

Brentwood Borough Council Draft Regulation 19 Local Plan (January 2019)

Habitats Regulations Assessment

Brentwood Borough Council

January 2019

Quality information

Prepared by

George Wilkinson
Ecologist

Verified by

Isla Hoffmann Heap
Senior Ecologist

Approved by

James Riley
Technical Director

Revision History

Revision	Revision date	Details	Authorized	Name	Position
0	25/10/2018	Draft for Client review.	JR	James Riley	Technical Director
1	16/01/2019	Final issue following client comments.	JR	James Riley	Technical Director
2	25/01/2019	Second Issue following client comments and update to Plan.	JR	James Riley	Technical Director
3	30/01/2019	Third issue following client comments and update to Plan.	JR	James Riley	Technical Director

Prepared for:

Brentwood District Council

Prepared by:

AECOM Limited
Midpoint, Alençon Link
Basingstoke
Hampshire RG21 7PP
United Kingdom

T: +44(0)1256 310200
aecom.com

Limitations

AECOM Infrastructure and Environment UK Limited (“AECOM”) has prepared this Report for the sole use of Brentwood Borough Council (“Client”) in accordance with the terms and conditions of appointment. No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by AECOM. This Report may not be relied upon by any other party without the prior and express written agreement of AECOM.

Where any conclusions and recommendations contained in this Report are based upon information provided by others, it has been assumed that all relevant information has been provided by those parties and that such information is accurate. Any such information obtained by AECOM has not been independently verified by AECOM, unless otherwise stated in the Report. AECOM accepts no liability for any inaccurate conclusions, assumptions or actions taken resulting from any inaccurate information supplied to AECOM from others.

The methodology adopted and the sources of information used by AECOM in providing its services are outlined in this Report. The work described in this Report was undertaken between October 2018 and January 2019 and is based on the conditions encountered and the information available during the said period of time. The scope of this Report and the services are accordingly factually limited by these circumstances. AECOM disclaims any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to AECOM’s attention after the date of the Report.

Copyright

© 2019 AECOM Limited. All Rights Reserved.

Table of Contents

1. Introduction	7
Background to the Project	7
Legislation	7
Scope of the Project	8
This Report	9
2. Methodology	10
Introduction	10
HRA Task 1: Test of Likely Significant Effects	10
HRA Task 2: Appropriate Assessment (AA)	11
HRA Task 3: Avoidance & Mitigation	12
Principal Other Plans and Projects That May Act 'In Combination'	12
3. Pathways of Impact	14
Introduction	14
Recreational Pressure	14
Atmospheric Pollution	17
Water Quality	18
4. Summary of Likely Significant Effects	20
5. Appropriate Assessment: Epping Forest SAC	21
Recreational Pressure	21
Atmospheric Pollution	21
6. Appropriate Assessment: Essex Coastal European Sites	23
Recreational Pressure	23
Water Quality	24
7. Summary of Recommendations and Conclusions	27
Appendix A European Designated Sites Background	28
Epping Forest SAC	28
Thames Estuaries and Marshes SPA and Ramsar Site	29
Essex Estuaries SAC	30
Crouch and Roach SPA and Ramsar Site	31
Benfleet and Southend Marshes SPA and Ramsar Site	32
Blackwater Estuary SPA and Ramsar Site	33
Appendix B Figures	35
Appendix C Likely Significant Effects Test of Plan Policies	36

Figures

Figure 1: Four Stage Approach to Habitats Regulations Assessment (CLG, 2006)	10
--	----

Tables

Table 1: Housing levels to be delivered across authorities surrounding Brentwood Borough	12
Table 2: Main sources and effects of air pollutants on habitats and species	17
Table 3: Wastewater Treatment Works with Catchments Serving Settlements Identified to Provide New Development in the Local Plan.....	18
Table 4: The Recreational Zone of Influence for Essex Coastal European Sites	23

1. Introduction

Background to the Project

- 1.1 AECOM has been appointed by Brentwood Borough Council to assist the Council in undertaking a Habitats Regulations Assessment (HRA) of its revised Draft Regulation 19 Local Plan (November 2019) (hereafter referred to as the 'Plan'). The Plan sets out the Council's proposed strategy to meet economic and housing needs in the Borough up to 2033. The Plan sets out development management policies and infrastructure requirements. The objective of this assessment is to identify any aspects of the Plan that would cause an adverse effect on the integrity of Natura 2000 sites, otherwise known as European sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs), (as a matter of Government policy) Ramsar sites, and 'Potential' sites for any such designations, either in isolation or in combination with other plans and projects. Advice on appropriate policy mechanisms for delivering mitigation where such effects have been identified is also provided.
- 1.2 In January 2018, Habitats Regulations Assessment was undertaken of residential and employment site allocations for the Plan¹. This is not being revisited within this assessment.

Legislation

- 1.3 The need for Appropriate Assessment is set out within Article 6 of the EC Habitats Directive 1992, and transposed into British law by the Conservation of Habitats and Species Regulations 2017². The ultimate aim of the Directive is to "*maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest*" (Habitats Directive, Article 2(2)). This aim relates to habitats and species rather than the European sites themselves, although the sites have a significant role in delivering favourable conservation status.
- 1.4 The Habitats Directive applies the Precautionary Principle³ to European sites. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the site(s) in question. Plans and projects with predicted adverse impacts on European sites may still be permitted if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.
- 1.5 In order to ascertain whether or not site integrity will be affected, an Appropriate Assessment should be undertaken of the plan or project in question:

¹ AECOM. (January 2018) Habitats Regulations Assessment of Brentwood District Council Draft Local Plan: Preferred Site Allocations Regulation 18 Consultation (January 2018). Brentwood District Council

² The Regulations were amended in late 2018 but none of the amendments involve changes to HRA practice or the legal tests that must be applied

³ The Precautionary Principle, which is referenced in Article 191 of the Treaty on the Functioning of the European Union, has been defined by the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2005) as:
"*When human activities may lead to morally unacceptable harm [to the environment] that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. The judgement of plausibility should be grounded in scientific analysis*".

Box 1: The legislative basis for Appropriate Assessment

Habitats Directive 1992

Article 6 (3) states that:

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives.”

Conservation of Habitats and Species Regulations 2017 (as amended)

The Regulations state that:

“A competent authority, before deciding to ... give any consent for a plan or project which is likely to have a significant effect on a European site ... shall make an appropriate assessment of the implications for the site in view of that site's conservation objectives... The authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site”.

- 1.6 Over time the phrase ‘Habitats Regulations Assessment’ has come into wide currency to describe the overall process set out in the Habitats Directive from screening through to Imperative Reasons of Overriding Public Interest (IROPI). This has arisen in order to distinguish the process from the individual stage described in the law as an ‘Appropriate Assessment’. Throughout this report we use the term Habitats Regulations Assessment for the overall process and restrict the use of Appropriate Assessment to the specific stage of that name.

Scope of the Project

- 1.7 There is no pre-defined guidance that dictates the physical scope of a HRA of a Local Plan document. Therefore, in considering the physical scope of the assessment we were guided primarily by the identified impact pathways rather than by arbitrary ‘zones’. Current guidance suggests that the following European sites be included in the scope of assessment:
- All sites within the Brentwood Borough boundary; and
 - Other sites shown to be linked to development within the Brentwood Borough boundary through a known ‘pathway’ (discussed below).
- 1.8 Briefly defined, pathways are routes by which a change in activity provided within a Local Plan document can lead to an effect upon an internationally designated site. DCLG guidance states that the HRA should be ‘*proportionate to the geographical scope of the [plan policy]*’ and that ‘*an AA need not be done in any more detail, or using more resources, than is useful for its purpose*’ (CLG, 2006, p.6)⁴. More recently, the Court of Appeal⁵ ruled that providing the Council (as competent authority) was duly satisfied that proposed mitigation could be ‘*achieved in practice*’ such that the proposed development would have no adverse effect, then this would suffice. This ruling has since been applied to a planning permission (rather than a Local Plan document)⁶. In this case the High Court ruled that for ‘*a multistage process, so long as there is sufficient information at any particular stage to enable the authority to be satisfied that the proposed mitigation can be achieved in practice it is not necessary for all matters concerning mitigation to be fully resolved before a decision maker is able to conclude that a development will satisfy the requirements of the Habitats Regulations*’.
- 1.9 No European sites lie within Brentwood Borough. However, the following sites are sufficiently close to the Borough and could be subject to impacts stemming from the Plan (distances from the Borough are in brackets):
- Epping Forest SAC (6km west of the borough, 9km west of the nearest small village (Navestock Heath) and 13km west of the nearest suburb (Pilgrims Hatch));
 - Thames Estuary and Marshes SPA and Ramsar site (8.3km south-east);

⁴ CLG. (2006) Planning for the Protection of European Sites, Consultation Paper.

⁵ No Adastral New Town Ltd (NANT) v Suffolk Coastal District Council Court of Appeal, 17th February 2015.

⁶ High Court case of R (Devon Wildlife Trust) v Teignbridge District Council, 28 July 2015.

- Essex Estuaries SAC (12.4km east);
 - Crouch and Roach Estuaries SPA and Ramsar site (12.4km east);
 - Benfleet and Southend Marshes SPA and Ramsar site (13.4km south-east); and
 - Blackwater Estuary SPA and Ramsar site (19.8km north-east).
- 1.10 Other European sites located along the Essex coast that were considered include the following sites (distances from the Borough are in brackets):
- Foulness Estuary SPA and Ramsar site (more than 27km);
 - Dengie SPA and Ramsar site (more than 35km);
 - Colne Estuary SPA and Ramsar site (more than 37km);
 - Stour and Orwell Estuary SPA and Ramsar site (more than 52km); and
 - Hamford Water SPA and Ramsar site (more than 57km).
- 1.11 Due to the considerable distances of the European sites listed in Paragraph 1.10, which are located well outside of the Borough's boundary, it is not considered realistic for impact pathways linking to the Plan to exist alone or in combination with these sites. This has been supported by the results of visitor survey information collected for these European sites to inform the Essex Coast Recreational Disturbance Avoidance & Mitigation Strategy (RAMS). As such, these European sites are not discussed further in this report.
- 1.12 The European sites located along the Essex coast are hereafter referred to as the 'Essex Coastal European sites'.
- 1.13 The reasons for the designation of the European sites considered in this report, together with current trends in habitat quality and pressures on these sites, are set out at Appendix A. The locations of the European sites considered in this report are illustrated in Appendix B, Figure B1.
- 1.14 In order to fully inform the screening process, a number of recent studies have been consulted to determine likely significant effects that could arise from the Plan. These include:
- Final Water Resources Management Plan 2014. Essex & Suffolk Water. October 2014;
 - Future development proposed (and, where available, HRAs) for Barking & Dagenham, Basildon, Castle Point, Chelmsford, East Hertfordshire District Epping Forest, Harlow, Havering, Maldon, Redbridge, Rochford, Southend-on-Sea, Thurrock, and Waltham Forest Districts;
 - Recreational activity, tourism and European site recreational catchment data has been used where this exists for individual European sites, although this is limited. In such circumstances where data does not exist then this HRA has used appropriate proxy information from other European sites designated for similar features and in similar settings that has been agreed by Natural England; and,
 - Multi Agency Geographic Information for the Countryside (MAGIC) and its links to SSSI citations and the JNCC website (www.magic.gov.uk).

This Report

- 1.15 Chapter 2 of this report explains the process by which the HRA has been carried out. Chapter 3 explores the relevant pathways of impact. Chapter 4 summarises the Likely Significant Effects test of Plan Policies to determine which present potential scope for impacts on European sites (specifically Epping Forest SAC and Essex Coastal European Sites). The Likely Significant Effects test itself is undertaken in Appendix C. Chapters 5 and 6 provide Appropriate Assessment in relation to the impact pathways that could not be 'screened out' in Appendix C, and include recommendations to ensure the Plan does not affect the integrity of any European sites. Key findings and recommendations are summarised in Chapter 7.

2. Methodology

Introduction

- 2.1 The HRA has been carried out in the continuing absence of formal central Government guidance, although general EC guidance on HRA does exist⁷. The DCLG released a consultation paper on the Appropriate Assessment of Plans in 2006⁸. As yet, no further formal guidance has emerged. However, Natural England has produced its own internal guidance⁹, as has the RSPB¹⁰. Both of these have been referred to in undertaking this HRA.
- 2.2 Figure 1 below outlines the stages of HRA according to current draft DCLG guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the plan until no significant adverse effects remain.

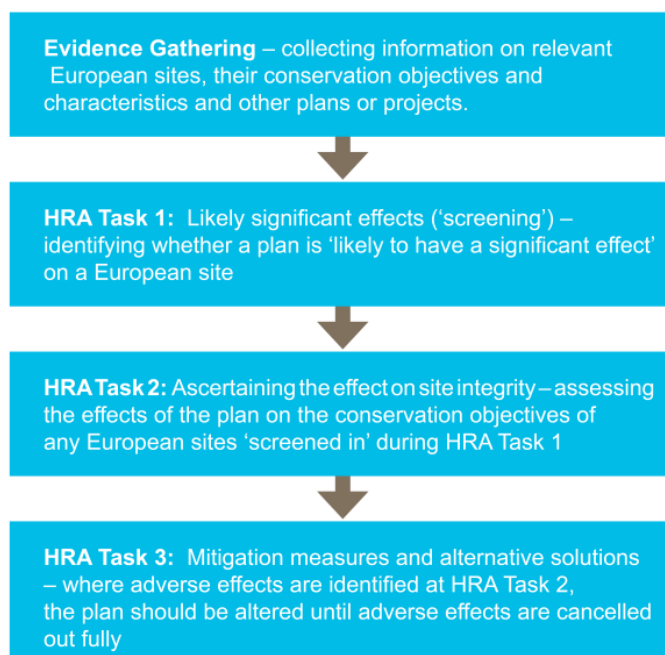


Figure 1: Four Stage Approach to Habitats Regulations Assessment (CLG, 2006)

HRA Task 1: Test of Likely Significant Effects

- 2.3 Following evidence gathering, the first stage of any Habitats Regulations Assessment is a Test of Likely Significant Effects (TOLSE). This is essentially a risk assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:
- "Is the Plan, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"*
- 2.4 The objective is to 'screen out' those plans and projects that can, without any detailed appraisal, be said to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction with European sites.

⁷ European Commission. (2001) *Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive*.

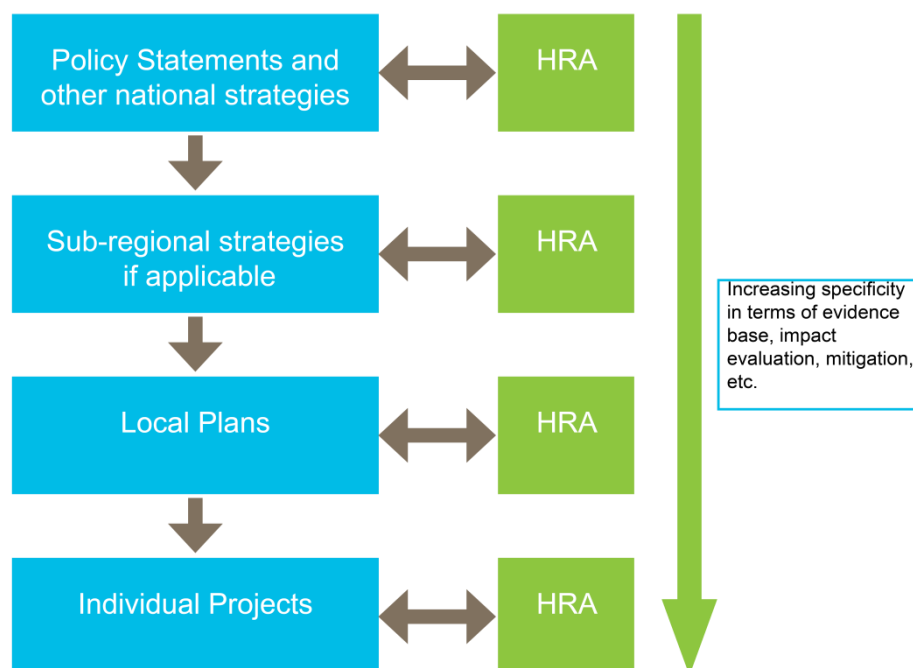
⁸ CLG (2006) *Planning for the Protection of European Sites*, Consultation Paper.

