development, among others:
- New relief road to form a south-western Billericay link road to ease congestion through the town centre, linking the Laindon Road / Noak Hill roundabout with London Road;
 - The new relief road will also provide the capacity to accommodate future traffic associated with proposed developments;
 - New arm onto the existing A176/Laindon Road roundabout;
 - Relief road forms new junctions with Frithwood Lane and Tye Common Road (major changes to road geometry and priority);
 - New signalised junction with A129 London Road;
 - Cycling and public transport improvements – facilitate modal shift towards active and sustainable transport.

SW Relief Road

6.3.6 The Highway Mitigation Modelling validated that SW relief road is an essential piece of infrastructure without which the developments cannot be accommodated. This highway would deliver two functions:

- Serving the new developments within the growth arc; and
- diverting transit from the town centre, thus making it more attractive for local trips, which would boost local economy.

6.3.7 Several options for the south west relief road were considered:

- ‘Short’ alignment routed to the east of the cricket club;
- ‘Long’ route west of the cricket club;
- Alignment in a distance from the town, using the northern portion of the Golf Club; this was deemed unsuitable due to its (i) impact on ancient woodland; (ii) limited effect on local traffic (loss of ‘attraction’ function) and (iii) construction cost.

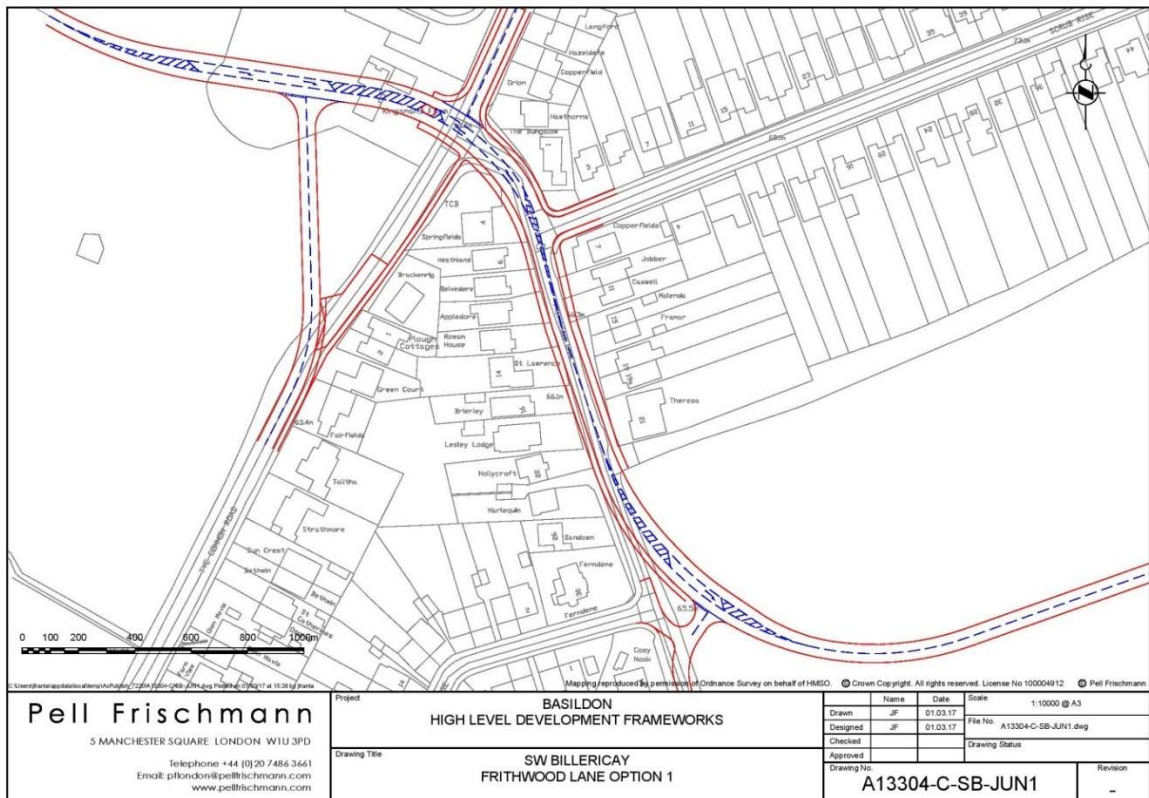


Figure 6-3: Relief road /Frithwood Ln /Tye Common Rd Indicative Layout

6.3.8 It is envisaged that the South West relief road will connect the Landon Road / Noak Hill Road roundabout with a new junction on London Road. The new relief road will follow Frithwood Lane near its junction with Tye Common Road, which was identified as the critical location. An indicative layout has been prepared to assess the viability and to assess the necessary land take, maximising existing highway land or that owned by development promoters.

Highway Improvements Cost Estimate

6.3.9 The cost assessment has been based on a high level highways design prepared without the benefit of (i) topographical surveys and (ii) traffic models, using our best engineering judgement.

6.3.10 Costs have been based upon recent tendered construction rates, SPONS, and benchmarks.

The cost estimate includes for items such as:

- Traffic Management
- Preliminaries, overheads
- Optimism bias (in accordance with Government guidelines)
- Design Fees

NOTE estimate does not include Land acquisition costs (e.g. within Frithwood Lane) or compensation associated in this regard.

Table 6-3: Preferred HLDF for SW Billericay East Basildon Cost Estimate

Highway Improvement/mitigation	Cost (£m)
New Road (Laindon Rd - Tye Common Road)	£6.5m
New Link (Tye Common Road - London Rd)	£5.7m
New Junction Tye Common Road	£3.3m
Signalised Junction New Link/A129	£1.2m

7. DELIVERY

7.1 DEVELOPMENT DELIVERY

The High Level Development Framework will be used to inform the allocation within the Local Plan and a framework to help guide future development on the sites H20, H21, H22 and H23. It elaborates on the requirements set out in the emerging Local Plan for Basildon Borough, including the inclusion of a new South West relief road to serve the area.

7.1.1 Through continuing discussions with ECC Education the new school will be sited to integrate fully with local facilities and to link effectively into the development's network of public open spaces, public transport network and to maximise connectivity with the proposed local centre. The indicative location of the school has also been influenced by the location of existing schools in the area and sustainable walking distances from the proposed development.

7.1.2 Further detail regarding the school site will need to be developed with the LA and ECC at the master plan /planning application stage, and the proposed education provision location(s) will need to be in full compliance with ECC Developers Guide to Contributions (revised Edition 2016) before these locations are confirmed.

7.2 PHASING

7.2.1 The primary access for both the development and construction traffic will be from the Tye Common Road for H20 and H23, and from the London Road for H21 and H22. The first phase of the relief road will be the stretch between Laindon Rd /Noak Hill Rd roundabout to Tye Common Road. Any land acquisition required at the junction of Frithwood Lane with Tye Common Road would need to be secured in the early phases. Second phase would include a new junction on London Road, where access will be taken from for H21 and H22. The new 2FE primary school would form part of this phase too, following the tennis club relocation. The logical sequence of development phasing will therefore follow the vehicular access in place when development commences on H23, and follow the new highway northwards to join with the new road first and the development land to the north.

7.2.2 The preferred HLDF described earlier would have slightly greater impacts on the landscape and Green Belt than Options 1 and 2, however the increased housing numbers would assist in delivering the SW relief road which the highway evidence determined would address major issues elsewhere in central Billericay.

7.2.3 The landowners and land promoters in this location are realising there are benefits to be had in working together on shaping the delivery of the highway route and their developments with the Council. This in turn would assist the Council in determining how much and what type of contribution would be sought from the developments for the delivery of the key infrastructure for the sites including the SW Billericay relief road.

7.2.4 Details of proposed phasing will be determined as part of the detailed planning application. The Council will require that when a planning application or planning

applications are brought forward for the allocation they demonstrate compliance with this Development Framework and a comprehensive approach to the development of the allocation, including the nature and timing of delivery of community infrastructure and other planning obligations.

7.3 PLANNING OBLIGATIONS

7.3.1 There are no known or identified abnormal development costs which will undermine the ability of this site to pay appropriate contributions towards infrastructure either through Community Infrastructure Levy (CIL) or Section 106, or a combination of both. The costs of providing a new SW relief road have been included in the costs provided for viability assessment of the site by PBA, and to inform the development of CIL. The main items identified to be funded as a result of the impact of the proposed development from either a Section 106 agreement or CIL include:

- *Affordable housing* - provision will be in accordance with the Council's policy on affordable housing. The individual composition of the tenure will be determined at the time of the application;
- *The new South West relief road* – this is expected to adopt an alignment outlined in the preferred HLDF option. Precise configuration to be determined following advice from the Highway Authority at the planning application stage. Any alternative route promoted by the developers would have to be in accordance with the general principles of the preferred Framework, and fully justified and funded by the developers.
- *Other local junction improvements* – as advised by the Highway Authority;
- *Contributions towards sustainable transport* – as advised by the Highway Authority;
- *Education contributions* - for a new local primary school provision and other educational needs;
- *Healthcare contributions* – for local services as advised by the Basildon and Brentwood CCG, and /or NHS England; and
- *Social and community infrastructure contributions* – including the provision of a Locally Equipped Play Area (LEAP) on the site and contributions toward other facilities where a need is identified, e.g. displaced playing pitches and built sports facilities.

7.4 NEXT STEPS AND RECOMMENDATIONS

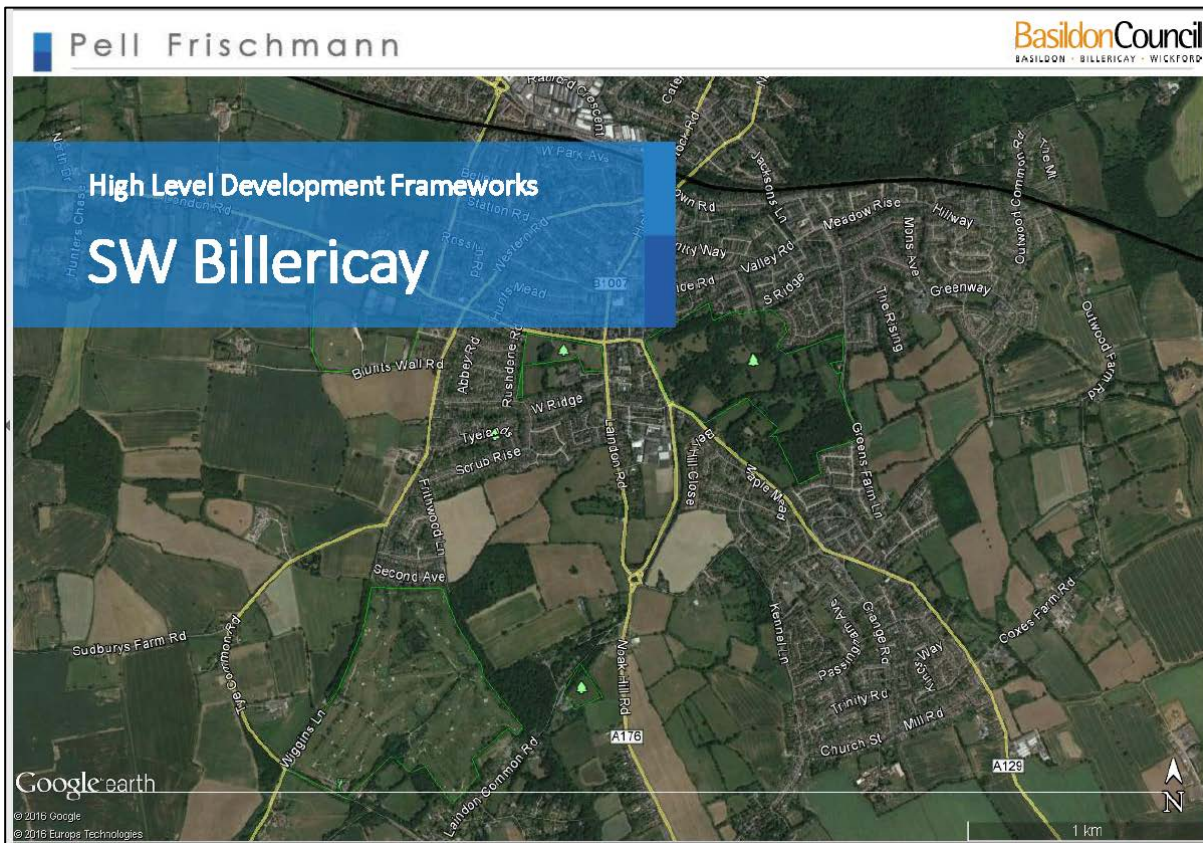
- 7.4.1 The focus of this study is a development framework that brings the key findings of the evidence together, meets the policy requirements specified in the Draft Local Plan and explore how this strategic site could evolve into a new community through coordinated delivery and phased release for development.
- 7.4.2 The above requirements underpin all the presented development options, with the preferred framework based on Option 3 delivering most benefits, following the evaluation detailed in 5.4.
- 7.4.3 In the short to medium term, the Council will need to continue to pursue the sites as a housing allocation through the Local Plan process. More specifically this will involve:
- Viability Appraisal of the preferred option and the relief road delivery;
 - Confirming the preferred option within the emerging Local Plan;
 - Making relevant Local Plan submission to the Government;
 - Participating in the Examination of the Local Plan.
- 7.4.4 Stakeholder engagement with the promoters of individual land parcels has provided a starting point for further work that will be required to consider how the site is brought forward and ultimately developed. In the short to medium term it is recommended that:
- Responses and interest shown through the stakeholder engagement exercise are followed up on as part of a process of exploring future delivery and development options, such as collaboration with a development partner or partners.
- 7.4.5 The preferred option is a high level development framework, geared to demonstrating the vision, concept and deliverability for the Draft Local Plan allocations. Future stages of work will require further design and layout work, including:
- Developing either a more detailed master plan or a design code for the preferred option which covers the whole site, with phasing considerations and more specific master plans prepared for each development parcel - to support future individual planning applications; and undertaking a public consultation exercise on the further proposals for the site.
- 7.4.6 In summary, it is considered that the South West Billericay provides a key opportunity for the Council and the land owners, to create a new community that provides a great place to live and that helps to meet the needs of the wider community, fulfilling the aspirations of the Local Plan in respect of housing delivery, and deliver key new infrastructure to support this strategic growth.