⁹ http://www.ukmpas.org/pdf/practical_guidance/HRGN1.pdf

¹⁰ Dodd, A.M., Cleary, B.E., Dawkins, J.S., Byron, H.J., Palframan, L.J. & Williams, G.M. (2007) *The Appropriate Assessment of Spatial Plans in England: a guide to why, when and how to do it*. The RSPB, Sandy.

- 2.5 In evaluating significance, AECOM have relied on our professional judgement as well as the results of previous stakeholder consultation regarding development impacts on the European sites considered within this assessment.
- 2.6 The level of detail in land use plans concerning developments that will be permitted under the plans is rarely sufficient to make a detailed quantification of adverse effects. It is therefore necessary to be cognisant of the fact that HRAs for plans can be tiered, with assessments being undertaken with increasing specificity at lower tiers. This is in line with the Department of Communities and Local Government guidance and Court rulings that the level of detail of the assessment, whilst meeting the relevant requirements of the Conservation Regulations, should be 'appropriate' to the level of plan or project that it addresses. This 'tiering' of assessment is summarised in Box 2.

Box 2: Tiering in HRA of Land Use Plans



- 2.7 On these occasions the advice of Advocate-General Kokott¹¹ to the European Court of Justice is worth considering. She commented that: *'It would ...hardly be proper to require a greater level of detail in preceding plans [rather than planning applications] or the abolition of multi-stage planning and approval procedures so that the assessment of implications can be concentrated on one point in the procedure. Rather, adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision of the plan. This assessment is to be updated with increasing specificity in subsequent stages of the procedure'* [emphasis added].

HRA Task 2: Appropriate Assessment (AA)

- 2.8 Where it is determined that a conclusion of 'no likely significant effect' cannot be drawn, the analysis has proceeded to the next stage of HRA known as Appropriate Assessment. Case law has clarified that 'appropriate assessment' is not a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to Appropriate Assessment.

¹¹ Opinion of Advocate General Kokott, 9th June 2005, Case C-6/04. Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland, paragraph 49.
<http://curia.europa.eu/juris/document/document.jsf?docid=58359&doclang=EN>

- 2.9 A 2018 decision by the European Court of Justice¹² (ECJ) concludes that measures intended to avoid or reduce the harmful effects of a proposed project on a European site, but which are not an integral part of the project or plan, may no longer be taken into account by competent authorities at the likely significant effects stage of HRA, essentially meaning that the role of avoidance and measures should be discussed in the subsequent Appropriate Assessment stage instead of the TOLSE stage.

HRA Task 3: Avoidance & Mitigation

- 2.10 Where necessary, measures will be recommended for incorporation into the Plan in order to avoid or mitigate adverse effects on European sites. There is considerable precedent concerning the level of detail that a Local Plan document needs to contain regarding mitigation for recreational impacts on European sites. The implication of this precedent is that it is not necessary for all measures that will be deployed to be fully developed prior to adoption of the Local Plan, but the Local Plan must provide an adequate policy framework within which these measures can be delivered.
- 2.11 When evaluating significance, AECOM has relied on professional judgement as well as the results of previous stakeholder consultation regarding development impacts on the European sites considered within this assessment.
- 2.12 When discussing mitigation for a Local Plan document, one is concerned primarily with the policy framework to enable the delivery of such mitigation rather than the details of the mitigation measures themselves since the Local Plan document is a high-level policy document.

Principal Other Plans and Projects That May Act ‘In Combination’

- 2.13 In practice, in combination assessment is of greatest relevance when the plan would otherwise be screened out because its individual contribution is inconsequential. For the purposes of this assessment, we have determined that, due to the nature of the identified impacts, the key other plans and projects relate to the additional housing and commercial/industrial development proposed for other relevant Essex, Hertfordshire and London authorities over the lifetime of the Plan (Table 1). These were selected if they related to bordering authorities or if the authority encompassed one of the European designated sites discussed (e.g. Southend-on-Sea, within which the Benfleet and Southend Marshes SPA and Ramsar site is located).

Table 1: Housing levels to be delivered across authorities surrounding Brentwood Borough

Local Authority	Total housing provided
Epping Forest	11,400 (to 2033) ¹³
Havering	17,550 (to 2031) ¹⁴
Barking and Dagenham	17,850 (to 2024/25) ¹⁵
Basildon	15,260 (to 2034) ¹⁶
Uttlesford	These three authorities with Epping Forest District are working together as part of an HMA. Where impacts in combination such as air quality impacts are considered, these
East Hertfordshire	

¹² People Over Wind and Sweetman v Coillte Teoranta (C-323/17).

¹³ <http://www.efdclocalplan.org/wp-content/uploads/2017/12/Submission-Version-Local-Plan.pdf> [accessed 24/10/2018]

¹⁴ https://www.havering.gov.uk/download/downloads/id/1567/proposed_submission_for_the_local_plan.pdf [accessed 24/10/2018]

¹⁵ <https://www.lbld.gov.uk/wp-content/uploads/2014/10/Adopted-Core-Strategy.pdf> [accessed 24/10/2018]

¹⁶ <http://www.basildon.gov.uk/CHttpHandler.ashx?id=6599&p=0> [accessed 24/10/2018]

Harlow	assessments will be based in the level of development provided within the HMA.
Chelmsford	18,515 (to 2036) ¹⁷
Havering	17,550 (2016 - 2031) ¹⁸
Redbridge	16,845 (2015-2030) ¹⁹
Waltham Forest	10,320 (2012 - 2026) ²⁰
Castle Point	No details on housing allocation provided; awaiting new local plan.
Southend-on-Sea	No details on housing allocation provided; awaiting new local plan.
Rochford	4,600 (to 2021) ²¹
Maldon	4,650 (to 2029) ²²
Thurrock	10,010 (to 2021) ²³
Waltham Forest	10,320 (to 2026) ²⁴

- 2.14 The Minerals and Waste Development Plans for Essex, London and Suffolk are also of some relevance, since these may contribute to increased vehicle movements on the road network within Brentwood Borough (and thereby contribute to air quality impacts). The Essex and Suffolk Local Transport Plans to 2031 will also be important in terms of encouraging sustainable transport. However, the major impact is likely to be that of housing and commercial development within the surrounding districts, as set out in Local Plans. These have therefore been the main focus of the examination of cumulative 'in combination' effects with regard to this HRA.
- 2.15 In relation to recreational activity, the Epping Forest Management Plan and visitor surveys have been consulted for their plans and projects that may affect European sites in combination with development in Epping Forest District.

¹⁷<https://www.chelmsford.gov.uk/planning-and-building-control/planning-policy-and-new-local-plan/new-local-plan/local-plan-examination/> [accessed 24/10/2018]

¹⁸https://www.havering.gov.uk/download/downloads/id/1909/lbhlpl1_-_proposed_submission_local_plan_2016-2031.pdf [accessed 24/10/2018]

¹⁹https://www.redbridge.gov.uk/media/2268/final-web-pdf_redbridge-local-plan_reduced.pdf [accessed 24/10/2018]

²⁰<https://branding.walthamforest.gov.uk/Documents/adopted-core-strategy.pdf> [accessed 24/10/2018]

²¹https://www.rochford.gov.uk/sites/default/files/planningpolicy_cs_adoptedstrategy.pdf [accessed 24/10/2018]

²²http://www.maldon.gov.uk/download/downloads/id/14807/approved_maldon_district_local_development_plan_2014-2029.pdf [accessed 24/10/2018]

²³https://www.thurrock.gov.uk/sites/default/files/assets/documents/core_strategy_adopted_2011_amended_2015.pdf [accessed 24/10/2017]

²⁴<https://static.walthamforest.gov.uk/sp/Documents/adopted-core-strategy.pdf> [accessed 24/10/2018]

3. Pathways of Impact

Introduction

3.1 In carrying out an HRA it is important to determine the various ways in which land use plans can impact on internationally designated sites by following the pathways along which development can be connected with internationally designated sites, in some cases many kilometres distant. Briefly defined, pathways are routes by which a change in activity associated with a plan document/development can lead to an effect upon an internationally designated site. Based in the findings of the Regulation 18 screening HRA, three main pathways have been identified that would be the focus of this analysis:

- Air quality issues relating to Epping Forest SAC.
- Recreational pressure on the Essex coastal European sites.
- Water quality relating to the Essex coastal European sites.

Recreational Pressure

3.2 Recreational use of an internationally designated site has the potential to:

- Cause damage through mechanical/ abrasive damage and nutrient enrichment;
- Cause disturbance to sensitive species, particularly ground-nesting birds and wintering wildfowl; and
- Prevent appropriate management or exacerbate existing management difficulties.

3.3 Different types of internationally designated sites are subject to different types of recreational pressures and have different vulnerabilities. Studies across a range of species have shown that the effects of recreation can be complex.

Mechanical/abrasive Damage and Nutrient Enrichment

3.4 Most types of terrestrial internationally designated site can be affected by trampling, which in turn causes soil compaction and erosion. Walkers with dogs contribute to pressure on sites through nutrient enrichment via dog fouling and also have potential to cause greater disturbance to fauna as dogs are less likely to keep to marked footpaths and move more erratically. Motorcycle scrambling and off-road vehicle use can cause serious erosion and disturbance to sensitive species.

3.5 There have been several papers published that empirically demonstrate that damage to vegetation in woodlands and other habitats can be caused by vehicles, walkers, horses and cyclists:

- Wilson & Seney (1994)²⁵ examined the degree of track erosion caused by hikers, motorcycles, horses and cyclists from 108 plots along tracks in the Gallatin National Forest, Montana. Although the results proved difficult to interpret, it was concluded that horses and hikers disturbed more sediment on wet tracks, and therefore caused more erosion, than motorcycles and bicycles.
- Cole (1995a, b)²⁶ conducted experimental off-track trampling in 18 closed forest, dwarf scrub and meadow and grassland communities (each tramped between 0 – 500 times) over five mountain regions in the US. Vegetation cover was assessed two weeks and one year after trampling, and an inverse relationship with trampling intensity was discovered, although this relationship was weaker after one year than two weeks, indicating some recovery of the vegetation. Differences in plant morphological characteristics were found to explain more variation in response between different vegetation types than soil and topographic factors. Low-growing, mat-forming grasses regained their cover best after two weeks and were considered most resistant to trampling,

²⁵ Wilson, J.P. & Seney, J.P. (1994) Erosional impact of hikers, horses, motorcycles and off road bicycles on mountain trails in Montana. *Mountain Research and Development* 14:77-88.

²⁶ Cole, D.N. (1995a) Experimental trampling of vegetation. I. Relationship between trampling intensity and vegetation response. *Journal of Applied Ecology* 32: 203-214.

Cole, D.N. (1995b) Experimental trampling of vegetation. II. Predictors of resistance and resilience. *Journal of Applied Ecology* 32: 215-224.

while tall forbs (non-woody vascular plants other than grasses, sedges, rushes and ferns) were considered least resistant. Cover of hemicryptophytes and geophytes (plants with buds below the soil surface) was heavily reduced after two weeks, but had recovered well after one year and as such these were considered most resilient to trampling. Chamaephytes (plants with buds above the soil surface) were least resilient to trampling. It was concluded that these would be the least tolerant of a regular cycle of disturbance.

- Cole (1995c)²⁷ conducted a follow-up study (in four vegetation types) in which shoe type (trainers or walking boots) and trampler weight were varied. Although immediate damage was greater with walking boots, there was no significant difference after one year. Heavier trampers caused a greater reduction in vegetation height than lighter trampers, but there was no difference in effect on cover.
- Cole & Spildie (1998)²⁸ experimentally compared the effects of off-track trampling by hiker and horse (at two intensities – 25 and 150 passes) in two woodland vegetation types (one with an erect forb understorey and one with a low shrub understorey). Horse traffic was found to cause the largest reduction in vegetation cover. The forb-dominated vegetation suffered greatest disturbance, but recovered rapidly. Higher trampling intensities caused more disturbance.

- 3.6 The total volume of dog faeces deposited on sites can be surprisingly large. For example, at Burnham Beeches National Nature Reserve over one year, Barnard (2003)²⁹ estimated the total amounts of urine and faeces from dogs to be 30,000 litres and 60 tonnes respectively. The specific impact on Epping Forest SAC has not been quantified from local studies; however, the fact that habitats for which the SAC is designated appear to already be subject to excessive nitrogen deposition suggests that any additional source of nutrient enrichment (including uncollected dog faeces) will make a cumulative contribution to overall enrichment. Any such contribution must then be considered within the context of other recreational sources of impact on sites.

Disturbance

- 3.7 Concern regarding the effects of disturbance on birds stems from the fact that they are expending energy unnecessarily and the time they spend responding to disturbance is time that is not spent feeding³⁰. Disturbance therefore risks increasing energetic output while reducing energetic input, which can adversely affect the 'condition' and ultimately the survival of the birds. In addition, displacement of birds from one feeding site to others can increase the pressure on the resources available within the remaining sites, as they have to sustain a greater number of birds³¹.
- 3.8 The potential for disturbance may be lower in winter than in summer due to the reduction in recreational users. In addition, the consequences of disturbance at a population level may be reduced because birds are not breeding. However, winter activity can still cause disturbance, especially as birds are particularly vulnerable at this time of year due to food shortages, such that disturbance which results in abandonment of suitable feeding areas can have severe consequences. Several empirical studies have, through correlative analysis, demonstrated that out-of-season (October-March) recreational activity can result in quantifiable disturbance:
- Underhill *et al.* (1993)³² counted waterfowl and all disturbance events on 54 water bodies within the South West London Waterbodies SPA and clearly correlated disturbance with a decrease in bird numbers at weekends in smaller sites and with the movement of birds within larger sites from disturbed to less disturbed areas.
 - Evans & Warrington (1997)³³ found that on Sundays total water bird numbers (including shoveler and gadwall) were 19% higher on Stocker's Lake LNR in Hertfordshire, and attributed this to displacement of birds resulting from greater recreational activity on surrounding water bodies at weekends relative to week days.

²⁷ Cole, D.N. (1995c) Recreational trampling experiments: effects of trampler weight and shoe type. Research Note INT-RN-425. U.S. Forest Service, Intermountain Research Station, Utah.

²⁸ Cole, D.N. & Spildie, D.R. (1998) Hiker, horse and llama trampling effects on native vegetation in Montana, USA. *Journal of Environmental Management* 53: 61-71.

²⁹ Barnard, A. (2003) Getting the Facts - Dog Walking and Visitor Number Surveys at Burnham Beeches and their Implications for the Management Process. *Countryside Recreation*, 11, 16-19.

³⁰ Riddington, R., Hassall, M., Lane, S. J., Turner, P. A., & Walters, R. (1996) The impact of disturbance on the behaviour and energy budgets of Brent geese. *Bird Study* 43:269-279.

³¹ Gill, J.A., Sutherland, W.J. & Norris, K. (1998) The consequences of human disturbance for estuarine birds. *RSPB Conservation Review* 12: 67-72.

³² Underhill, M. C., Kirby, J. S., Bell, M. C. & Robinthwaite, J. (1993) Use of Waterbodies in South West London by Waterfowl. An Investigation of the Factors Affecting Distribution, Abundance and Community Structure. Report to Thames Water Utilities Ltd. and English Nature. Wetlands Advisory Service, Slimbridge.