8. SUPPORTING DOCUMENTS

8.1.1 8.1 The following background documents have helped with the preparation of the High Level Development Framework:

- Basildon Infrastructure Delivery Plan, Dec 2015
- Greater Essex Growth and Infrastructure Framework 2016-2036
- Basildon Borough Council Draft Local Plan, Jan 2016
- Basildon Outline Landscape Appraisals of Potential Strategic Development Sites, The Landscape Partnership, Jan 2016
- Basildon Borough Council Ecology Surveys, Jan 2016
- Basildon Draft Outline Landscape Appraisals of Additional Sites, Dec 2016
- Basildon Borough Council Ecology Surveys, Additional Sites, Dec 2016
- Basildon Council – Landscape Study and Landscape Character Assessment, Dec 2014
- Basildon Council – Green Belt Review, Dec 2015
- Basildon Council – Plotlands Study, Dec 2015
- Basildon Council – Urban Design Review, Dec 2015
- Basildon Council – Historic Environment Characterisation Report
- Basildon Council – HELAA Review, Nov 2015
- Basildon Council – GT Sites Provision Study, PBA, Aug 2015
- Basildon Council – Settlement Hierarchy Review, Aug 2015
- Flood Risk Sequential Test for Draft Local Plan, Dec 2015
- Basildon Borough Council SFRA Level 1 and Level 2, 2011
- South Essex Surface Water Management Plan, Apr 2012
- Basildon Transport Topic Paper, 2016
- Basildon Borough Local Plan Highway Impact Assessment, Jan 2014
- Basildon Borough Local Plan Highway Mitigation Modelling 2015
- Basildon Borough Council Planning Obligations Strategy, Jul 2015
- Essex Design Guide, edition Oct 2005
- Building for Life 12, Design Council, 2015
- Active Design, Sports England, Oct 2015
- Various land promoters' representations.

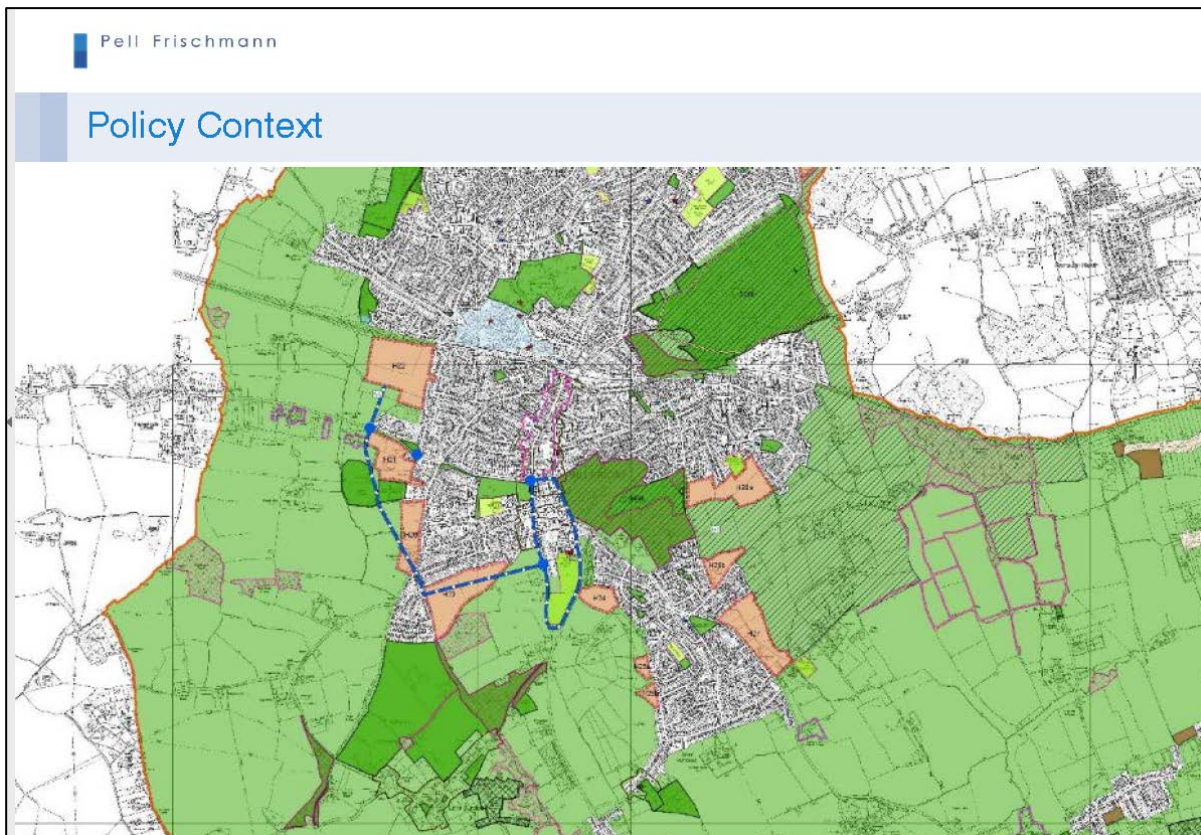
Appendix A – Stakeholder Presentation



Pell Frischmann

The Team

<p>Pell Frischmann master planners, environmental, transport and engineering disciplines;</p> <p>working closely with</p> <p>Basildon Borough Council and</p> <p>Essex County Council on this project</p>	<p>Other consultants Not directly on this project, however others working on related elements, e.g. site viability, landscape assessments, site ecology, etc.</p> <p>Stakeholders Land owners, land promoters, interest holders</p>
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Pell Frischmann

Deliverable and Viable Development Framework

- Feed into the local plan process to guide the development in the borough until 2034 including how much land should be allocated for new homes in this location (H20, H21, H22, H23) and how it could be aligned to facilitate the delivery of a relief route;
- Define the necessary infrastructure in order to deliver the proposals, including social infrastructure (schools, surgeries, parks etc.) to support local community and its growth;
- Prepare a framework to encourage delivering high quality design, attractive and sustainable forms of development;
- Work with the highways authorities to seek to realise improvements to the local road network and to deliver an appropriate network solution to serve both the new development and the surrounding community;
- Involve site stakeholders in the process of regeneration.

Principles of Active Design
(Sport England, 2015)

- Activity for all
- Walkable communities
- Connected walking & cycling routes
- Co-location of community facilities
- Network of multifunctional open space
- High quality streets and spaces
- Appropriate infrastructure