- Tuite *et al.* (1984)³⁴ used a large (379 site), long-term (10-year) dataset (September – March species counts) to correlate seasonal changes in wildfowl abundance with the presence of various recreational activities. They found that on inland water bodies shoveler was one of the most sensitive species to disturbance. The greatest impact on winter wildfowl numbers was associated with sailing/windsurfing and rowing.
 - Pease *et al.* (2005)³⁵ investigated the responses of seven species of dabbling ducks to a range of potential causes of disturbance, ranging from pedestrians to vehicle movements. They determined that walking and biking created greater disturbance than vehicles and that gadwall were among the most sensitive of the species studied.
 - A three-year study of wetland birds at the Stour and Orwell SPA, Ravenscroft (2005)³⁶ found that walkers, boats and dogs were the most regular source of disturbance. Despite this, the greatest responses came from relatively infrequent events, such as gun shots and aircraft noise. Birds seemed to habituate to frequent 'benign' events such as those involving vehicles, sailing and horses, but there was evidence that apparent habituation to more disruptive events related to reduced bird numbers – i.e. birds were avoiding the most frequently disturbed areas. Disturbance was greatest at high tide on the Orwell, but birds on the Stour showed greatest sensitivity.
- 3.9 A number of studies have shown that birds are affected more by dogs and people with dogs than by people alone, with birds flushing more readily, more frequently, at greater distances and for longer. In addition, dogs, rather than people, tend to be the cause of many management difficulties, notably by worrying grazing animals, and can cause eutrophication near paths. Nutrient-poor habitats such as heathland are particularly sensitive to the fertilising effect of inputs of phosphates, nitrogen and potassium from dog faeces³⁷.
- 3.10 Underhill-Day (2005)³⁸ summarises the results of visitor studies that have collected data on the use of semi-natural habitat by dogs. In surveys where 100 observations or more were reported, the mean percentage of visitors who were accompanied by dogs was 54.0%.
- 3.11 However the outcomes of many of these studies need to be treated with care. For instance, the effect of disturbance is not necessarily correlated with the impact of disturbance, i.e. the most easily disturbed species are not necessarily those that will suffer the greatest impacts. It has been shown that, in some cases, the most easily disturbed birds simply move to other feeding sites, whilst others may remain (possibly due to an absence of alternative sites) and thus suffer greater impacts on their population³⁹. A literature review undertaken for the RSPB⁴⁰ also urges caution when extrapolating the results of one disturbance study because responses differ between species and the response of one species may differ according to local environmental conditions. These facts have to be taken into account when attempting to predict the impacts of future recreational pressure on internationally designated sites.
- 3.12 Disturbing activities are on a continuum. The most disturbing activities are likely to be those that involve irregular, infrequent, unpredictable loud noise events, movement or vibration of long duration (such as those often associated with construction activities). Birds are least likely to be disturbed by activities that involve regular, frequent, predictable, quiet patterns of sound or movement or minimal vibration. The further any activity is from the birds, the less likely it is to result in disturbance.
- 3.13 The factors that influence a species response to a disturbance are numerous, but the three key factors are species sensitivity, proximity of disturbance sources and timing/duration of the potentially disturbing activity.

³³ Evans, D.M. & Warrington, S. (1997) The effects of recreational disturbance on wintering waterbirds on a mature gravel pit lake near London. *International Journal of Environmental Studies* 53: 167-182.

³⁴ Tuite, C.H., Hanson, P.R. & Owen, M. (1984) Some ecological factors affecting winter wildfowl distribution on inland waters in England and Wales and the influence of water-based recreation. *Journal of Applied Ecology* 21: 41-62.

³⁵ Pease, M.L., Rose, R.K. & Butler, M.J. (2005) Effects of human disturbances on the behavior of wintering ducks. *Wildlife Society Bulletin* 33 (1): 103-112.

³⁶ Ravenscroft, N. (2005) Pilot study into disturbance of waders and wildfowl on the Stour-Orwell SPA: analysis of 2004/05 data. Era report 44, Report to Suffolk Coast & Heaths Unit.

³⁷ Shaw, P.J.A., Lankey, K. & Hollingham, S.A. (1995) Impacts of trampling and dog fouling on vegetation and soil conditions on Headley Heath. *The London Naturalist*, 74, 77-82.

³⁸ Underhill-Day, J.C. (2005). A literature review of urban effects on lowland heaths and their wildlife. Natural England Research Report 623.

³⁹ Gill, J.A., Norris, K. & Sutherland, W.J. (2001) Why behavioural responses may not reflect the population consequences of human disturbance. *Biological Conservation*, 97, 265-268.

⁴⁰ Woodfield, E. & Langston, R. (2004) Literature review on the impact on bird population of disturbance due to human access on foot. *RSPB research report* No. 9.

- 3.14 Effects of increased recreational activities as a result of increased residential development stemming from the Plan on both Epping Forest SAC and the Essex Coastal Sites are assessed further in Chapters 5.1 and 6.1 respectively.

Atmospheric Pollution

- 3.15 The main pollutants of concern for European sites are oxides of nitrogen (NO_x), ammonia (NH₃) and sulphur dioxide (SO₂). Ammonia can be directly toxic to vegetation, and research suggests that this may also be true for NO_x at very high concentrations. More significantly, greater NO_x or ammonia concentrations within the atmosphere will lead to greater rates of nitrogen deposition to vegetation and soils. An increase in the deposition of nitrogen from the atmosphere is generally regarded to lead to an increase in soil fertility, which can have a serious deleterious effect on the quality of semi-natural, nitrogen-limited terrestrial habitats.

Table 2: Main sources and effects of air pollutants on habitats and species

Pollutant	Source	Effects on habitats and species
Acid deposition	SO ₂ , NO _x and ammonia all contribute to acid deposition. Although future trends in SO ₂ emissions and subsequent deposition to terrestrial and aquatic ecosystems will continue to decline, it is likely that increased NO _x emissions may cancel out any gains produced by reduced SO ₂ levels.	Can affect habitats and species through both wet (acid rain) and dry deposition. Some sites will be more at risk than others depending on soil type, bed rock geology, weathering rate and buffering capacity.
Ammonia (NH ₃)	Ammonia is released following decomposition and volatilisation of animal wastes. It is a naturally occurring trace gas, but levels have increased considerably with expansion in numbers of agricultural livestock. Ammonia reacts with acid pollutants such as the products of SO ₂ and NO _x emissions to produce fine ammonium (NH ₄ ⁺) - containing aerosol which may be transferred much longer distances (can therefore be a significant trans-boundary issue.)	Adverse effects are as a result of nitrogen deposition leading to eutrophication. As emissions mostly occur at ground level in the rural environment and NH ₃ is rapidly deposited, some of the most acute problems of NH ₃ deposition are for small relict nature reserves located in intensive agricultural landscapes.
Nitrogen oxides (NO _x)	Nitrogen oxides are mostly produced in combustion processes. About one quarter of the UK's emissions are from power stations, one-half from motor vehicles, and the rest from other industrial and domestic combustion processes.	Deposition of nitrogen compounds (nitrates (NO ₃), nitrogen dioxide (NO ₂) and nitric acid (HNO ₃)) can lead to both soil and freshwater acidification. In addition, NO _x can cause eutrophication of soils and water. This alters the species composition of plant communities and can eliminate sensitive species.
Nitrogen (N) deposition	The pollutants that contribute to nitrogen deposition derive mainly from NO _x and NH ₃ emissions. These pollutants cause acidification (see also acid deposition) as well as eutrophication.	Species-rich plant communities with relatively high proportions of slow-growing perennial species and bryophytes are most at risk from N eutrophication, due to its promotion of competitive and invasive species which can respond readily to elevated levels of N. N deposition can also increase the risk of damage from abiotic factors, e.g. drought and frost.
Ozone (O ₃)	A secondary pollutant generated by photochemical reactions from NO _x and volatile organic compounds (VOCs). These are mainly released by the combustion of fossil fuels. The increase in combustion of fossil fuels in the UK has led to a large increase in background ozone concentration, leading to an increased number of days when levels across the region are above 40ppb. Reducing ozone pollution is believed to require action at international level to reduce levels of the precursors that form ozone.	Concentrations of O ₃ above 40 ppb can be toxic to humans and wildlife, and can affect buildings. Increased ozone concentrations may lead to a reduction in growth of agricultural crops, decreased forest production and altered species composition in semi-natural plant communities.
Sulphur Dioxide (SO ₂)	Main sources of SO ₂ emissions are electricity generation, industry and domestic fuel combustion. May also arise from shipping and	Wet and dry deposition of SO ₂ acidifies soils and freshwater, and alters the species composition of plant and associated animal communities. The significance of

	increased atmospheric concentrations in busy ports. Total SO ₂ emissions have decreased substantially in the UK since the 1980s.	impacts depends on levels of deposition and the buffering capacity of soils.
--	---	--

- 3.16 Sulphur dioxide emissions are overwhelmingly influenced by the output of power stations and industrial processes that require the combustion of coal and oil. Ammonia emissions are dominated by agriculture, with some chemical processes also making notable contributions. NO_x emissions, however, are dominated by the output of vehicle exhausts (more than half of all emissions). Within a 'typical' housing development, by far the largest contribution to NO_x (92%) will be made by the associated road traffic. Other sources, although relevant, are of minor importance (8%) in comparison⁴¹. Emissions of NO_x could therefore be reasonably expected to increase as a result of greater vehicle use as an indirect effect of the plan.
- 3.17 Whilst Epping Forest SAC is located more than 6km from the Borough boundary, the SAC is known to already be in exceedance of its Critical Load for nitrogen deposition. Chapter 5.2 investigates the potential for increased traffic movements stemming from the Plan to interact with the SAC.

Water Quality

- 3.18 The quality of the water that feeds European sites is an important determinant of the nature of their habitats and the species they support. Poor water quality can have a range of environmental impacts:
- 3.19 At high levels, toxic chemicals and metals can result in immediate death of aquatic life, and can have detrimental effects even at lower levels, including increased vulnerability to disease and changes in wildlife behaviour.
- Eutrophication, the enrichment of plant nutrients in water, increases plant growth and consequently results in oxygen depletion. Algal blooms, which commonly result from eutrophication, increase turbidity and decrease light penetration. The decomposition of organic wastes that often accompanies eutrophication deoxygenates water further, augmenting the oxygen depleting effects of eutrophication. In the marine environment, nitrogen is the limiting plant nutrient and so eutrophication is associated with discharges containing available nitrogen.
 - Some pesticides, industrial chemicals, and components of sewage effluent are suspected to interfere with the functioning of the endocrine system, possibly having negative effects on the reproduction and development of aquatic life.
- 3.20 Sewage and some industrial effluent discharges contribute to increased nutrients in the European sites and in particular to phosphate levels in watercourses.
- 3.21 The Plan provides for development within the following settlements that are served by the following Wastewater Treatment Works (WwTW):

Table 3: Wastewater Treatment Works with Catchments Serving Settlements Identified to Provide New Development in the Local Plan⁴²

WwTW	Settlements with WwTW Catchment	Quantum of Residential Allocations Located within the WwTW Catchment and Approximate Quantum	Discharge Waters and Distance to European Sites
Brentwood (Nags Head)	Brentwood Warley Pilgrims Hatch	1081 net new dwellings	Discharges into Ingrebourne River (ultimately entering the River Thames at Rainham); connected to River Thames Estuaries and Marshes SPA/Ramsar 35km along an approximate south-east course.
Shenfield & Hutton	Brentwood Hutton Pilgrims Hatch	1133 net new dwellings	Discharges into the River Wid at Little Crowbridge Grange, west of Billericay. The River Wid passes north-east into the River Chelmer before emerging into River Blackwater SPA/Ramsar site. The designated site is approximately 20km along a

⁴¹ Proportions calculated based upon data presented in Dore CJ et al. 2005. UK Emissions of Air Pollutants 1970 – 2003. UK National Atmospheric Emissions Inventory. <http://www.airquality.co.uk/archive/index.php>

⁴² Amec Foster Wheeler Environment and Infrastructure UK Limited (November 2018). Brentwood Borough Council Water Cycle Study.

			downstream course from the discharge site.
Upminster	Upminster West Horndon Warley	3553 net new dwellings	Discharges into the River Mar Dyke near Childerditch (ultimately entering the River Thames at West Thurrock); connected to River Thames Estuaries and Marshes SPA/Ramsar 25km along an approximate south-east course.
Ingatestone	Ingatestone	218 net new dwellings	Discharges into the River Wid east of Ingatestone. The River Wid passes north-east into the River Chelmer before emerging into River Blackwater SPA/Ramsar site. The designated site is approximately 20km along a downstream course from the discharge site.
Doddinghurst	Doddinghurst Kelvedon Hatch	1633 net new dwellings	Discharges east of Doddinghurst which enters the River Wid. This ultimately reaches River Blackwater SPA/Ramsar approximately 27km along a north-east course.

3.22 Epping Forest SAC is not vulnerable to changes in water levels. As such, this impact pathway is investigated further with regards to the Essex Coastal European Sites only in paragraph 5.3

4. Summary of Likely Significant Effects

- 4.1 The Likely Significant Effects test of the Local Plan policies is undertaken in Appendix A; this chapter provides a summary of that screening process.
- 4.2 It should be noted, that whilst the Local Plan provides both residential and employment site allocations, these have previously been subject to HRA⁴³. As site allocations remain unchanged, these are not revisited. The Site Allocation HRA enabled all site allocations to be screened out in isolation, however in combination effects required further consideration.
- 4.3 Appendix C enables all Local Plan policies to be screened out from resulting in likely significant effects in isolation. This is primarily due to the distances from Brentwood District boundary to European designated sites. However, the Likely Significant Effects test identifies that the following policies have the potential to act in combination with neighbouring plans, and result in a Likely Significant Effect in combination.
- 4.4 These policies are as follows:
- SP02: Managing Growth: This policy allocates 7,752 net new houses during the plan period. It provides for **atmospheric pollution** as a linking impact pathway to Epping Forest SAC, and increased **recreational pressure** and **adverse water quality** as potential linking impact pathways to the Essex Coast European sites.
 - HP07: Provision for Gypsies and Travellers. This policy allocates 13 permanent Gypsy and Traveller pitches, regularisation of 8 pitches and the incorporation of a minimum of 5 served Gypsy and Traveller pitches during the plan period. It provides for **atmospheric pollution** as a linking impact pathway to Epping Forest SAC, and increased **recreational pressure** and **adverse water quality** as potential linking impact pathways to the Essex Coast European sites.
 - HP08: Regularising Suitable Existing Traveller Sites. This policy two new sites for Gypsies and Travellers (GT16 and GT17) (8 pitches) during the plan period. It provides for **atmospheric pollution** as a linking impact pathway to Epping Forest SAC, and **adverse water quality** as potential linking impact pathways to the Essex Coast European sites.
 - PC02: Job Growth and Employment Land. This policy allocates a total of 47.39 of employment land and 5,000 additional jobs during the plan period. It provides for **atmospheric pollution** as a linking impact pathway to Epping Forest SAC, and **adverse water quality** as a potential linking impact pathways to the Essex Coast European sites.
 - E11: Brentwood Enterprise Park . This policy allocates a single development site for employment purposes at the Brentwood Enterprise Park. It provides for **atmospheric pollution** as a linking impact pathway to Epping Forest SAC, and **adverse water quality** as a potential linking impact pathways to the Essex Coast European sites.
 - PC07: Retail and Commercial Leisure Growth. This policy allocates 4,844 square metres retail floorspace and 3,833 square metres of convenience floor space within Brentwood Borough. It provides for **atmospheric pollution** as a linking impact pathway to Epping Forest SAC, and **adverse water quality** as a potential linking impact pathways to the Essex Coast European sites.
- 4.5 As such, based on the above summary it is the following impact pathways that will be subject to Appropriate Assessment within the remainder of this document:
- Epping Forest: atmospheric pollution
 - Essex Coast European sites: recreational pressure
 - Essex Coast European sites: adverse water quality

⁴³ AECOM. (January 2018) Habitats Regulations Assessment of Brentwood District Council Draft Local Plan: Preferred Site Allocations Regulation 18 Consultation (January 2018). Brentwood District Council

5. Appropriate Assessment: Epping Forest SAC

Recreational Pressure

- 5.1 Epping Forest SAC receives a great many visits per year (estimated at over 4 million) and discussions with the City of London Corporation have identified long-standing concerns about increasing recreational use of the Forest resulting in damage to its interest features. A programme of detailed formal visitor surveys has been undertaken in recent years. A 2011 visitor survey report⁴⁴ identified that those living within 2km of the edge of the Forest comprise at least 95% of all visitors. However, further analysis of these data was undertaken by Footprint Ecology in September 2016⁴⁵. This further analysis identified that, although the scale of the data was substantial (in 2014 alone almost 900 questionnaires were returned) the catchment appeared to be larger than suggested by previous reports. A new survey was therefore undertaken in late 2017 and this identified that 75% of visitors live within 6.2km of the SAC, although visitor origin is not evenly distributed around the SAC; in Essex the major points of visitor origin are within 3km of the SAC, while in London the points of visitor origin are much more dispersed.
- 5.2 In September 2018, Natural England issued an Interim Advice Letter⁴⁶ to those local authorities that are located around Epping Forest SAC, including Brentwood District Council. This letter provided interim advice regarding the *'Emerging strategic approach relating to the Epping Forest Special Area of Conservation (SAC) Mitigation Strategy. Interim advice to ensure new residential development and any associated recreational impacts on Epping Forest SAC are compliant with the Habitats Regulations'*. The Interim Advice Letter identified that as part of the work required to produce the Mitigation Strategy, *'Footprint Ecology undertook a visitor survey to identify a recreational zone of influence and to identify the distance the majority of visitors will travel to visit Epping Forest SAC. This report identified that 75% of visitors travelled up to 6.2Km to the SAC. Natural England therefore advises that in this interim period a zone of influence of 6.2Km is used to determine whether residential applications will have a recreational impact on Epping Forest SAC.'*
- 5.3 As such it is this distance of 6.2km from Epping Forest SAC site boundary that is considered to be the recreational Zone of Influence (Zol). Brentwood District just clips this zone (as noted in the Natural England advice); however the area within the 6.2km Zol is (from review of freely available online imagery and mapping) woodland and arable farmland located in a rural setting and is highly unlikely to receive net new residential development (as opposed to replacement dwellings) within the Plan period; certainly none is allocated. The nearest area that *might* receive a very small net increase in dwellings during the plan period due to (for example) windfall is Navestock Heath but this is a very small village and is situated well outside the 6.2km zone, being 9km from the SAC at its closest. The nearest suburban or urban area to the SAC (most likely to receive net new housing) is Pilgrims Hatch located 13km from the SAC. It is therefore concluded that recreational pressure on Epping Forest SAC is not a realistic linking impact pathway linking to the Brentwood Plan. **As such it is considered that the Plan will not result in an adverse effect alone or in combination.**