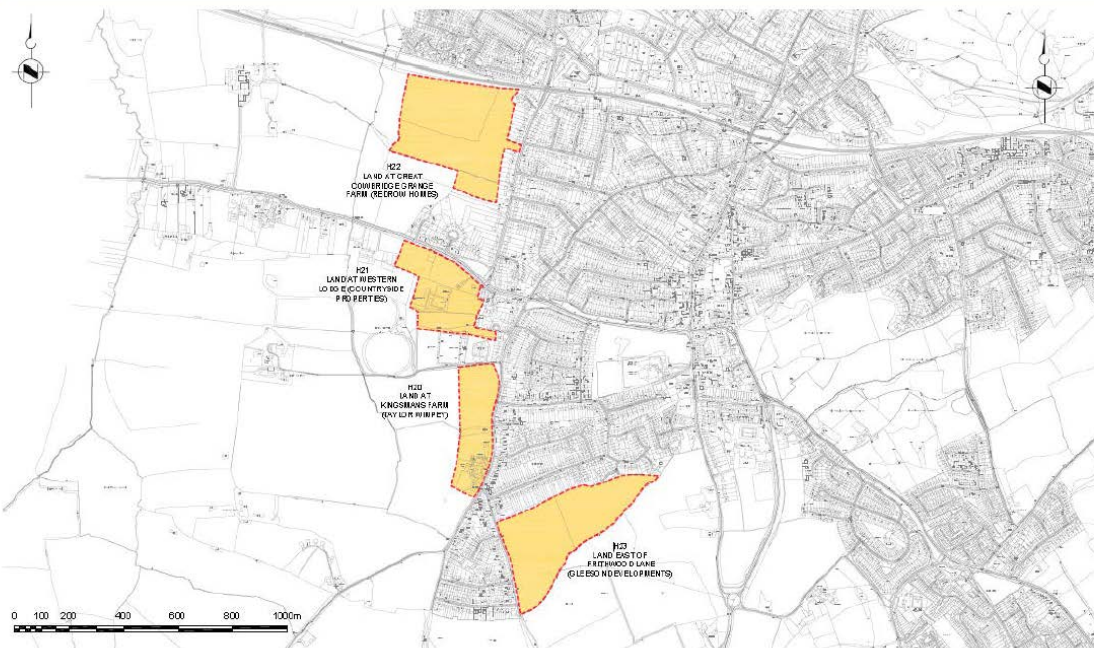
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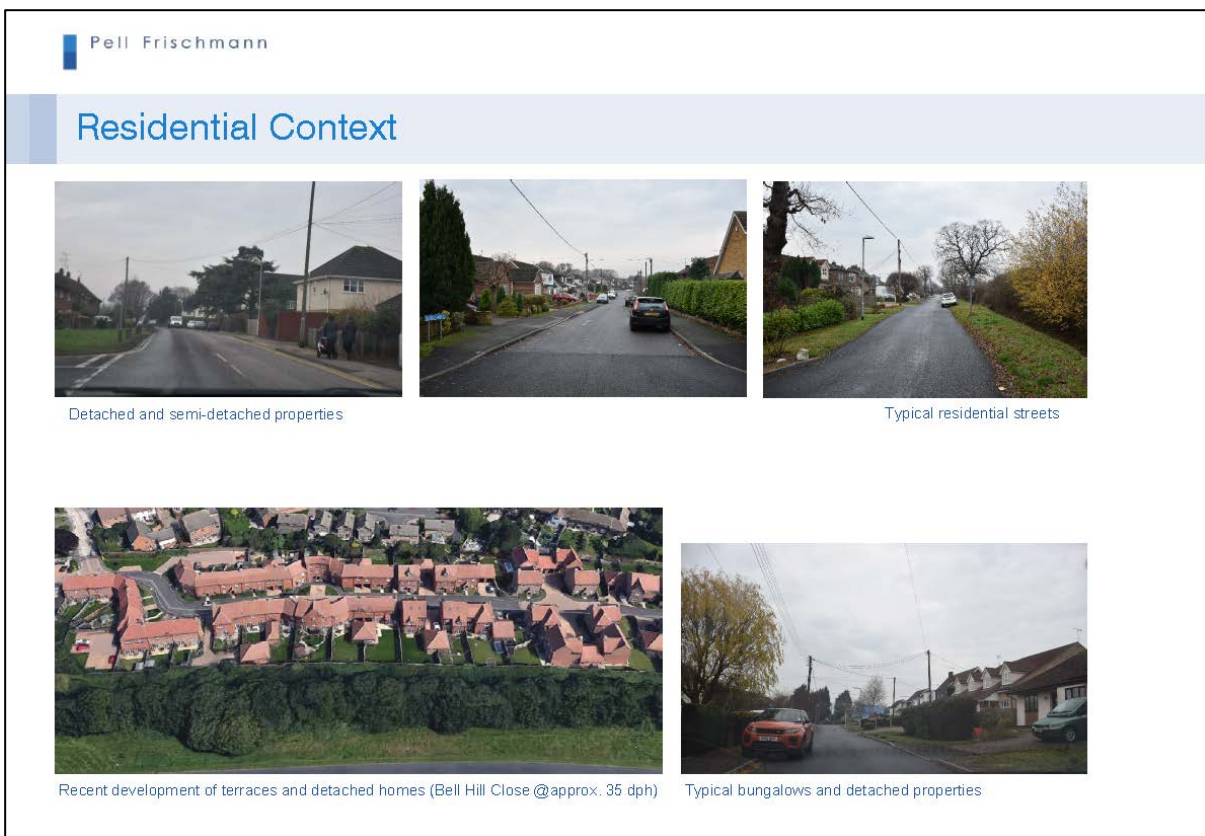
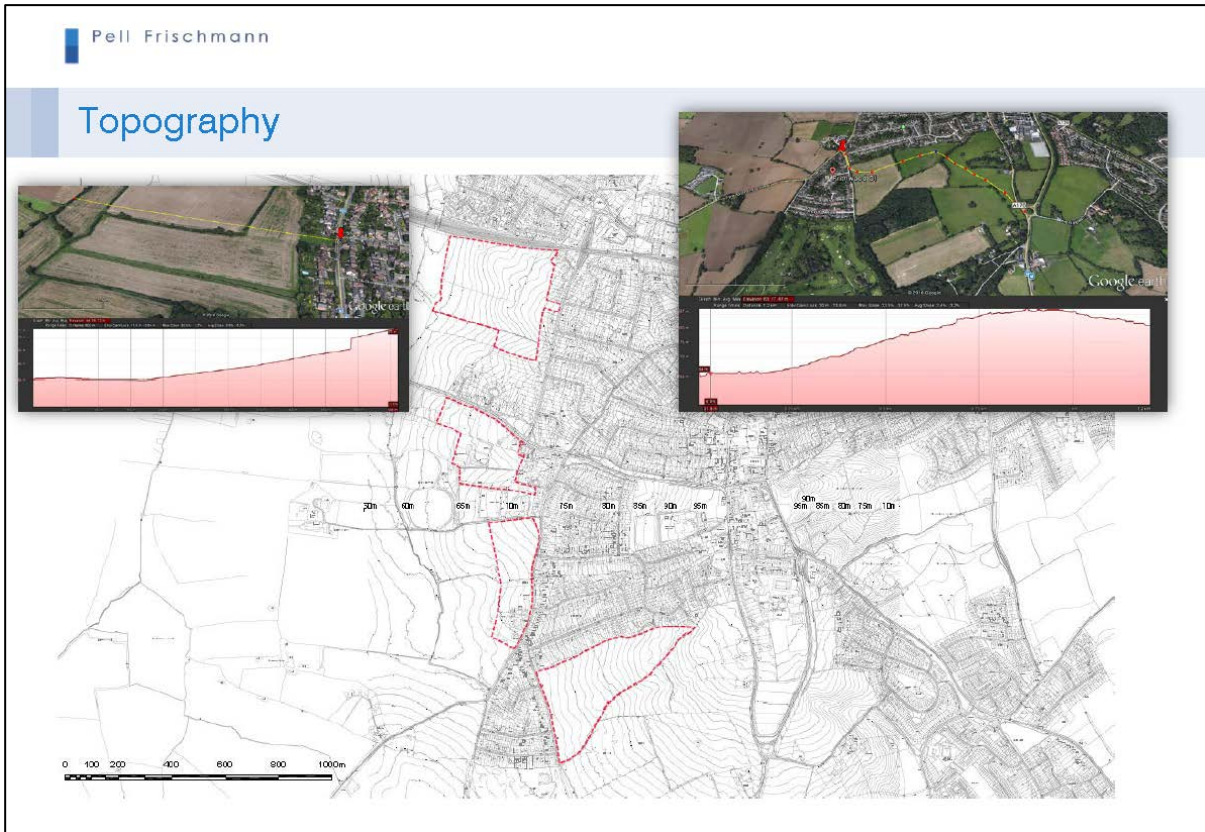
The Sites



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Land Interest





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Site Access



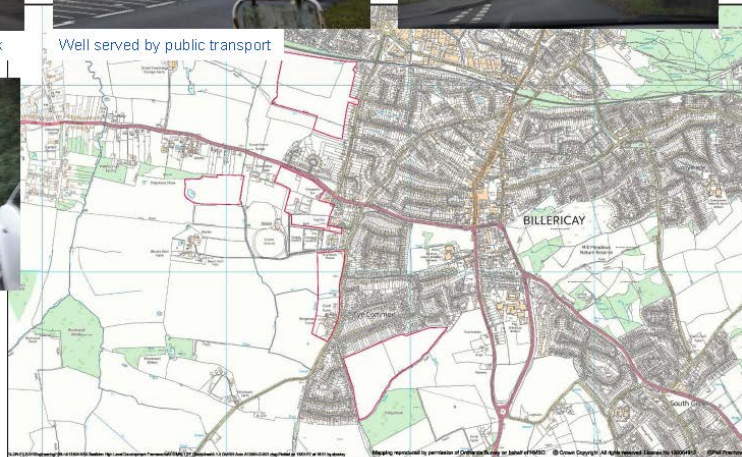
Good access to strategic transport network



Well served by public transport

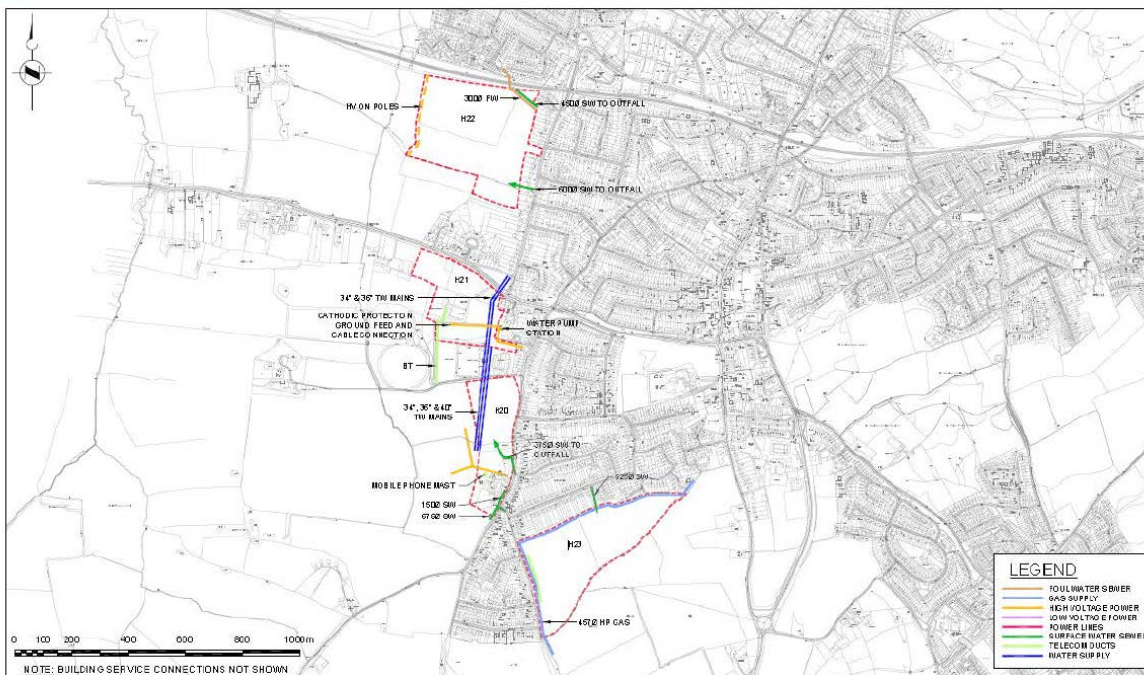


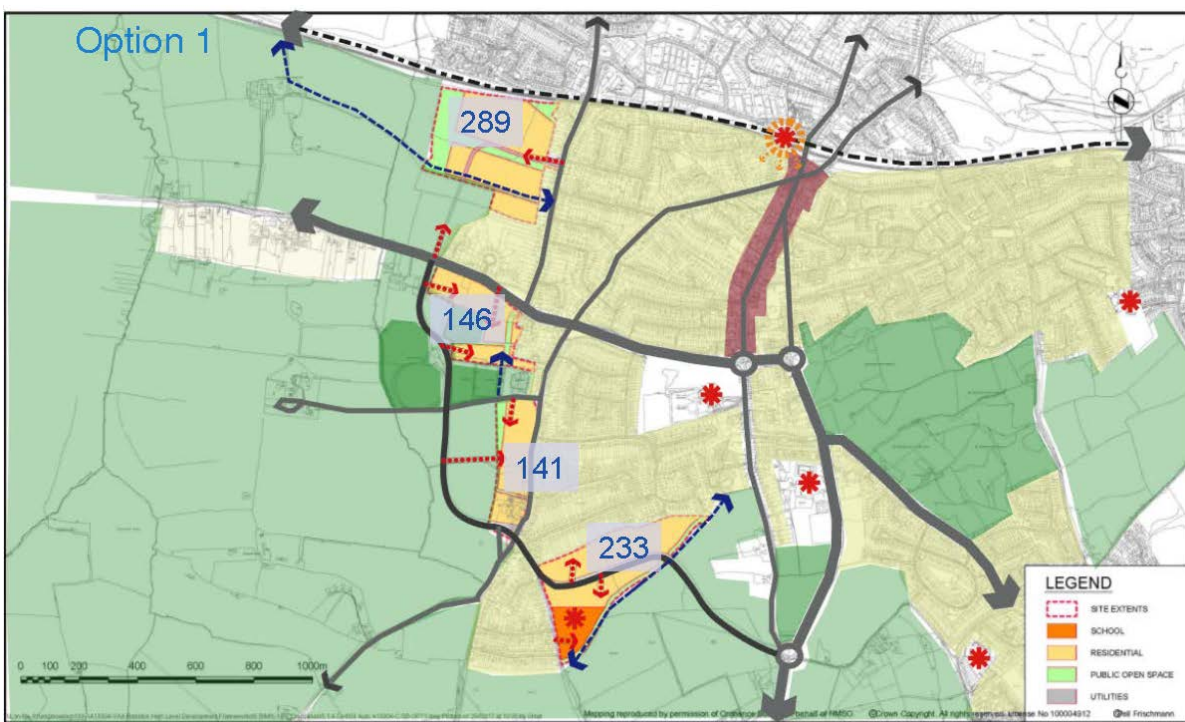
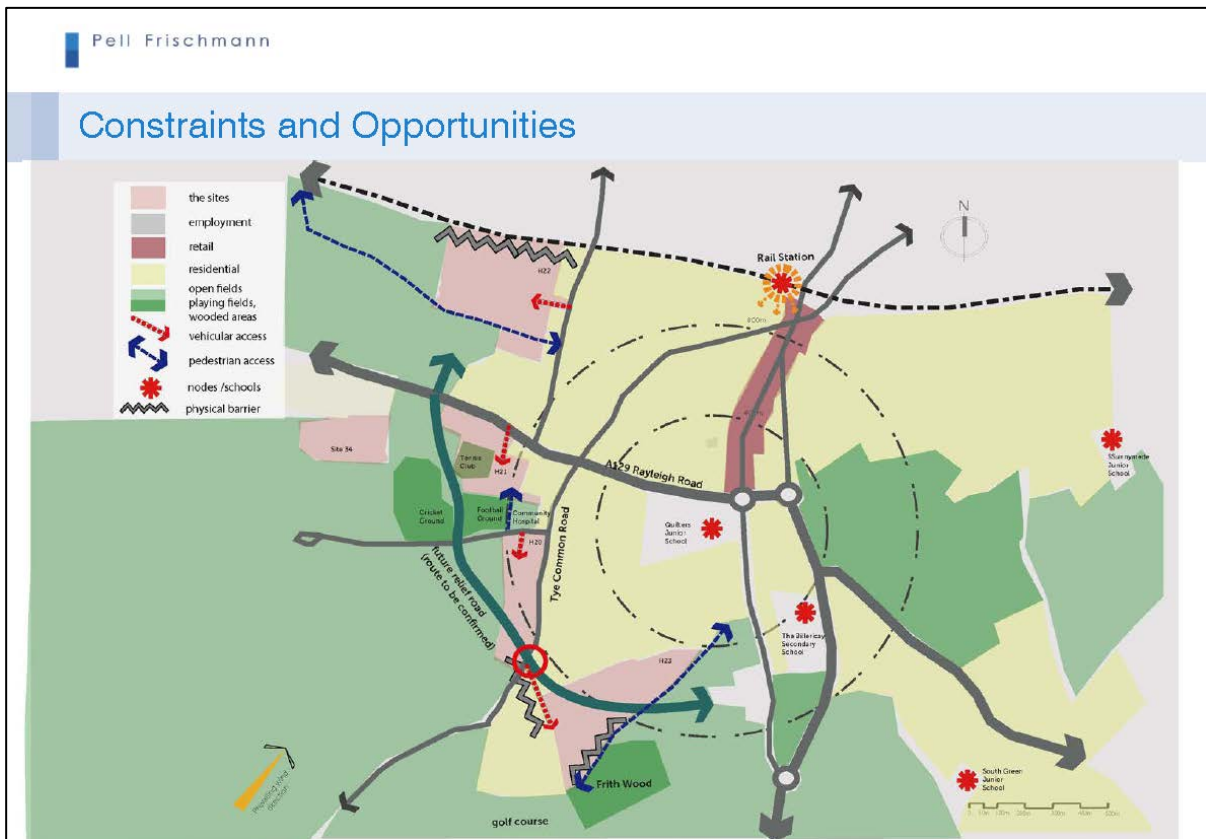
Blunts Wall Rd access to sports facilities