Atmospheric Pollution

- 5.4 Epping Forest SAC is known to be adversely affected by relatively poor local air quality alongside the roads that traverse the SAC and this has been demonstrated to have negatively affected the epiphytic lichen communities of the woodland. The nature of the road network around Epping Forest SAC is such that journeys between a number of key settlements around the Forest by car, van or bus effectively necessitate traversing the SAC. Modelling undertaken for the West Essex/East Hertfordshire Housing Market Area (HMA) authorities in 2016 indicated that even on B roads through the SAC vehicle flows are substantial (e.g. a 2014 base case of c.20,000 AADT on the B1393) while the A121 between Wake Arms Roundabout and the M25 had 2014 base flows of 25,000 AADT. Moreover, queues are known to build around most arms of Wake Arms Roundabout, which increases emissions

⁴⁴ Alison Millward Associates. 2011. Epping Forest Visitor Survey 2011: Results Summary

⁴⁵ Footprint Ecology (2016). Initial review of current visitor data for Epping Forest

⁴⁶ Natural England (20th September 2018) Interim Advice Letter relating to 'Emerging strategic approach relating to the Epping Forest Special Area of Conservation (SAC) Mitigation Strategy. Interim advice to ensure new residential development and any associated recreational impacts on Epping Forest SAC are compliant with the Habitats Regulations'

compared to the same volume and composition of free-flowing traffic. In response to this, the HMA Authorities have co-signed a Memorandum of Understanding⁴⁷ (MoU) that identifies the need for a mitigation strategy to address potential increases in atmospheric pollution at Epping Forest SAC as a result of planned development. At the time of writing (January 2019) the modelling results were being updated and are not publically available.

- 5.5 However, it is understood that the modelling clearly indicates that for the key roads through the SAC in Essex projected housing and employment growth arising from outside the HMA plays a negligible contribution in forecast changes in traffic and thus roadside air quality. This is due to the minimal role that the modelled roads play in journeys to work for people resident outside the West Essex/East Herts HMA. Indeed, changes in traffic flows on the modelled roads are overwhelmingly dominated by housing and employment growth in Epping Forest District itself, with even other parts of the same HMA (Harlow, East Herts and Uttlesford) playing a minimal role.
- 5.6 While parts of the SAC also lie within 200m of the A12 and A406 in the London Borough of Waltham Forest, 2011 Census data indicate that only 305 road-based journeys to work currently arising from Brentwood District are to destinations which *might* involve using those routes i.e. destinations in the London Boroughs of Waltham Forest, Haringey or Hackney. This is less than 2% of the 17,752 daily journeys to work to other districts that arise from Brentwood and is likely to be considerably less than 1% of all journeys to work for Brentwood residents when one adds in those people who both live and work in Brentwood. In short, routes through Epping Forest SAC play a negligible role in journeys to work for Brentwood residents and there is no reason to expect this pattern to change.
- 5.7 **It is therefore considered that a conclusion of no adverse effects on integrity alone or in combination can be reached with regard to the Brentwood Plan.** This conclusion will be reviewed as necessary once the modelling data for the West Essex/East Herts HMA are published.
- 5.8 Notwithstanding this conclusion, it should be acknowledged that the Plan provides positive policies that aim to reduce and/ or limit the increase of atmospheric pollution contributions as a result of development associated with the Local Plan. These are as follows:
- NE05: Air Quality
 - BE01: Future Proofing
 - BE11: Strategic Transport Infrastructure
 - BE12: Car- limited Development
 - BE13: Sustainable Means of Travel and Walkable Streets
 - BE15: Electric and Low Emission Vehicle
 - BE03: Carbon Reduction, Renewable Energy and Water Efficiency
 - BE06: Improving Energy Efficiency in Existing Dwellings
 - BE09: Communications Infrastructure
 - HP13: Creating Successful Places
- 5.9 This reinforces the conclusion of no adverse effect on integrity.

⁴⁷ MoU on. Managing the impacts of growth within the West Essex/ East Hertfordshire Housing Market Area on Epping Forest Special Area of Conservation (draft September 2016)

6. Appropriate Assessment: Essex Coastal European Sites

Recreational Pressure

- 6.1 It has been identified that coastal European sites in Essex are vulnerable to increased recreational pressure. As such Natural England has been working with neighbouring district, borough and county authorities to devise a strategic mitigation strategy to ensure that the increase in residential development within these authorities does not affect the sensitive European sites. In November 2017, Natural England issued interim advice regarding the 'Essex Recreational Disturbance Avoidance and Mitigation Strategy (RAMS)'. This identified core recreational catchments or 'Zone of Influence' (Zol) for the Essex Coastal sites as follows:

Table 4: The Recreational Zone of Influence for Essex Coastal European Sites⁴⁸

European Site	Zone of Influence (km)	Distance from the Borough Boundary (km)
*Colne Estuary SPA and Ramsar site and the portion of Essex Estuaries SAC that coincides	9.7	>37
* Foulness Estuary SPA and Ramsar and the portion of Essex Estuaries SAC that coincides	13	>27
*Dengie SPA and Ramsar and the portion of Essex Estuaries SAC that coincides	20.8	>35
Thames Estuary and Marshes Ramsar and SPA	8.1	8.3
*Crouch and Roach Estuaries Ramsar and SPA and the portion of Essex Estuaries SAC that coincides	4.5	12.4
Benfleet and Southend Marshes Ramsar and SPA	4.3	13.4
*Blackwater Estuary Ramsar and SPA and the portion of Essex Estuaries SAC that coincides	22	19.8

* The Essex Estuaries SAC comprise the Colne Estuary, Blackwater Estuary, Dengie, Crouch and Roach Estuaries and Foulness Estuary and so follow the respective ZOIs throughout

- 6.2 Table 4 identifies that two European sites have a recreational Zol that extends to Brentwood Borough by highlighting them orange. These are the Blackwater Estuary Ramsar site and SPA (with a Recreational Zone of Influence of 22km) and the portion of the Essex Estuary that coincides with the SPA and Ramsar site (with the same Zol as the corresponding SPA/ Ramsar site; in this case the Blackwater Estuary).
- 6.3 It is these two European sites (Blackwater Estuary Ramsar site and SPA and the Essex Estuaries SAC) that are discussed further within this Chapter. Due to the distances involved the remaining Essex Coastal sites discussed in Table 4 can be screened out as recreational pressure from Brentwood is not a realistic linking impact pathway and no likely significant effects will result.
- 6.4 For the purposes of the following discussion the Blackwater Estuary European site and the Essex Estuaries SAC are discussed as single site. A small proportion of Brentwood District is located within 22km of the Blackwater Estuary European site. Much of the area within the Zol is rural; however the town of Ingatestone does lie within the Zol. Any net new residential development within the 22km Zol that is located within Brentwood District has the potential to result in Likely Significant Effect in combination. The following policies provide for development within these recreational Zones of Influence and thus, unmitigated, potentially result in Likely Significant Effect:

⁴⁸ <https://magic.defra.gov.uk/>

- SP02: Managing Growth
- HP07: Provision for Gypsies and Travellers

6.5 Brentwood Council recognises that there are significant threats to the Essex Estuaries European sites due to a net increase in residential development. As such the Council have also produced protective policies that safeguard the local environment and the European Sites that lies within catchment of the Brentwood Borough. These policies and policy text include:

- NE02: Recreational Disturbance Avoidance and Mitigation Strategy (RAMS):
 - 'A. *New residential development within the RAMS Zone of Influence will be subject to proportionate contributions to deliver all mitigation measures identified (including strategic measures) through project level HRAs, to mitigate any recreational disturbance impacts in compliance with the Habitat Regulations and Habitats Directive.*
 - B. *Proposals will need to implement on-site options for avoidance and/or reduction in recreational disturbance impact through sensitive layout and design measures and green and blue infrastructure proportionate to the scale of the development.*
 - C. *The Council will seek appropriate financial contributions towards off-site mitigation as prescribed in the Essex Coastal RAMS mitigation strategy and the Epping Forest RAMS mitigation strategy (as applicable)...*
- NE01: Protecting and Enhancing the Natural Environment:
 - 'A. *The Council will support proposals which minimise the use of natural resources and proactively conserve and enhance the quality of the natural environment according to their international, national and local significance, aiming to achieve:...*
 - d *habitat and species conservation and enhancement (both statutory and non-statutory, including priority habitats and species) of international, national and local importance commensurate with their status..'*
 - 'C. *Development should avoid adverse impact on existing natural heritage assets as a first principle and enable net gains by designing in landscape and biodiversity features and enhancements. Where adverse impacts are unavoidable, they must be adequately and proportionately mitigated in accordance with their international, national and local significance. Proposals must demonstrate how they have taken all necessary steps of avoidance, minimisation and then mitigation; if insufficient to fully address adverse impacts, consideration will be given to compensation measures. Following this process, a proposal will only be supported subject to the following hierarchy:*
 - a. *where a site of international importance, being a Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar site, would be affected, there has to be exceptional overriding reasons of human health, public safety or environmental benefit; impact on these international (European) sites will also be subject to Policy NE02...*

6.6 As the RAMS development progresses, Natural England's advice and recommendation may change. As such this HRA assessment may require updating in time. However, **it can be concluded that increased recreational pressure stemming from increased residential development provided by the Plan will not affect the integrity of any of the Essex Coastal European sites in combination.**

Water Quality

6.1. Five wastewater treatment works (WwTW) serve the urban areas in Brentwood. These are:

- Doddinghurst WwTW
- Ingatestone WwTW
- Shenfield and Hutton WwTW
- Upminster WwTW
- Brentwood WwTW

- 6.7 These are all provided by Anglian Water other than Brentwood WwTW which is provided by Thames Water (see Table 3 for the catchments of each of these WwTW).
- 6.1 The Brentwood Water Cycle Study (WCS) (2018)⁴⁹ identifies that Shenfield & Hutton WwTW will remain within its DWF permit levels and that it will have sufficient capacity to manage increased flows under the proposed Local Plan. The remaining four WwTWs (Doddinghurst WwTW, Ingatestone WwTW, Upminster WwTW and Brentwood WwTW) *'would need to consider capacity upgrades, diversion of flows and / or water reduction measures to provide additional treatment capacity/ headroom'. ... 'There may need to be some consideration to sewerage network upgrade evidenced by modelled flooding at Ingatestone High Street during a 1 in 100 year annual event due to capacity of sewer network in the area. Anglian Water and Thames Water should be approached to discuss specific developments and whether the sewage network capacity can handle the additional flows.'*
- 6.2 Water from both Ingatestone WwTW (serves the settlement of Ingatestone) and Doddinghurst WwTW (serves the settlements of Doddinghurst and Kelvedon Hatch) discharges into the River Wid, and ultimately the River Chelmer before flowing into the River Blackwater and the Blackwater Estuary SPA and Ramsar site and the Essex Estuaries SAC more than 19km downstream from the Borough boundary (in a straight line). Water discharged from Upminster WwTW (serves the settlements of Warley and the proposed Dunston Hills garden Village) ultimately enters the River Thames at West Thurrock, which, 25km from the discharge point enters the River Thames Estuaries and Marshes SPA/Ramsar 25km Water from Brentwood WwTW (serves the settlement of Brentwood) discharges into Ingrebourne River (ultimately entering the River Thames at Rainham); connected to River Thames Estuaries and Marshes SPA/Ramsar 35km along an approximate south-east course.
- 6.3 Due to the estuarine conditions and dynamic tidal processes in the Essex Coastal European sites, water conditions are essentially cold and relatively turbid with high levels of water movement and wave action. As such, inflows into the estuarine sites are constantly changing and water is flushed away from the area dispersing any waste water and associated sedimentation, phosphates, ammonia and Biochemical Oxygen Demand (BOD). In addition, the conditions described above tend to result in the various Essex estuaries being less susceptible to excessive macro-algal summer growth and winter persistence (and thus smothering of underlying sediments) than the estuaries in the warmer, clearer, calmer waters of the south coast such as the Solent estuaries, notwithstanding their generally hyper-nutrient status. This is supported by the analyses contained in several of the Environment Agency's Stage 3 Review of Consents reports for these estuaries. As such, the features for which these sites are designated (see Appendix A) are likely to be affected by wastewater discharge to a much smaller extent than other estuarine sites, particularly at distances of more than 19km, with consequent extensive dilution.
- 6.4 It is ultimately to the responsibility of the competent authority (in this case the Environment Agency) and water company to determine headroom capacities of WwTW such as Ingatestone and Doddinghurst and it is the Environment Agency's Review of Consents process that will ultimately determine whether amended consents can be granted. **However, the Council needs confidence in the deliverability of its housing allocations. In light of the fact that Ingatestone, Doddinghurst, Upminster and Brentwood WwTW's have been modelled to have insufficient capacity to support the planned level of development, it is recommended that the Council liaise with Thames Water and Anglian Water to ensure that development is delivered in locations that can accommodate increased sewage inputs. If upgrades to two WwTW, or novel treatment solutions, are required then either the distribution of housing or the housing trajectory should reflect the need for those upgrades by (for example) avoiding front-loading of growth in the catchments of these WwTWs.**
- 6.5 To aid this decision, process it is noted that Plan policy provides the following protective policies:
- NE06: Flood Risk:
 - *'D. Applications will need to demonstrate that the sewerage provider has been contacted to identify whether the sewerage network has adequate capacity both on and off-site to serve the development and to assess the need to contribute to any additional connections for the development to prevent flooding or pollution of land and water courses.*
 - *E Where sewerage capacity is identified as insufficient, development will only be permitted if it is demonstrated that improvements will be completed prior to occupation of the development.'*

⁴⁹ Amec Foster Wheeler Environment and Infrastructure UK Limited (November 2018). Brentwood Borough Council Water Cycle Study.

- 6.6 However, it is considered that a conversation between the Council and the relevant water companies is also required at a strategic level. Once this conversation has taken place and it can be confirmed that the water companies have no core concerns, it will be possible to conclude no adverse effect on integrity from the Brentwood Plan.

7. Summary of Recommendations and Conclusions

- 7.1 The preceding assessment undertakes an assessment against the Habitats Regulations of the Draft Regulation 19 Local Plan
- 7.2 Following the Likely Significant Effects test (conducted in Appendix C) it was considered that Plan policy could result in the Likely Significant Effects resulting in the following linking impact pathways:
- Epping Forest: atmospheric pollution
 - Essex Coast European sites: recreational pressure
 - Essex Coast European sites: adverse water quality
- 7.3 It is these that were subject to Appropriate Assessment.
- 7.4 It is recommended that (unless it has already taken place) the Council seeks confirmation from the relevant water companies that their housing/employment distribution and trajectory does not pose issues with regard to the known capacity limitations of Ingatestone, Doddinghurst, Upminster and Brentwood WwTWs.
- 7.5 Following Appropriate Assessment (conducted in Chapter 5 for Epping Forest and Chapter 6 for the Essex Coastal European sites), it was concluded that the Brentwood Local Plan provides sufficient policy framework to ensure that no adverse effects on the integrity of European sites results.

Appendix A European Designated Sites Background

Epping Forest SAC

Introduction

Part of the Epping Forest SAC is located within Epping Forest District. Approximately 70% of the 1,600 hectare (ha) site consists of broadleaved deciduous woodland, and it is one of only a few remaining large-scale examples of ancient wood-pasture in lowland Britain. Epping Forest SAC supports a nationally outstanding assemblage of invertebrates, a major amphibian interest and an exceptional breeding bird community.