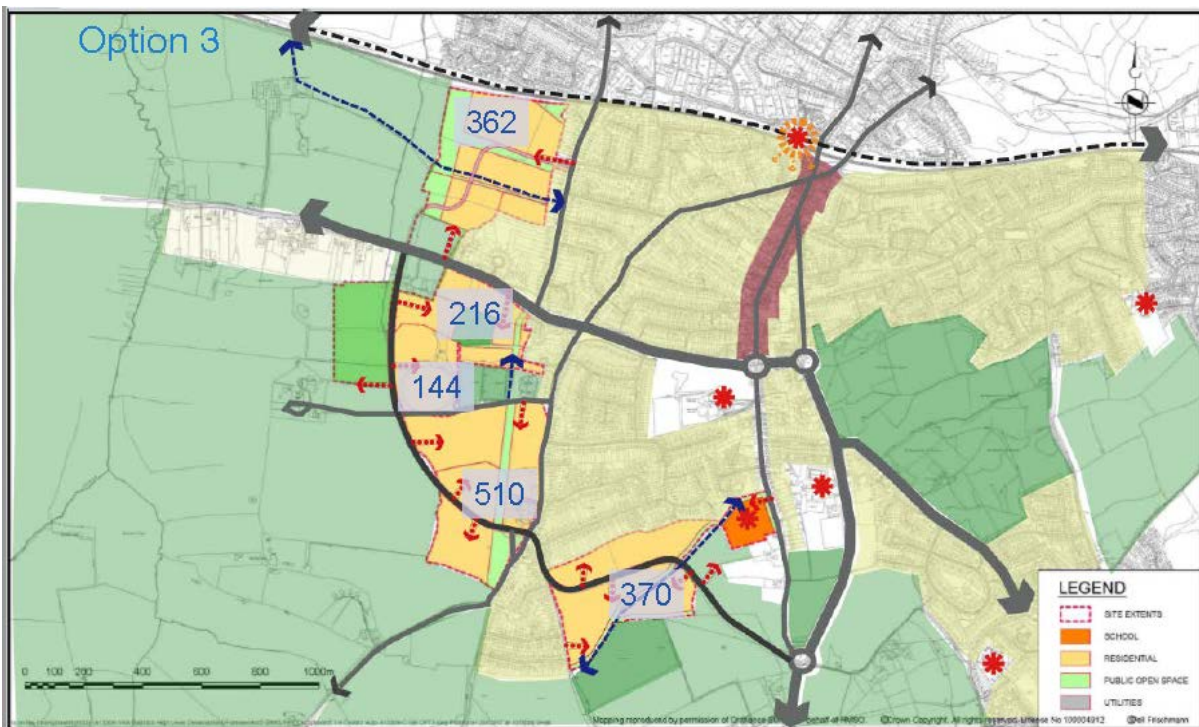
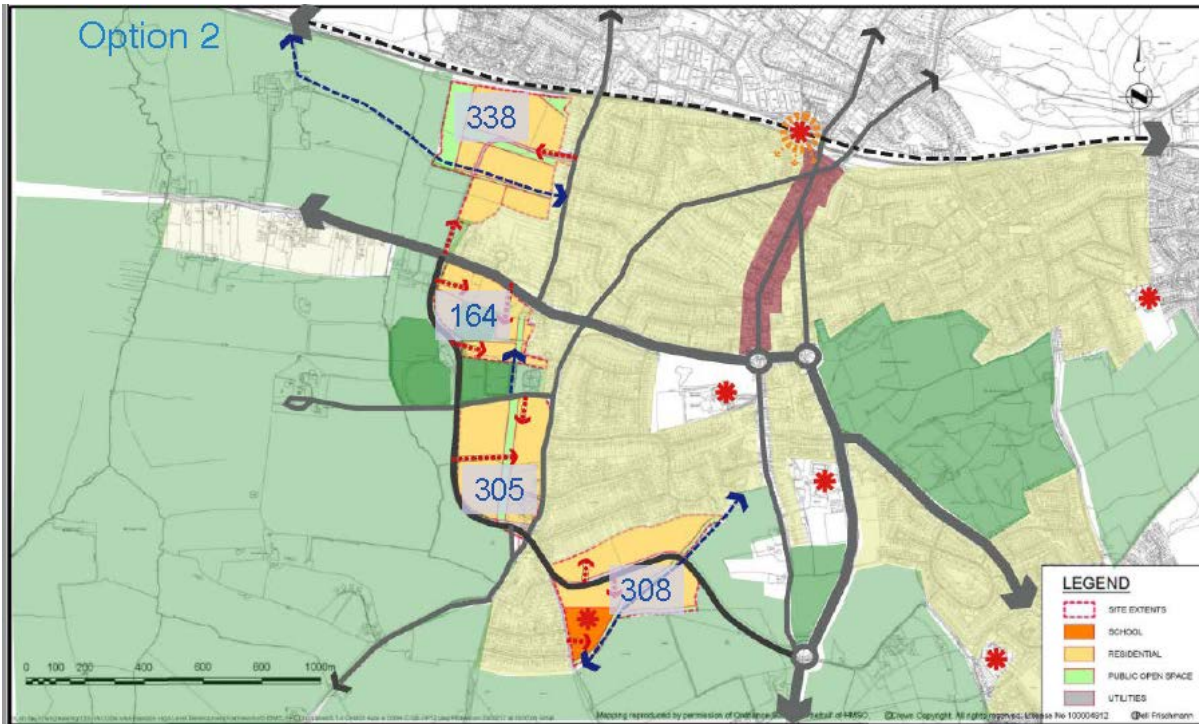