Reasons for Designation⁵⁰

Epping Forest qualifies as a SAC for both habitats and species. The site contains the following Habitats Directive Annex I habitats:

- Beech forests on acid soils with *Ilex* and some *Taxus* in the shrublayer;
- Wet heathland with cross-leaved heath; and
- Dry heath.

The site also contains the Habitats Directive Annex II species, stag beetle *Lucanus cervus*, with widespread and frequent records.

Current Pressures and Threats⁵¹

- Air pollution
- Under grazing
- Public disturbance
- Changes in species distribution
- Inappropriate water levels
- Water pollution
- Invasive species
- Disease

Conservation Objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

⁵⁰ JNCC. (2015) Natura 2000 Standard Data Form: Epping Forest SAC.

⁵¹ Natural England. (2015) Site Improvement Plan: Epping Forest SAC.

Thames Estuaries and Marshes SPA and Ramsar Site

Introduction

The Thames Estuaries and Marshes comprise intertidal mudflats visible at low tide, saltmarsh and complex channel systems across a 4802.5ha area along the outer Thames Estuary. In addition, a series of disused quarry pits have been transformed to create an extensive series of ponds and lakes at Cliffe Pools. Levees and seawalls bound most intertidal areas, occasionally featuring small beaches. These coastal features support internationally important numbers of wintering avocet, dunlin, grey plover, knot, redshank and hen harrier, and summer populations of black-tailed godwit and ringed plover. The site also qualifies as a Ramsar site on account of the saltmarsh and grazing marsh supporting diverse and internationally important assemblages of wetland plants and invertebrates.

The Thames Estuaries and Marshes SPA and Ramsar site consists of two Sites of Special Scientific Interest: Mucking Flats and Marshes SSSI, and South Thames Estuary and Marshes SSSI. Of these Sites, only Mucking Flats and Marshes SSSI is located in Essex, whereas South Thames Estuary and Marshes SSSI is located across the Thames in northern Kent.

Reasons for Designation

The Thames Estuaries and Marshes site is designated as an SPA⁵² for its Birds Directive Annex I and Ramsar site under criterion 6⁵³ for species that over-winter and over-summer. Over-summering species include:

- Ringed plover *Charadrius hiaticula*; and
- Black-tailed godwit *Limosa limosa islandica*.

Over-wintering species include:

- Grey plover *Pluvialis squatarola*;
- Red knot *Calidris canutus islandica*;
- Dunlin *Calidris alpina alpina*; and
- Common redshank *Tringa totanus totanus*.

In addition, the site qualifies as a Ramsar site under criterion 2⁵⁵, by supporting the endangered least lettuce *Lactuca saligna* and at least 14 nationally scarce plants of wetland habitats, including bulbous foxtail *Alopecurus bulbosus*.

Current Pressures and Threats⁵⁴

- Coastal squeeze
- Public access/disturbance
- Invasive species
- Changes in species distribution
- Fisheries: commercial marine and estuarine
- Vehicles: illicit
- Air pollution: risk of atmospheric nitrogen

Conservation Objectives⁵⁵

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features'), and subject to natural change;

⁵² <http://jncc.defra.gov.uk/page-2042> [accessed 18/01/2018]

⁵³ <http://jncc.defra.gov.uk/pdf/RIS/UK11069.pdf> [accessed 18/01/2018]

⁵⁴ <http://publications.naturalengland.org.uk/publication/6270737467834368> [accessed 18/01/2018]

⁵⁵ <http://publications.naturalengland.org.uk/file/5268280864407552> [accessed 18/01/2018]

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features; and,
- The distribution of the qualifying features within the site.

Essex Estuaries SAC

Introduction

The SAC comprises a large estuarine site along the Essex coastline of largely undeveloped coastal plain estuaries with associated open coast mudflats and sandbank and encompasses the Colne, Blackwater, Crouch and Roach estuaries. The Essex Estuaries SAC supports a diverse range of marine and estuarine sediment communities which in turn support diverse and unusual marine communities. The site is designated for the presence of several European designated priority habitats, including Atlantic salt meadows⁵⁶.

This SAC overlaps with several protected areas, including Blackwater Estuary Ramsar/SPA, Colne Estuary Ramsar/SPA, Crouch and Roach Estuaries Ramsar/SPA, Dengie Ramsar/SPA, Foulness Ramsar/SPA and Outer Thames SPA. In addition, the SAC consists of the following seven SSSIs:

- Blackwater Estuary SSSI
- Colne Estuary SSSI
- Crouch and Roach Estuary SSSI
- Dengie SSSI
- Foulness SSSI
- The Cliff, Burnham-On-Crouch SSSI
- Upper Colne Marshes SSSI

Reasons for Designation⁵⁸

Essex Estuaries qualifies as a SAC through its habitats, containing the Habitats Directive Annex I habitat:

- Estuaries – an extensive, continuous area of estuarine habitat;
- Mudflats and sandflats not covered by seawater at low tide;
- Salicornia and other annuals colonizing mud and sand;
- Spartina swards;
- Atlantic salt meadows; and,
- Mediterranean and thermo-Atlantic halophilous scrubs.

Current Pressures and Threats⁵⁷

- Coastal squeeze
- Public access/disturbance

⁵⁶ <http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0013690> [accessed 18/01/2018]

⁵⁷ <http://publications.naturalengland.org.uk/publication/5459956190937088> [accessed 08/01/2018]

- Invasive species
- Changes in species distribution
- Fisheries: commercial marine and estuarine
- Vehicles: illicit
- Air pollution: risk of atmospheric nitrogen deposition
- General planning permission

Conservation Objectives⁵⁸

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features'), and subject to natural change:

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of qualifying natural habitats;
- The structure and function (including typical species) of qualifying natural habitats; and
- The supporting processes on which qualifying natural habitats rely.

Crouch and Roach SPA and Ramsar Site

Introduction

The Crouch and Roach Estuaries is located on the Essex south coast spanning across 1735.58ha. The estuaries partly form from the River Crouch which is predominantly located between two ridges of London Clay and partly from the River Roach, which is set between areas of brick earth and loams. Coastal squeezing of the intertidal zone has left a narrow strip of tidal mud, which is used by significant bird numbers. The site is of importance for wintering waterbirds, such as the dark-bellied Brent goose *Branta b. bernicla*⁵⁹.

The Crouch and Roach Estuaries SPA and Ramsar site consists of a single Sites of Special Scientific Interest, Crouch and Roach Estuaries SSSI.

Reasons for Designation

The Crouch and Roach site is designated as an SPA⁶¹: for its Birds Directive Annex I and Ramsar site under criterion 6⁶⁰ for species that over-winter. This designation is provided for the presence of an internationally important population of dark-bellied Brent goose *Branta bernicla bernicla* (1% of total wintering Western European population).

In addition, the site qualifies as a Ramsar under criterion 2⁶¹, by supporting the vulnerable, endangered and at least 13 nationally scarce plants of wetland habitats, including slender hare's ear *Bupleurum tenuissimum*. Several important invertebrate species are also present on site, including scarce emerald damselfly *Lestes dryas* and the large horsefly *Hybomitra expollicata*.

Current Pressures and Threats⁶²

- Coastal squeeze
- Public access/disturbance
- Invasive species

⁵⁹ <http://jncc.defra.gov.uk/default.aspx?page=2019> [accessed 18/01/2017]

⁶¹ <http://jncc.defra.gov.uk/pdf/RIS/UK11058.pdf> [accessed 18/01/2017]

⁶² <http://publications.naturalengland.org.uk/publication/6270737467834368> [accessed 18/01/2018]

- Changes in species distribution
- Fisheries: commercial marine and estuarine
- Vehicles: illicit
- Air pollution: risk of atmospheric nitrogen

Conservation Objectives⁶³

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features'), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Benfleet and Southend Marshes SPA and Ramsar Site

Introduction

The Benfleet and Southamptton Marshes are located on the north shore of the Outer Thames Estuary in Essex. The site covers a 2251.31ha area comprising an extensive series of saltmarshes, cockle shell banks, mudflats and grassland that support a diverse flora and fauna. The productive mudflats, cockle shell banks and saltmarsh communities provide a wide range of feeding and roosting opportunities for internationally important numbers of wintering wildfowl and waders, such as the over-wintering population of dark-bellied brent geese⁶⁴.

The Benfleet and Southend Marshes SPA/Ramsar consist of a single Site of Special Scientific Interest, Benfleet and Southend Marshes SSSI.

Reasons for Designation

The Thames Estuaries and Marshes site is designated as an SPA⁶⁵ for its Birds Directive Annex I and Ramsar site under criterion 6⁶⁵ for on passage and over-wintering species. On passage species include:

- Ringed plover (*Charadrius hiaticula*);

Over-wintering species include:

- Dark-bellied Brent goose
- Grey plover
- Knot

Current Pressures and Threats⁶⁶

- Coastal squeeze

⁶³ [file:///C:/Users/Ashley.Welch.NA/Downloads/UK9009244-Crouch-and-Roach-Estuaries-\(Mid-Essex-Coast-Phase-3\)-SPA-V2.pdf](file:///C:/Users/Ashley.Welch.NA/Downloads/UK9009244-Crouch-and-Roach-Estuaries-(Mid-Essex-Coast-Phase-3)-SPA-V2.pdf) [accessed 18/01/2018]

⁶⁴ <http://jncc.defra.gov.uk/page-2014-theme=default> [accessed 19/01/2018]

⁶⁵ <http://jncc.defra.gov.uk/pdf/RIS/UK11006.pdf> [accessed 18/01/2018]

⁶⁶ <http://publications.naturalengland.org.uk/publication/6270737467834368> [accessed 18/01/2018]

- Public access/disturbance
- Invasive species
- Changes in species distribution
- Fisheries: commercial marine and estuarine
- Vehicles: illicit
- Air pollution: risk of atmospheric nitrogen

Conservation Objectives⁶⁷

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features'), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Blackwater Estuary SPA and Ramsar Site

Introduction

Blackwater Estuary is the largest estuary in Essex covering a 4395.15ha area along the Essex coastline. The estuary comprises mudflats fringed by saltmarsh on the upper shores, and shingle, shell banks and offshore islands featuring on the tidal flats. In addition, the surrounding contains terrestrial habitat of high conservation importance including the sea wall, ancient grazing marsh, fleet and ditch systems, and semi-improved grassland. The diversity of estuarine habitats results in the sites being of importance for a range of overwintering waterbirds⁶⁸. The site is also important during the summer for breeding terns. In addition to the ornithological interest, the site also qualifies as a Ramsar site on account of it supporting 7% of Britain's saltmarshes. The saltmarsh also supports diverse and internationally important assemblages of wetland plants and invertebrates, including the endangered water beetle *Paracymus aeneus*, and vulnerable damselfly *Lestes dryas*⁶⁹.

The Thames Estuaries and Marshes SPA/Ramsar consist of a single Site of Special Scientific Interest, Blackwater Estuary SSSI.

Reasons for Designation

The Blackwater Estuary site is designated as an SPA⁷²: for its Birds Directive Annex I and Ramsar site under criterion 6⁷³ summer breeding, on passage, and over-wintering species. Summer breeding species include:

- Little tern *Sternula albifrons*.

On passage species include:

- Ringed plover *Charadrius hiaticula*.

Over-wintering species include:

⁶⁷ <file:///C:/Users/Ashley.Welch.NA/Downloads/UK9009171-Benfleet-and-Southend-Marshes-SPA-V2.pdf> [accessed 18/01/2018]

⁶⁸ <http://jncc.defra.gov.uk/default.aspx?page=2020> [accessed 19/01/2018]

⁶⁹ <http://jncc.defra.gov.uk/pdf/RIS/UK11007.pdf> [accessed 19/01/2018]

- Avocet *Recurvirostra avosetta*;
- Golden plover *Pluvialis apricaria*;
- Hen harrier *Circus cyaneus*;
- Ruff *Philomachus pugnax*;
- Black-tailed godwit *Limosa limosa islandica*;
- Dark bellied brent goose *Branta bernicla bernicla*;
- Grey plover *Pluvialis squatarola*;
- Dunlin *Calidris alpina alpina*;
- Common redshank *Tringa totanus totanus*;
- Shelduck *Tadorna tadorna*.

In addition, the site qualifies as a Ramsar site under criterion 2⁷³, by supporting at least 16 British Red Data Book invertebrate species, including the endangered water beetle *Paracymus aeneus*, vulnerable scarce emerald damselfly *Lestes dryas*, the fly species *Aedes flavescens*, *Erioptera bivittata*, *Hybomitra expollicata* and the spiders *Heliophanus auratus* and *Trichopterna cito*.

Current Pressures and Threats⁷⁰

- Coastal squeeze
- Public access/disturbance
- Invasive species
- Changes in species distribution
- Fisheries: commercial marine and estuarine
- Vehicles: illicit
- Air pollution: risk of atmospheric nitrogen

Conservation Objectives⁷¹

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features'), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

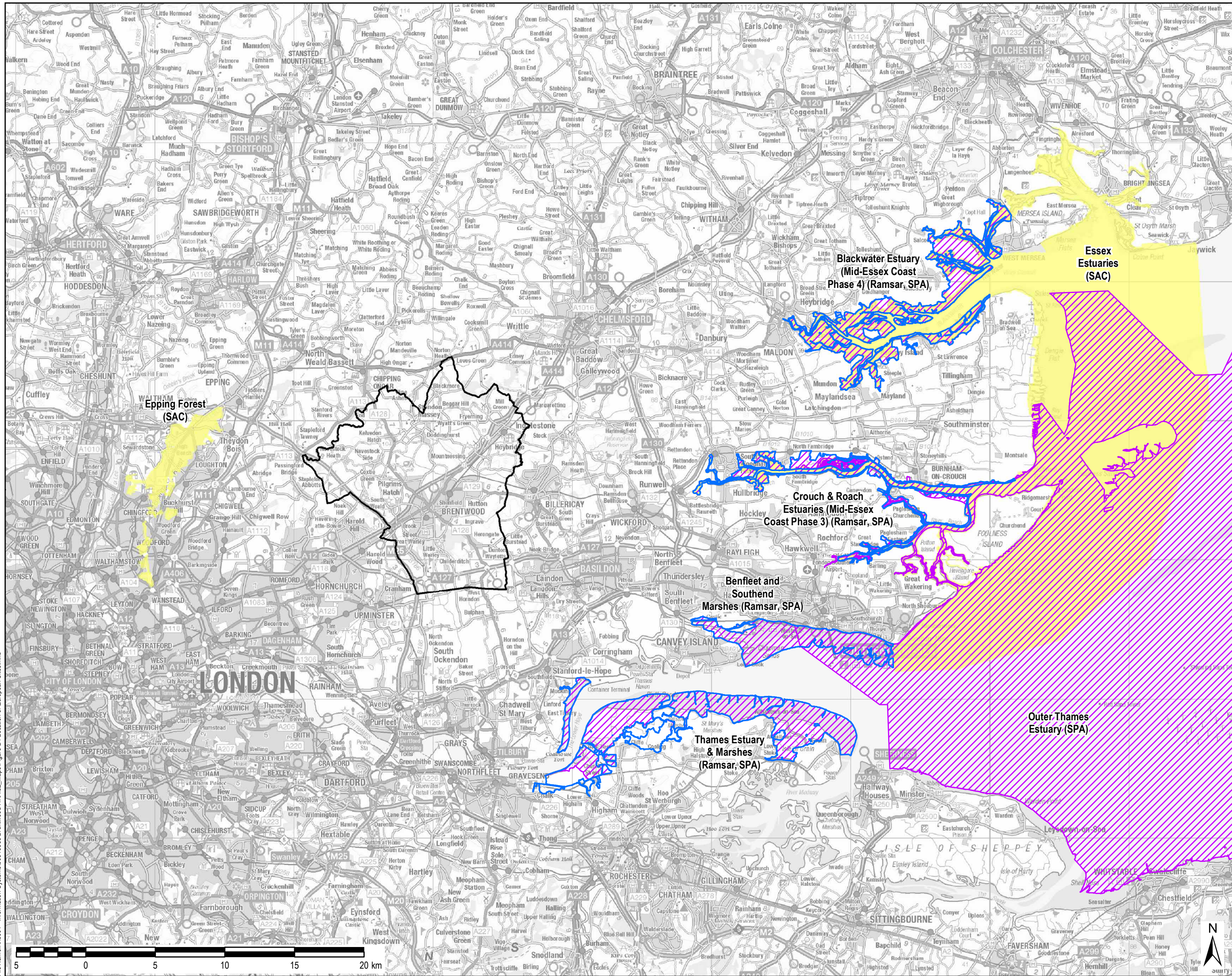
- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features; and,
- The distribution of the qualifying features within the site.