Pell Frischmann

Utilities







Development Options

H20 - 23 – Proposals for a total of 950 homes and an integrated highway relief route on land south of Billericay;

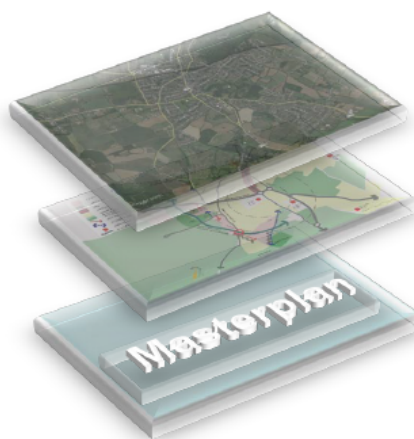
Option 1 – 808 homes (30dph)	Option 2 – 1,114 (30dph)	Option 3 – 1,607 (30dph)
H20 – 141 homes	H20 – 305 homes	H20 – 510 homes
H21 – 146 homes	H21 – 164 homes	H21 – 216 homes
H22 – 289 homes	H22 – 337 homes	H22 – 362 homes
H23 – 233 homes	H23 – 309 homes	H23 – 370 homes
Relief Road to the east of the Cricket Club	Relief Road to the east of the Cricket Club	Relief Road to the west of the Cricket Club
Primary School	Primary School	Primary School
		Former cricket gr. – 149 homes
		New cricket ground

Indicative improvements to strategic and local road network

- New relief road to form a south-western Billericay link road to ease congestion through the town centre, linking the Laindon Road / Noak Hill roundabout with London Road
- The new relief road will also provide the capacity to accommodate future traffic associated with proposed developments
- New arm at the existing roundabout
- Relief Road forms new junctions with Frithwood Lane and Tye Common Road (major changes to road geometry and priority)
- New junction with London Road
- Cycling and public transport improvements – facilitate modal shift towards active and sustainable transport

Objectives

- Feed into the local plan process to guide the development in the borough until 2034 including how much land should be allocated for new homes in this location (H20, H21, H22, H23) and how it could be aligned to facilitate the delivery of a relief route;
- Define the **necessary infrastructure** in order to deliver the proposals, including **social infrastructure (schools, surgeries, parks etc.)** to support **local community** and its growth;
- Prepare a framework to encourage delivering **high quality design**, attractive and sustainable forms of development;
- Work with the highways authorities to seek to realise improvements to the local road network and **to deliver an appropriate network solution to serve both the new development and the surrounding community**;
- **Involve site stakeholders** in the process of regeneration.



Thank You

Any questions?



Appendix B

HLDF Options Land Use Budgets

SW Billerica	sqm	res. units	sqm	res. units	sqm	res. units
	Option 1		Option 2		Option 3	
H20a	46,209	139	46,209	139	46,226	139
H20b			55,858	168	57,281	172
H20c					27,658	83
H20d					32,516	98
H21a	48,707	146	43,137	129	43,137	129
H21b			8,858	27	39,182	118
H22a	71,669	215	71,669	215	71,669	215
H22b	38,244	115	38,244	115	38,244	115
H22c			16,189	49	38,808	116
H22d					10,047	30
H23a	50,609	152	50,609	152	50,609	152
H23b	27,020	81	47,040	141	47,040	141
H23c			25,687	77	25,687	77
H cgr					58,769	176
Residential subtotal (Ha)	28.25		40.35		58.69	
Residential units (@30 dpha)		847		1,211		1,761
EY Child Yield**		76		109		158
Primary School Child Yield**		254		363		528
Sec. School Child Yield**		169		242		352
Primary School	2.00		2.00		2.00	
New Roads	1.68		1.68		2.37	
H20 /POS5,6	9,288		14,474		15,440	
H21 /POS4	5,974		5,974		5,974	
H22 /POS1, 2, 3	25,478		25,478		30,839	
H23 /POS7	10,701		14,784		14,784	
Cricket Ground relocated					52,895	
Tennis relocated			16,786		16,786	
Public Open Space subt (Ha)	5.14		6.07		11.99	
Total	37.07		50.11		75.05	

**EY 0.09 ch /100 dw; Primary Sch 0.3 ch /100 dw; Sec. Sch 0.2 ch /100 dw

(1FE = 210 places; 1 1/2 FE = 315 places; 2FE = 420 places; 2 1/2 FE = 525 places; 3FE = 630 places)

Residential units (@35 dpha)	989	1,412	2,054
Primary School Child Yield**	297	424	616

Open space required	Option 1	Option 2	Option 3
Urban parks and gardens	3.86	5.51	8.01
Natural semi natural open spa	5.55	7.93	11.53
Amenity green space	2.82	4.02	5.85
Outdoor sports facilities	3.35	4.78	6.95
Total required for SWB	15.57 ha	22.24 ha	32.35 ha

Open space standards	per 1,000 population
Urban parks and gardens	1.82
Natural and semi natural open space	2.62
Amenity green space	1.33
Outdoor sports facilities	1.58
Allotments and comm gardens	n/a
Cemeteries and churchyards	n/a

Appendix C

HLDF Options Traffic Trip Generation

Vehicular Trip Generation – Options 1, 2 and 3

Depending on option, the proposal is estimated to generate between 5,000 and 11,000 vehicle movements per day (some of those however, will be within the area).

Table C-1: Option 1 - Vehicular Trip Generation

	Plot Area (sq.m.)	FAR/housing density	Units	Vehicular trip generation										
				AM			PM			Daily				
				Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total		
Employment														
B1 - Business Park			0	0	0	0	0	0	0	0	0	0	0	0
B2 - Industrial Park			0	0	0	0	0	0	0	0	0	0	0	0
B8 - Warehousing			0	0	0	0	0	0	0	0	0	0	0	0
Sub-Total	0		0	0	0	0	0	0	0	0	0	0	0	0
Residential														
Mixed Housing	282500	~30	847	180	395	599	374	279	623	2322	2413	4728		
Education														
School	20000		254	74	63	141	19	15	36	220	219	439		
TOTAL	302500			254	458	740	393	294	659	2542	2632	5167		

Table C-2: Option 2 - Vehicular Trip Generation

	Plot Area (sq.m.)	FAR/housing density	Units	Vehicular trip generation										
				AM			PM			Daily				
				Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total		
Employment														
B1 - Business Park			0	0	0	0	0	0	0	0	0	0	0	0
B2 - Industrial Park			0	0	0	0	0	0	0	0	0	0	0	0
B8 - Warehousing			0	0	0	0	0	0	0	0	0	0	0	0
Sub-Total	0		0	0	0	0	0	0	0	0	0	0	0	0
Residential														
Mixed Housing	403500	~30	1211	257	565	856	535	399	891	3320	3450	6759		
Education														
School	20000		363	106	90	202	28	21	51	314	314	627		
TOTAL	423500			363	655	1058	563	420	942	3634	3764	7386		

Table C-3: Option 3 - Vehicular Trip Generation

	Plot Area (sq.m.)	FAR/housing density	Units	Vehicular trip generation									
				AM			PM			Daily			
				Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	
Employment													
B1 - Business Park			0	0	0	0	0	0	0	0	0	0	0
B2 - Industrial Park			0	0	0	0	0	0	0	0	0	0	0
B8 - Warehousing			0	0	0	0	0	0	0	0	0	0	0
Sub-Total	0		0	0	0	0	0	0	0	0	0	0	0
Residential													
Mixed Housing	586900	~30	1761	374	821	1245	777	581	1296	4828	5017	9829	
Education													
School	20000		528	154	131	294	40	30	74	456	456	912	
TOTAL	606900			528	952	1539	817	611	1370	5284	5473	10741	

Public Transport Trip Generation – Options 1, 2 and 3

A similar exercise has been carried out for trips made by public transport, the results are summarised below. The development is estimated to generate about 1,050 – 2,200 train trips, whereas other modes are significantly lower (ca 20 by bus and 15-30 by bicycle).

Table C-4: Option 1 – Public Transport Trip Generation

	Train			Bus			Bicycle		
	AM	PM	Daily	AM	PM	Daily	AM	PM	Daily
	Total	Total	Total	Total	Total	Total	Total	Total	Total
Employment									
B1 - Business Park	0	0	0	0	0	0	0	0	0
B2 - Industrial Park	0	0	0	0	0	0	0	0	0
B8 - Warehousing	0	0	0	0	0	0	0	0	0
Sub-Total	0	0	0	0	0	0	0	0	0
Residential									
Mixed Housing	87	145	1060	1	1	9	1	2	15
Education									
School									
TOTAL	87	145	1060	1	1	9	1	2	15

Table C-5: Option 2 - Public Transport Trip Generation

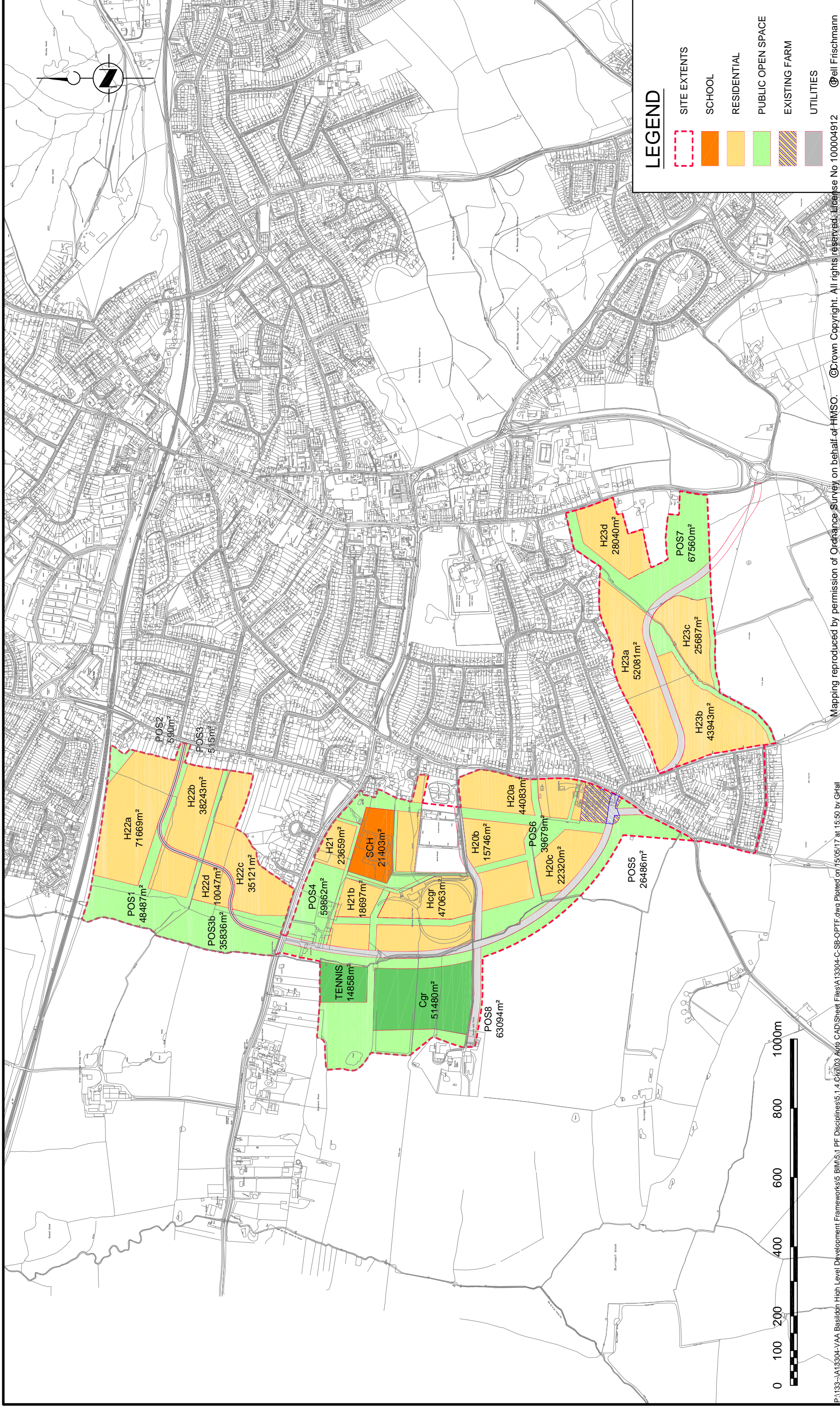
	Train			Bus			Bicycle		
	AM Total	PM Total	Daily Total	AM Total	PM Total	Daily Total	AM Total	PM Total	Daily Total
Employment									
B1 - Business Park	0	0	0	0	0	0	0	0	0
B2 - Industrial Park	0	0	0	0	0	0	0	0	0
B8 - Warehousing	0	0	0	0	0	0	0	0	0
Sub-Total	0	0	0	0	0	0	0	0	0
Residential									
Mixed Housing	124	207	1515	1	2	12	1	3	21
Education									
School									
TOTAL	124	207	1515	1	2	12	1	3	21

Table C-6: Option 3 - Public Transport Trip Generation

	Train			Bus			Bicycle		
	AM Total	PM Total	Daily Total	AM Total	PM Total	Daily Total	AM Total	PM Total	Daily Total
Employment									
B1 - Business Park	0	0	0	0	0	0	0	0	0
B2 - Industrial Park	0	0	0	0	0	0	0	0	0
B8 - Warehousing	0	0	0	0	0	0	0	0	0
Sub-Total	0	0	0	0	0	0	0	0	0
Residential									
Mixed Housing	181	302	2203	1	2	18	2	4	31
Education									
School									
TOTAL	181	302	2203	1	2	18	2	4	31

Appendix D

HLDF Preferred Concept CAD Layout



LEGEND

- SITE EXTENTS
- RESIDENTIAL
- PUBLIC OPEN SPACE
- EXISTING FARM
- UTILITIES

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**BASILDON
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SW BILLERICAY
FINAL OPTION

Drawing No.
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Revision
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