⁷⁰ <http://publications.naturalengland.org.uk/publication/6270737467834368> [accessed 18/01/2018]

⁷¹ <http://publications.naturalengland.org.uk/publication/4888693533835264> [accessed 18/01/2018]

Appendix B Figures

Figure A1: Locations of Internationally Designated Sites and Site Allocations



THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

LEGEND

- Brentwood Borough Boundary
- Ramsar
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)

Copyright
Reproduced from Ordnance Survey digital map data © Crown copyright 2018. All rights reserved.
Licence number 0100031673.
© Natural England material is reproduced with the permission of Natural England 2018.

Purpose of Issue
DRAFT

Client
BRENTWOOD BOROUGH COUNCIL

Project Title
HABITATS REGULATIONS ASSESSMENT OF BRENTWOOD DISTRICT COUNCIL DRAFT (REGULATION 19) LOCAL PLAN: NOVEMBER 2019

Drawing Title
LOCATION OF EUROPEAN SITES

Drawn JW	Checked BB	Approved IHH	Date 25/10/2018
AECOM Internal Project No. 60543883		Scale @ A3 1:250,000	

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND IS SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

AECOM

Midpoint
Alconbury Link, Basingstoke
Hampshire, RG21 7PP
Telephone (01256) 310200
Fax (01256) 310201
www.aecom.com

AECOM

Drawing Number FIGURE B1	Rev
------------------------------------	-----

Appendix C Likely Significant Effects Test of Plan Policies

7.6 In the following screening table, where Policies are coloured green in the 'HRA implications' column, this indicates that the Policies do not contain potential impact pathways linking to European sites, and have therefore been screened out from further consideration in isolation. Where Policies and Site Allocations are coloured orange in the 'HRA Implications' column, this indicates that the Policies and Site Allocations have potential impact pathways linking to European sites, and have therefore been screened in for further consideration in isolation within this report.

Policy	Description	HRA Implications
SP01: Sustainable Development	<p>A. When considering development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework.</p> <p>B. The Council will always work proactively with applicants to jointly find solutions which mean that proposals for sustainable development can be approved wherever appropriate, and to secure development that improves the economic, social and environmental conditions in the area.</p> <p>C. Planning applications that accord with policies in this Local Plan (and, where relevant, with policies in relevant Development Plan Documents, and Neighbourhood Plans) will be approved without delay, unless material considerations indicate otherwise.</p> <p>D. Development will be supported and is considered to contribute towards delivering the Strategic Objectives where it:</p> <ul style="list-style-type: none"> a. preserves and enhances the character and settlement setting of our borough of villages; b. has no unacceptable effect on visual amenity, the character appearance of the surrounding area; c. provides satisfactory means of access to the site for vehicles, cyclists and pedestrians and parking and servicing arrangements; d. ensures the transport network can satisfactorily accommodate the travel demand generated and traffic generation would not give rise to adverse highway conditions or highway safety concerns or unacceptable loss of amenity; e. has no unacceptable effect on health, the environment or amenity due to the release of pollutants (such as light, noise pollution, vibration, odour, smoke, ash, dust and grit) to land, water or air; f. causes no unacceptable effects on adjoining sites, properties or their occupiers through excessive noise, activity or vehicle movements; overlooking or visual intrusion; harm to or loss of outlook, privacy or daylight/sunlight enjoyed by occupiers of nearby properties; g. takes full account of opportunities to incorporate biodiversity in developments; 	<p>No Likely Significant Effect</p> <p>This policy describes various planning requirements of development proposals that contribute to the Council's Strategic Objectives. This includes the safeguarding and where possible the enhancement of economic, social and environmental conditions of the Borough. This policy is a development management policy that does not in itself provide for any quantum, type or location of development and as such there are no linking impact pathways present.</p>

Policy	Description	HRA Implications
	<ul style="list-style-type: none"> h. delivers good design; i. preserves, and where appropriate, enhances heritage asset and conservation area; j. results in no net loss of residential units; and k. mitigates impact on local services and community infrastructure. 	

Policy	Description	HRA Implications
SP02: Managing Growth	<p>A. Provision is made for 7,752 new residential dwellings (net) to be built in the borough over the Plan period 2016-2033 at an annual average rate of 310 dwellings per year to 2022/23, followed by 584 dwellings per year from 2023/24-2033.</p> <p>B. New development within the borough will be directed towards:</p> <ol style="list-style-type: none"> the site allocations set out in Chapter 9; and highly accessible locations along transit/growth corridors. 	<p>No Likely Significant Effect</p> <p>This policy allocates 7,752 net residential dwellings within the Borough of Brentwood.</p> <p>In isolation it is considered that there is no realistic linking impact pathway present, however in combination consideration is required to include quantum of residential development to be delivered by neighboring authorities.</p>
SP03: Health Impact Assessments (HIAs)	<p>A. Brentwood Borough Council is committed to ensuring all new developments promote healthier and inclusive environments. This includes regeneration proposals. The design of the built environments and use of the natural environments play a key role in ensuring that health inequalities are not exacerbated and can support people to live healthier lives. The evidence suggests that the following issues impact on the physical, social, and mental health and well-being of communities:</p> <ol style="list-style-type: none"> the location, density and mix of land use; street layout and connectivity; access to public services, employment, local fresh food, education, leisure and recreation activities, and other community services; safety and security; open and green space; affordable and energy efficient housing; air quality and noise; extreme weather events and climate change; community interaction; and transport. <p>B. The majority of proposals will be required to assess their impacts on health and well-being, upon the capacity of existing health and social care services and facilities, the environmental impacts, and the promotion of health improvement activities. For use class C2 developments comprising residential care homes and nursing homes, and use class C3 residential, developments of any size are encouraged to illustrate how health and well-being have been considered within the development. For use class A5 hot food takeaways, a Health Impact</p>	<p>No Likely Significant Effect</p> <p>This policy addresses the health requirements of development with particular emphasis on air quality and effects to local people and communities. This policy does therefore not allocate land for development rather provide mitigation for health impacts of development and is therefore not likely to pose as a likely significant effect to European Sites.</p>

Policy	Description	HRA Implications
	<p>Assessment will be required to be included in an application. Where an unacceptable adverse impact on health is established, permission will not be granted. Planning proposals should adhere to the requirements set out in the most up to date Essex Planning Officer's Association (EPOA) Health Impact Assessment (HIA) Guidance Notes or any latest iteration of the document.</p> <p>C. Developments that are 50 or more units (or less than 50 units at the discretion of the planning authority where the number of units could propose a significant impact on the community and infrastructure) and non-residential developments in excess of 1,000m², are required to submit a Health and Well-being Impact Assessment as required by the EPOA HIA Guidance Note, which will measure the impact on health and well-being, the demand on the capacity of health and social care services and facilities arising from the development. Where significant impacts are identified, planning permission will be refused unless infrastructure provision and/or funding to reasonably meet the health and well-being and service requirements of the development are provided and/or secured by planning obligations, or by CIL, as appropriate.</p> <p>D. Brentwood Borough Council will require a Health and Well-being Impact Assessment to be prepared and carried out in accordance with the advice and best practice for such assessments as published locally through the Essex Planning Officers Association (EPOA). Developers will be expected to contact the Council at pre-application stage to complete the Healthy Communities Checklist (as part of the validations checklist), to enable joint discussions to take place on the likely health and well-being impacts and environmental impacts of proposals. This is an opportunity to strengthen the process of spatial planning through partnership working, community engagement, evidence sharing and coordination and the impacts on health and well-being and the environment.</p>	

Policy	Description	HRA Implications
SP04: Developer Contributions	<p>A. All new development should be supported by, and have good access to, all necessary infrastructure. Permission will only be granted if it can be demonstrated that there is sufficient appropriate infrastructure capacity to support the development or that such capacity will be delivered by the proposal. It must further be demonstrated that such capacity as is required will prove sustainable over time both in physical and financial terms.</p> <p>B. Where a development proposal requires additional infrastructure capacity, to be deemed acceptable, mitigation measures must be agreed with the local planning authority and the appropriate infrastructure provider. Such measures may include (not exclusively):</p> <ol style="list-style-type: none"> financial contributions towards new or expanded facilities and the maintenance thereof; on-site provision (which may include building works); off-site capacity improvement works; and/or the provision of land. <p>C. Developers and land owners must work positively with the Council, neighbouring authorities and other infrastructure providers throughout the planning process to ensure that the cumulative impact of development is considered and then mitigated, at the appropriate time, in line with their published policies and guidance.</p> <p>D. Applicants proposing new development will be expected to make direct provision or contribute towards the delivery of relevant infrastructure as required by the development either alone or cumulatively with other developments. Developers may be required to:</p> <ol style="list-style-type: none"> pay Community Infrastructure Levy (CIL) charges in order to mitigate on-site and off-site impacts of growth as required by the Council's charging schedules; and enter into Section 106 (S106) agreements to make provisions to mitigate the impacts of the development where necessary or appropriate. Section 106 will remain the appropriate mechanism for securing land and works along with financial contributions where a sum for the necessary infrastructure is not secured via CIL. <p>E. For the purposes of this policy the widest reasonable definition of infrastructure and infrastructure providers will be applied. Exemplar types of infrastructure are provided in the glossary appended to this Plan.</p> <p>F. Where proposals do not meet planning policy requirements or do not propose to deliver required S106 planning obligations, applicants will be required to:</p> <ol style="list-style-type: none"> prove that the benefits of the development proceeding without full mitigation outweigh the collective harm; submit a fully transparent open book Financial Viability Assessment to the Council. The viability assessment may be subject to an independent scrutiny by appointed experts, at the applicant's cost; 	<p>No Likely Significant Effect</p> <p>This policy ensures that developers make either financial contributions or provisions to infrastructure to ensure that development does not impact on operational facilities. This policy is therefore not expected to have an adverse impact on the integrity of European Sites within catchment of Brentwood.</p>

Policy	Description	HRA Implications
	<p>c. prove that a full and thorough investigation has been undertaken to find innovative solutions to issues and all possible steps have been taken to minimise the residual level of unmitigated impacts; and</p> <p>d. obligations are entered into by the developer that provide for appropriate additional mitigation in the event that viability improves prior to completion of the development.</p>	

Policy	Description	HRA Implications
SP05: Construction Management	<p>A. All major development should sign up to the Considerate Constructors Scheme, or equivalent. During construction, major development is required to:</p> <ul style="list-style-type: none"> a. minimise levels of noise, vibration, artificial light, odour, air quality, fumes, or dust pollution; b. consider the routing, timing and frequency of heavy goods vehicle movements to reduce their impact on vulnerable road users, local amenity and congestion; c. use, where available, construction and or freight consolidation centres; and d. consider the impact of construction on water supply, flood risk and drainage and implement suitable mitigation measures where required. <p>B. Major development must consider the cumulative impacts of other major development occurring in the vicinity on levels of noise, vibration, artificial light, odour, air quality, fumes or dust pollution, and plan timings of works, delivery timings, routes, and location of equipment accordingly to reduce the cumulative impacts.</p> <p>C. Development is required to employ the highest standards of sustainable construction management, including:</p> <ul style="list-style-type: none"> a. sustainable construction methods, such as use of sustainably sourced materials recycled materials; b. the reuse of demolished material from development site, where practical in order to minimise the transportation of waste and reduce carbon emissions; and c. the sustainable disposal of materials. 	<p>No Likely Significant Effect</p> <p>This policy outlines that all development should sign up and adhere to the considerate constructors' scheme this ensures that the highest level of health and safety and environmental standards are met both on site and within the wider area during construction. This includes aspects of noise pollution, air quality and drainage. As such this policy is not expected to pose as a likely significant effect to European Sites and is therefore screened out from further discussion.</p>
SP06: Effective Delivery of Development	<p>A. Development proposals for large complex allocation sites will be expected to be developed in partnership with the Council, infrastructure providers and other relevant organisations, through a collaborative masterplanning approach.</p> <p>B. Successful development of the sites will require supporting documents such as a strategic masterplan, area specific masterplan, complementary design guide/code, to help guide the necessary coherence across the entire development site, irrespective of who delivers the different locations or components of the scheme.</p> <p>C. The Council may, at its discretion, appoint an independent Quality Design Review Panel to review the detailed design proposals, to provide additional rigour to the design-thinking process, thereby ensuring the longer-term sustainable success of the development.</p> <p>D. Development proposals should submit a supporting statement setting out the sustainable long-term governance and stewardship arrangements for community assets; the statement should be proportionate with the scale of the scheme and quantum of infrastructure being delivered.</p>	<p>No Likely Significant Effect</p> <p>This policy outlines required criteria to ensure the effective delivery of developments. It does not in itself provide for any development. This policy is not expected to pose as a likely significant effect to European Sites and is therefore screened out from further discussion.</p>
BE01: Future Proofing	<p>A. In planning and design for resilience, all applications must take into account the following principles of future proofing:</p>	<p>No Likely Significant Effect</p> <p>This policy encourages sustainable development</p>

Policy	Description	HRA Implications
	<ul style="list-style-type: none"> a. well-being, safety and security for residents and/or users; b. adaptable and flexible spatial planning and design; c. life cycle duration of infrastructure and buildings, including appropriate maintenance plan for the life of the development; d. potential hazards including fire, pest, flood, and climate change long term stresses in determining design, locations and installations of protection facilities, systems and buildings for the life of the development; e. existing and potential source of pollution, such noise and air, and according mitigation measures; f. increased quality of materials and installation; g. multi-functional green and blue infrastructure in line with the principles of Sustainable Drainage (SuDs) and natural flood management as part of the wider green and blue infrastructure network to deliver multiple benefits; h. provision of class leading digital connectivity infrastructure and other future essential technology; and i. delivery phasing that takes into account demand and supply if and where appropriate. <p>B. Time horizons for proposed future-proof interventions can vary depending on the size, location and purpose of development but long-term time horizons based on objective and realistic assessment should be made clear in the proposal.</p>	<p>aspects of this policy criteria include air quality, flood risk, climate change and green infrastructure. It is therefore considered to be of benefit to European sites within catchment of Brentwood and can therefore be screened out from further discussion.</p>

Policy	Description	HRA Implications								
BE02: Sustainable Construction and Resource Efficiency	<p>The Council will require all development proposals, including the conversion or re-use of existing buildings, to:</p> <ul style="list-style-type: none">a. maximise the principles of energy conservation and efficiency in the design, massing, siting, orientation, layout, as well as construction methods and use of materials;b. submit details of measures that increase resilience to the threat of climate change, including but not limited to summertime overheating;c. demonstrates how the water conservation measures were incorporated in the proposals;d. incorporate suitable Sustainable Drainage Systems (SuDs);e. incorporate the reduction in the use of mineral resources, including an increase in the re-use of aggregate; andf. include commercial and domestic scale renewable energy and decentralised energy as part of new development.	<p>No Likely Significant Effect</p> <p>This policy encourages sustainable development within Brentwood Borough. Aspects of sustainability that are to be incorporated at the design stage of development include SuDS, green roofs and rainwater attenuation measures. This policy is therefore not likely to have an impact on the integrity of European Sites that are located within catchment of Brentwood Borough.</p>								
BE03: Carbon Reduction, Renewable Energy and Water Efficiency	<p>A. Proposals for renewable, low carbon or decentralised energy schemes will be supported provided they can demonstrate that they will not result in adverse impacts, including cumulative and visual impacts which cannot be satisfactorily addressed.</p> <p>B. Development should meet the following minimum standards of sustainable construction and carbon reduction:</p> <p>New Residential Development:</p> <table><tr><th>Year</th><th>Minimum sustainable construction standards</th><th>On-site carbon reduction</th><th>Water efficiency</th></tr><tr><td>Up to 2020</td><td>In line with Part L Building Regulations</td><td>At least a 10% reduction in carbon dioxide emissions above the requirements of</td><td>110 litres per person per day limit Major</td></tr></table>	Year	Minimum sustainable construction standards	On-site carbon reduction	Water efficiency	Up to 2020	In line with Part L Building Regulations	At least a 10% reduction in carbon dioxide emissions above the requirements of	110 litres per person per day limit Major	<p>No Likely Significant Effect</p> <p>This positive policy sets out the requirement for renewable and low carbon energy schemes, water efficiency measures and the requirement for developer contributions if these provisions cannot be provided on site. It is therefore considered unlikely that this policy will lead to adverse impacts upon the integrity of European Sites that are within catchment of Brentwood.</p>
Year	Minimum sustainable construction standards	On-site carbon reduction	Water efficiency							
Up to 2020	In line with Part L Building Regulations	At least a 10% reduction in carbon dioxide emissions above the requirements of	110 litres per person per day limit Major							

Policy	Description				HRA Implications
			Part L Building Regulations	development is expected to provide more substantial water management measures, such as rain/grey water harvesting.	
	2020 onwards	In line with Part L Building Regulations	<p>In line with national nearly-zero carbon policy.</p> <p>If national nearly- zero carbon policy is unavailable, the previous target applies. However, the minimum improvement over the Building Regulations baseline may be increased to</p>	<p>110 litres per person per day limit</p> <p>Major development is expected to provide more substantial water management measures, such as rain/grey water harvesting.</p>	

Policy	Description				HRA Implications												
	<table><tr><td></td><td></td><td>reflect the reduction in costs of more efficient construction methods.</td><td></td></tr></table>						reflect the reduction in costs of more efficient construction methods.										
			reflect the reduction in costs of more efficient construction methods.														
	New Non-residential Development																
	<table><tr><th>Year</th><th>Minimum BREEAM Rating*</th><th>On-site carbon reduction</th><th>Water efficiency</th></tr><tr><td>Up to 2020</td><td>BREEAM 'Very Good' rating to be achieved in the following categories:<ul style="list-style-type: none">Man 02Ene 04Mat 03Wst 01Wst 03LE 03</td><td>At least a 10% reduction in carbon dioxide emissions above the requirements of Part L Building Regulations</td><td>BREEAM 'Very Good' rating to be achieved in category Wat 01 Major development is expected to provide more substantial water management measures, such as grey water harvesting.</td></tr><tr><td>2020 ards</td><td>2021 BREEAM 'Excellent' rating to be achieved in the following categories:</td><td>In line with national nearly-zero carbon policy If national nearly-zero carbon policy is unavailable, the 2016 -</td><td>BREEAM 'Excellent' rating to be achieved in category Wat 01 Major development is expected to provide</td></tr></table>				Year	Minimum BREEAM Rating*	On-site carbon reduction	Water efficiency		Up to 2020	BREEAM 'Very Good' rating to be achieved in the following categories: <ul style="list-style-type: none">Man 02Ene 04Mat 03Wst 01Wst 03LE 03	At least a 10% reduction in carbon dioxide emissions above the requirements of Part L Building Regulations	BREEAM 'Very Good' rating to be achieved in category Wat 01 Major development is expected to provide more substantial water management measures, such as grey water harvesting.	2020 ards	2021 BREEAM 'Excellent' rating to be achieved in the following categories:	In line with national nearly-zero carbon policy If national nearly-zero carbon policy is unavailable, the 2016 -	BREEAM 'Excellent' rating to be achieved in category Wat 01 Major development is expected to provide
	Year	Minimum BREEAM Rating*	On-site carbon reduction	Water efficiency													
Up to 2020	BREEAM 'Very Good' rating to be achieved in the following categories: <ul style="list-style-type: none">Man 02Ene 04Mat 03Wst 01Wst 03LE 03	At least a 10% reduction in carbon dioxide emissions above the requirements of Part L Building Regulations	BREEAM 'Very Good' rating to be achieved in category Wat 01 Major development is expected to provide more substantial water management measures, such as grey water harvesting.														
2020 ards	2021 BREEAM 'Excellent' rating to be achieved in the following categories:	In line with national nearly-zero carbon policy If national nearly-zero carbon policy is unavailable, the 2016 -	BREEAM 'Excellent' rating to be achieved in category Wat 01 Major development is expected to provide														

Policy	Description				HRA Implications
		<ul style="list-style-type: none"> Man 02 Ene 04 Mat 03 Wst 01 Wst 03 LE 03 	2020 target applies. However, the minimum improvement over the Building Regulations baseline may be increased to reflect the reduction in costs of more efficient construction methods.	more substantial water management measures, such as grey water harvesting.	
	<p>*: The version of BREEAM that a building must be assessed under should be the latest BREEAM scheme and not be based on scheme versions that have been registered under at the pre-planning stages of a project. Other construction standards, such as LEEDs or Passivhaus, will be supported provided that they are broadly at least in line with the standards set out above.</p> <p>C. Application of major development, where feasible, will be required to provide a minimum of 10% of the predicted energy needs of the development from renewable energy;</p> <p>D. Application of major development, including redevelopment of existing floor space, should be accompanied by a Sustainability Statement (see Figure 5.1 Areas to be covered in the Sustainability Statement) as part of the Design and Access Statement submitted with their planning application, outlining their approach to the following issues:</p> <ul style="list-style-type: none"> a. adaptation to climate change; b. carbon reduction; c. water management; d. site waste management; e. use of materials; <p>E. Where these standards are not met, applicants must demonstrate compelling reasons and</p>				

Policy	Description	HRA Implications
	<p>provide evidence, as to why achieving the sustainability standards outlined above for residential and non-residential developments would not be technically feasible or economically viable;</p> <p>F. Where on-site provision of renewable technologies is not appropriate, or where it is clearly demonstrated that the above target cannot be fully achieved on-site, any shortfall should be provided via:</p> <p>a. 'allowable solutions contributions' via Section 106 or CIL. These funds will then be used for energy efficiency and energy generation initiatives or other measure(s) required to offset the environmental impact of the development;</p> <p>off-site provision, provided that an alternative proposal is identified, and delivery is certain.</p>	

Policy	Description	HRA Implications
BE04: Establishing Low Carbon and Renewable Energy Infrastructure Network	<p>A. Stand-alone renewable energy infrastructure Community-led initiatives for renewable and low carbon energy, including developments outside areas identified in this Local Plan or other strategic policies that are being taken forward through neighbourhood planning, will be encouraged, subject to the acceptability of their wider impacts, including on the Green Belt.</p> <p>B. Decentralised energy infrastructure The Council will work with developers and energy providers to seek opportunities to expand Brentwood's decentralised energy infrastructure.</p> <p>a. Strategic development that could play a key role in establishing a decentralised energy network should engage at an early stage with the Council, stakeholders and relevant energy companies to establish the future energy requirements and infrastructure arising from large-scale development proposals and clusters of significant new development. Applicants of these sites will prepare energy masterplans which establish the most effective energy strategy and supply options.</p> <p>b. New development of over 500 dwelling units, or brownfield and urban extensions at 500 units or more, or where the clustering of neighbouring sites totals over 500 units, will be expected to incorporate decentralised energy infrastructure in line with the following hierarchy:</p> <ol style="list-style-type: none"> where there is an existing heat network, new development will be expected to connect to it; where there is no existing heat network, new development will be expected to deliver an onsite heat network, unless demonstrated that this would render the development unviable; where a developer is unable to deliver the heat network, they need to demonstrate that they have worked in detail with third parties (commercially or community) to fully assess the opportunity; where a heat network opportunity is not currently viable and no third party is interested in its delivery, the development should be designed to facilitate future connection to a heat network unless it can be demonstrated that a lower carbon alternative has been put in place. <p>c. New development will be expected to demonstrate that the heating and cooling system have been selected according to the following heat hierarchy:</p> <ol style="list-style-type: none"> connection to existing CHP/CCHP distribution network; site-wide renewable CHP/CCHP; site-wide gas-fired CHP/CCHP; site-wide renewable community heating/cooling; site-wide gas-fired community heating/cooling; individual building renewable heating. <p>D. Building scale technologies</p>	<p>No Likely Significant Effect</p> <p>This policy describes criteria for establishing energy infrastructure within Brentwood. It does not identify any location, type or extent of development. The Council is keen to ensure that such infrastructure is of renewable energy or low-carbon. Furthermore, the impacts of such proposals are to involve the local community and the impacts of green belt land. This policy is therefore not considered to pose as a likely significant effect to the integrity of European Sites that lie within catchment of the Brentwood Borough.</p>

Policy	Description	HRA Implications
	<p>Innovative approaches to the installation and/or construction of community and individually owned energy generation facilities or low carbon homes which demonstrate sustainable use of resources and high energy efficiency levels will be supported.</p> <p>E. Development in the Green Belt will be considered in accordance with Policy NE10 New Development, Extension and Replacement of Buildings in the Green Belt.</p>	

Policy	Description	HRA Implications
BE05: Assessing Energy Infrastructure	<p>Proposals for development involving the provision of individual and community scale energy facilities from renewable and/or low carbon sources, will be supported, subject to the acceptability of their wider impacts. As part of such proposals, the following should be demonstrated:</p> <ol style="list-style-type: none"> the siting and scale of the proposed development is appropriate to its setting and position in the wider landscape; the proposed development does not create an unacceptable impact on the local amenities, the environment, the historic environment, the setting of a heritage asset, or a feature of natural or biodiversity importance. These considerations will include air quality, as well as noise issues associated with certain renewable and low carbon technologies; any impacts identified have been minimised as far as appropriate; where any localised adverse environmental effects remain, these are outweighed by the wider environmental, economic or social benefits of the scheme; renewable and low carbon energy development proposals located within the Green Belt will need to demonstrate very special circumstances, and ensure that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts) in line with Policy NE09 Green Belt and NE10 New Development, Extension and Replacement of Buildings in the Green Belt. 	<p>No Likely Significant Effect</p> <p>This policy provides development management criteria for the development of energy infrastructure within the Brentwood Borough. These include impacts relating to noise, environment, biodiversity and air quality. This policy is therefore not considered to pose as a likely significant effect to the integrity of European Sites. As such, this policy can be screened out from further discussion.</p>
BE06: Improving Energy Efficiency in Existing Dwellings	<p>To support the transition to a low carbon future, and to tackle issues of rising energy costs, applications for extensions to existing dwellings and/or the conversion of ancillary residential floorspace to living accommodation should be accompanied by cost-effective improvements to the energy efficiency of the existing dwelling. The requirements of this policy will apply where the following measures have not already been implemented:</p> <ol style="list-style-type: none"> cavity wall and/or loft insulation at least to the standards stipulated by Building Regulations; heating controls upgrade; E, F and G rated boilers replaced with an A-rated condensing boiler; and draught proofing around external doors, windows and un-used chimney. 	<p>No Likely Significant Effect</p> <p>This policy describes the energy efficiency requirements of existing residential developments within Brentwood. This policy does not therefore provide site allocations for development and is unlikely to pose as a likely significant effect to the integrity of the European Sites that are within catchment of Brentwood Borough.</p>
BE07: Managing Heat Risk	<ol style="list-style-type: none"> Development proposals should minimise internal heat gain and the risks of overheating through design, layout, orientation and materials. Major development proposals should demonstrate how they will reduce the potential for overheating and reliance on air conditioning systems by: <ol style="list-style-type: none"> minimising internal heat generation through energy efficient design; reducing the amount of heat entering a building through orientation, shading, albedo, fenestration, insulation and the provision of green roofs and walls; managing the heat within the building through exposed internal thermal mass and high 	<p>No Likely Significant Effect</p> <p>This policy describes a set of criteria for development to manage heat risks. This policy is therefore mitigating and is unlikely to pose have adverse impacts on the integrity of European Sites. As such, this policy can be screened out</p>

Policy	Description	HRA Implications
	ceilings; d. providing passive ventilation; e. providing mechanical ventilation; and f. providing active cooling systems.	from further discussion.

Policy	Description	HRA Implications
BE08: Sustainable Drainage	<p>A. All developments should incorporate appropriate Sustainable Drainage Systems (SuDS) for the disposal of surface water, in order to avoid any increase in flood risk or adverse impact on water quality.</p> <p>B. Applications must meet the following requirements:</p> <p>a. Quantity</p> <p>i. on brownfield developments, SuDS features will be required to reduce discharge to previous greenfield rates or achieve a 50% minimum reduction of brownfield run-off rates;</p> <p>ii. sites over 0.1 hectares in Flood Zone 1 will be required to submit a surface water drainage strategy. Larger sites over 1 hectare in Zone 1 or all schemes in Flood Zone 2 and 3 must be accompanied by a Flood Risk Assessment (FRA);</p> <p>b. Quality</p> <p>i. the design must follow an index-based approach when managing water quality. Implementation in line with the updated CIRIA SuDS Manual is required. Source control techniques such as green roofs, permeable paving and swales should be used so that rainfall runoff in events up to 5mm does not leave the site;</p> <p>c. Amenity and Biodiversity</p> <p>i. SuDS should be sensitively designed and located to promote improved biodiversity, water use efficiency, river water quality, enhanced landscape and good quality spaces that benefit public amenities in the area;</p> <p>ii. redeveloped brownfield sites should disconnect any surface water drainage from the foul network;</p> <p>iii. the preferred hierarchy of managing surface water drainage from any development is through infiltration measures, secondly attenuation and discharge to watercourses, and if these cannot be met, through discharge to surface water only sewers;</p> <p>iv. when discharging surface water to a public sewer, developers will be required to provide evidence that capacity exists in the public sewerage network to serve their development.</p>	<p>No Likely Significant Effect</p> <p>This development management policy requiring that sustainable drainage is incorporated at the design stage of development proposals. It is therefore unlikely that this policy will pose as a likely significant effect to the integrity of European Sites. As such, this policy is screened out from further discussion.</p>
BE09: Communications Infrastructure	<p>A. The Council will support investment in high quality communications infrastructure and superfast broadband, including community-based networks, particularly where alternative technologies need to be used in rural areas of the borough.</p> <p>B. Applications from service providers for new or the expansion of existing communications infrastructure (including telecommunications masts, equipment and associated development, and superfast broadband) are supported subject to the following criteria:</p> <p>a. evidence is provided to demonstrate, to the Council's satisfaction, that the possibility of mast or site sharing has been fully explored and no suitable alternative sites are available in the locality including the erection of antennae on existing buildings or other suitable structures;</p>	<p>No Likely Significant Effect</p> <p>This policy is related to communication infrastructure and ensuring the appropriate level of broadband is available to all residents within Brentwood Borough. Suitable communications infrastructure has the potential to reduce the need to travel and thus reduce atmospheric pollution contributions. This policy is therefore</p>

Policy	Description	HRA Implications
	<ul style="list-style-type: none"> b. evidence is provided to confirm that the proposals would cause no harm to highway safety; c. the proposal has sympathetic design and camouflage, having regard to other policies in the Local Plan; d. the proposal has been designed to minimise disruption should the need for maintenance, adaption or future upgrades arise; e. the proposal will not cause significant and irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest; and f. the proposal conforms to the latest International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines, taking account of the cumulative impact of all operator equipment located on the mast/site where appropriate (i.e. prevent location to sensitive community uses, including schools) 	no expected to have likely significant impact to the European Sites located within catchment of the Brentwood Borough. As such, this policy is screened out from further discussion.

Policy	Description	HRA Implications
BE10: Connecting New Developments to Digital Infrastructure	<p>A. To support Brentwood's economic growth and productivity now and in the future, all development proposals should:</p> <ul style="list-style-type: none"> a. provision of up to date communications infrastructure should be designed and installed as an integral part of development proposals. As a minimum, all new developments must be served by the fastest available broadband connection, installed on an open access basis. This includes installation of appropriate cabling within dwelling or business units as well as a fully enabled connection of the developed areas to the full main telecommunications network; b. ensure that sufficient ducting space for future digital connectivity infrastructure (such as small cell antenna and ducts for cables, that support fixed and mobile connectivity and therefore underpins smart technologies) is provided where appropriate; c. support the effective use of the public realm, such as street furniture and bins, to accommodate well-designed and located mobile digital infrastructure; <p>B. When installing new and improving existing digital communication infrastructure in new development, proposals should:</p> <ul style="list-style-type: none"> a. identify and plan for the telecommunications network demand and infrastructure needs from first occupation; b. include provision for connection to broadband and mobile phone coverage across the site on major developments; c. the location and route of new utility services in the vicinity of the highway network or proposed new highway network should engage with the Highway Authority and take into account the Highway Authority's land requirements so as to not impede or add to the cost of the highway mitigation schemes; d. ensure the scale, form and massing of the new development does not cause unavoidable interference with existing communications infrastructure in the vicinity. If so, opportunities to mitigate such impact through appropriate design modifications should be progressed including measures for resiting, re-provision or enhancement of any relevant communications infrastructure within the new development; e. demonstrate that the siting and design of the installation would not have a detrimental impact upon the visual and residential amenity of neighbouring occupiers, the host building (where relevant), and the appearance and character of the area; f. seek opportunities to share existing masts or sites with other providers; and g. all digital communication infrastructure should be capable of responding to changes in technology requirements over the period of the development. <p>C. Where applicants can demonstrate, through consultation with broadband infrastructure providers, that superfast broadband connection is not practical, or economically viable:</p>	<p>No Likely Significant Effect</p> <p>This policy describes that all new development within Brentwood must provide the appropriate level of digital infrastructure. This policy does not allocated sites for service development. As such, this policy is not considered to pose as a likely significant effect to the integrity of European Sites and is therefore screened out from further discussion.</p>

Policy	Description	HRA Implications
	<p>a. the developer will ensure that broadband service is made available via an alternative technology provider, such as fixed wireless or radio broadband; and</p> <p>b. ducting to all premises that can be accessed by broadband providers in the future, to enable greater access in the future. Or:</p> <p>D. The Council will seek developer contribution towards off-site works to enable those properties access to superfast broadband, either via fibre optic cable or wireless technology in the future.</p>	

Policy	Description	HRA Implications
BE11: Strategic Transport Infrastructure	<p>A. Maximising the value of railway connectivity and Elizabeth Line</p> <p>a. The Council supports the fast high-capacity transport links into London from Shenfield and the improved linkages from Elizabeth Line, maximising the potential for an overall improvement to borough rail services, and mitigating environmental and transport impacts as a consequence of the scheme. This would be achieved through improvements to pedestrian and cycle infrastructure and bus services linking both new and existing developments to the train stations, and introduction of parking controls where needed.</p> <p>b. Development in proximity to the railway stations will demonstrate how the schemes connect to the surrounding walking, cycling and public transport links to the station. The proposed schemes must offer direct routes, as well as easy, effective orientation and navigation to the stations.</p> <p>B. Improving multimodal integration and/or capacity at train stations</p> <p>a. The Council will work with the highway authority, statutory bodies and key stakeholders, including public transport operators, to secure funding for:</p> <p>i. improving the public realm and circulation arrangement as well as achieving multimodal integration around both Brentwood and Shenfield stations given the potential increased usage and footfall expected to arise from Elizabeth Line;</p> <p>ii. improving the public realm, circulation arrangement and capacity of West Horndon station as well as creating associated multimodal interchange through phases to support new residents and employees;</p> <p>iii. improving the public realm and circulation arrangement as well as achieving multimodal integration around Ingatestone; and</p> <p>iv. bus services connecting the developments sites to stations;</p> <p>b. The Council will consider the scope for Park and Ride/ Cycle/ Stride schemes where the demand and impacts are assessed within a detailed feasibility study.</p> <p>C. Delivering improvements to the highway infrastructure capacity</p> <p>a. The Council will continue to work with the highway authority, statutory bodies and key stakeholders to coordinate and, where appropriate, deliver improvements to the highway network and other suitable non-highway measures.</p> <p>b. Any significant impacts from the development on the transport network on highway safety must be effectively mitigated to an acceptable degree in line with Policy BE16 Mitigating the Transport Impacts of Development.</p> <p>c. Development close to schools and early years & childcare facilities should facilitate an attractive public realm that is safe for children and encourages walking and cycling to address the impacts of school run traffic, in line with ECC's Developers' Guide to Infrastructure Contributions.</p>	<p>No Likely Significant Effect</p> <p>This policy does not propose development at Elizabeth Line; rather this policy supports this development requires that public transport links are maximized to their best use. This policy therefore encourages the use of public transport and waling and cycling links into/ out of Brentwood. This policy is therefore not expected to impact on the integrity of European Sites that are located within catchment of the Borough.</p>

Policy	Description	HRA Implications
BE12: Car-limited Development	<p>The Council will encourage car-limited development proposals in appropriate locations that are, or are planned to be, well-connected by public transport and have good accessibility through walking and cycling. Car-limited development will be considered against the following criteria:</p> <ul style="list-style-type: none"> a. where there is safe and direct walking and cycling routes into Brentwood Town Centre or District Shopping Centres, railway stations or strategic employment sites; b. where there is excellent access to public transport or where internal road layouts are well-connected allowing bus services to access; c. where there is potential for measures to enable sustainable modes that offer travel choice: and d. where the car- limited status of the development can realistically be enforced by planning condition, planning obligations, on-street parking controls or other means such as car clubs. 	<p>No Likely Significant Effect</p> <p>This is a development management policy identifying where car-light developments may be appropriate. This policy encourages the use of fewer cars within developments. As such this is a positive policy aimed at reducing atmospheric pollution and is therefore unlikely to have significant effects upon the European Sites located within catchment of Brentwood.</p>
BE13: Sustainable Means of Travel and Walkable Streets	<p>A. Sustainable modes of transport should be facilitated through new developments to promote accessibility and integration into the wider community and existing networks. Priority should be given to cycle and pedestrian movements and access to public transport.</p> <p>B. Development proposals should seek to provide appropriate provision for the following sustainable measures:</p> <ul style="list-style-type: none"> a. the provision of pedestrian, cycle, public transport and where appropriate, bridleway connections within development sites and to the wider area, including key destinations; b. the creation of safe, secure, well connected and attractive layouts which minimise the conflicts between traffic, cyclists and pedestrians, and allow good accessibility for bus services within sites and between sites and adjacent areas, improve areas where public transport, pedestrian or cycle movement is difficult or dangerous; c. the provision of community transport measures promoting car pools, car sharing, voluntary community buses, cycle schemes; d. safeguarding existing and proposed routes for walking, cycling, and public transport, from development that would prejudice their continued use and/or development; and e. any development requiring a new road or road access, walking and cycling facilities and public transport, will be required to have regard to the adopted Essex County Council's Development Management Policies or successor documents, in order to assess the impact of development in terms of highway safety and capacity for both access to the proposed development and the wider highway network. 	<p>No Likely Significant Effect</p> <p>This policy ensures that new development within Brentwood is well connected to public transport links. Proposals that are not well connected to existing infrastructure will be rejected on the bases of unsustainable development. As such this policy is not likely to pose as a significant effect to European Sites that are located within catchment to Brentwood Borough. As such, this policy is screened out from further discussion.</p>
BE14: Sustainable Passenger Transport	<p>A. The Council will facilitate and support sustainable passenger transport services operating in Brentwood to help deliver the vision of the Local Plan.</p> <p>B. Development proposals should protect and enhance existing passenger transport and their capacity.</p>	<p>No Likely Significant Effect</p> <p>This policy ensures that there are adequate facilities for passenger transport services. It does</p>

Policy	Description	HRA Implications
	C. Community facilities, schools, and specialist older persons housing, where reasonable and proportionate, should provide pick-up and drop-off facilities (with appropriate kerbs) for passenger transport close to the principal entrance suitable for minibuses, school buses, taxis, and/or ambulances.	not in itself provide for new development. As such, this policy is not considered to pose as a likely significant effect to the integrity of European Sites located within the Brentwood Borough. As such this policy is screened out from further discussion.
BE15: Electric and Low Emission Vehicle	A. The Council will seek appropriate infrastructure for electric and low emission vehicles at new developments. B. This could include, but is not limited to, electric vehicle charging / plug-in points or the infrastructure required to provide this in the future.	No Likely Significant Effect This policy encourages the use of electric or low emission vehicles for all major development. As such, this is a mitigating strategy for air quality control measures. As such this policy is not likely to pose as a likely significant effect to the integrity of European Sites within Brentwood Borough.
BE16: Mitigating the Transport Impact of Development	A. Developments should seek to ensure that they will not have an unacceptable transport impact and/or any significant impacts from the development on the transport network (in terms of capacity and congestion) and on highway safety can be effectively mitigated to an acceptable degree. B. New development will be required to: a. submit Travel Plans, Transport Assessments and/or Statements in accordance with the thresholds and detailed requirements for each land use category as set out in the Essex County Council's Development Management Policies or its successors; b. provide reasonable and proportionate financial contributions/mitigation measures where necessary to mitigate the transport impact of the development to an acceptable degree. This could include investment in infrastructure, services, Low Emission Zone, or behavioural change measures (including enforcement) to encourage the use of sustainable modes of transport. Such measures should be provided to meet the first or early occupation of a site in order to influence travel behaviour from the outset.	No Likely Significant Effect This policy is also a mitigating strategy designed to improve the efficiency of transport links by encouraging behavioral changes to transport. This policy is therefore not considered to pose as a likely significant effect to the integrity of European Sites and is screened out from further discussion.
BE17: Parking Standards	A. The Council will refer developers to the vehicle parking standards set out in the most up-to-date Essex Parking Standards. Schemes should comply with design standards and provision levels for uses and transport modes specified. B. In the following circumstances, the parking standards may be flexible to minimise pressure on land and encourage alternative modes of transport:	No Likely Significant Effect This policy does not allocate land for car parking; rather this policy ensures that abide by the Parking Standards adopted by the Borough. As

Policy	Description	HRA Implications
	<p>a. office developments in urban areas that are well-connected by public transport and have good accessibility through walking and cycling;</p> <p>b. retail and mixed-use development in the Town Centre, District Shopping Centres and Local Centres that has access to shared car parks with different facilities/users at different times; and</p> <p>c. commuter parking provision at train stations.</p> <p>C. Proposals which do not conform to these standards should be supported by evidence detailing the local circumstances that justify deviation from the standard.</p>	<p>such this policy is not expected to pose as a likely significant effect to European Sites and is screened out from further discussion.</p>

Policy	Description	HRA Implications
BE18: Green and Blue Infrastructure	<p>A. Brentwood's existing ecological networks, its green and open spaces, as well as green and blue features in the built environment are a part of the borough's network of green and blue infrastructure (GBI) and should be protected, planned, enhanced and managed.</p> <p>B. Development proposals should:</p> <ol style="list-style-type: none"> ensure GBI is integral to the primary decision making at every stage in the planning process; maximise opportunities for the provision, restoration, enhancement, and connection of GBI that integrates with natural and historic environments and systems; direct buildings and construction area to the least sensitive locations; provide appropriate specification and maintenance plans for proposed on site green and blue infrastructure throughout the life of the development, this includes small scale greening interventions such as green roofs, street trees and soft landscaping; protect and enhance Brentwood's rivers, ponds and watercourses, avoid any adverse impacts on existing rivers, the water quality of the rivers and watercourse, and demonstrate that any unavoidable impacts are mitigated; seek to improve the water environment and ensure that adequate wastewater infrastructure capacity is provided; ensure that misconnections between foul and surface water networks are eliminated and not easily created through future building alterations; incorporate measures such as smart metering, water saving and recycling, including retrofitting and rain/grey water harvesting, to help to achieve lower water consumption rates and to maximise futureproofing; deliver environmental net gains; if there is a net loss from the development, provide provisions through offsetting. <p>C. Where this is not possible, financial contributions to facilitate improvements to the quality and extent of existing GBI in Brentwood Borough will be sought.</p> <p>D. The quantity, quality, accessibility and distribution of green and blue infrastructure for proposed allocations, including Dunton Hills Garden Village, will be set out in site specific policies.</p>	<p>No Likely Significant Effect</p> <p>This policy encourages the protection and enhancement of green and blue infrastructure within Brentwood such as the Thames Chase Forest. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.</p>
BE19: Access to Nature	<p>Access to nature should be integrated as a fundamental part of site and buildings design. Development, including conversion of existing buildings, will be supported if they:</p> <ol style="list-style-type: none"> major development should provide direct access to nature by measures such as buildings design and orientation, high-quality landscaping, planting, green roofs, green walls, nature-based sustainable drainage and/or non-motorised access to the countryside; these measures should be protected, planned, designed and managed as integrated features of green and blue infrastructure; development in areas that are more than 1 km walking distance from an accessible green 	<p>No Likely Significant Effect</p> <p>This policy encourages access to nature within Brentwood, through green roofs and nature-based sustainable drainage. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be</p>

Policy	Description	HRA Implications
	open space should seek opportunities to improve residents' experience and interaction with nature by means of design and/or greening interventions.	screened out from further discussion.

Policy	Description	HRA Implications
BE20: Allotments And Community Food Growing Space	<p>A. Planning for allotment space should be an integral part of the green and blue infrastructure provision in residential development.</p> <p>B. Provision of space for personal and community gardening and food growing will be favourably considered.</p>	<p>No Likely Significant Effect</p> <p>This policy encourages community garden spaces within Brentwood. This is a positive policy as this type of outdoor activity has the potential to divert recreational pressure away from sensitive European sites. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.</p>
BE21: Protecting Land for Gardens	<p>Proposals for development on sites that form part of an existing allotment, garden, or group of gardens will only be permitted where:</p> <ul style="list-style-type: none"> a. sufficient garden space and space around existing dwellings is retained, especially where these spaces and any trees are worthy of retention due to their contribution to the character of the area and their importance for biodiversity; b. the form, height and layout of the proposed development is appropriate to the surrounding pattern of development and the character of the area in line with Policy HP14 Responding to Context; c. the amenity and privacy of neighbouring, existing and new properties is protected; d. provision is made for adequate amenity space, vehicular access arrangements and parking spaces for the proposed and existing properties; and e. there is no detrimental effect on the potential comprehensive development of the wider area. 	<p>No Likely Significant Effect</p> <p>This policy encourages the preservation of garden spaces within Brentwood. This is a positive policy as garden provision has the potential to divert recreational pressure away from sensitive European sites. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.</p>
BE22: Open Space in New Development	<p>A. New development proposals are expected to provide functional on-site open space and/or recreational amenities and may, where appropriate, be required to also provide a financial contribution towards new or improved facilities within the borough.</p> <p>B. The amount and type of provision required will be determined according to the size, nature and location of the proposal, quantity and type of open space needed, and existing provision accessible to the proposal. All payments will be in line with the Policy BE23 Open Space, Community, Sport and Recreational Facilities.</p> <p>C. A commuted sum may be requested for:</p> <ul style="list-style-type: none"> a. proposals where strategic open space requirements cannot be met within the site; b. local and strategic open space in developments of single person households or of dwellings for the elderly (where however some compensating increase in private amenity space may be 	<p>No Likely Significant Effect</p> <p>This policy encourages the provision of and preservation of open spaces within Brentwood. This is a positive policy as open space has the potential to divert recreational pressure away from sensitive European sites. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further</p>

Policy	Description	HRA Implications
	<p>required); or</p> <p>c. a Town Centre, District Shopping Centre or Local Centre location within Brentwood or where</p> <p>d. it is justified by an outstanding urban design approach based on site constraints and opportunities.</p> <p>D. All open space provision should be fully equipped to meet the needs of users as agreed by the Council, reflecting acceptable distance and minimum size criteria for different types of open space as set out in the Council's Open Space Standards (refer to Figure 5.4). Maintenance Plans should be submitted at planning application stage for all new facilities provided for exercise or recreation purposes. This is to secure quality over the long term and clarify responsibilities from the outset.</p>	<p>discussion.</p>

Policy	Description	HRA Implications
BE23: Open Space, Sport and Recreational Facilities	<p>A. Within the borough's urban areas, permission will not be granted for development of land allocated on the Brentwood Policies Map as Protected Urban Open Space or Local Green Space unless it can be demonstrated:</p> <ol style="list-style-type: none"> that alternative and improved provision can be created in a location well related to the functional requirements of the relocated use and existing and future users; the proposal would relate to the enhancement of the open space, contributing to both the character and amenity of the area; or the provision of new open space creates no additional displacement within the Green Belt. <p>B. All proposals, where appropriate, will be required to comply with the Council's open space standards; with regard to children's play space, the Council will seek proposals which meet the Fields in Trust minimum standards (see Figure 5.4 and Figure 5.5).</p> <p>C. Proposals for green space and landscaping must be accompanied by a maintenance plan to ensure long-term quality and scheme viability.</p> <p>D. There will be a presumption against any development that involves the loss of open space, community, sport, recreation or play facilities, including allotments, except where it can be demonstrated that where alternative facilities of equal or better quality and convenience will be provided as part of the development.</p> <p>E. Where appropriate, the Council will seek provision of community and recreational facilities through the acquisition of land, joint use of existing facilities or by entering into negotiation with private landowners.</p>	<p>No Likely Significant Effect</p> <p>This policy encourages the preservation of open spaces within Brentwood. This is a positive policy as open space has the potential to divert recreational pressure away from sensitive European sites. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.</p>
HP01: Housing Mix	<p>A. All new development should deliver an inclusive, accessible environment throughout.</p> <ol style="list-style-type: none"> On residential development proposals of 10 or more (net) additional dwellings the Council will require: <ol style="list-style-type: none"> an appropriate mix of dwelling types, sizes and tenures to meet the identified housing needs in the borough as set out in the Strategic Housing Market Assessment or any similar evidence for market and affordable units (such as the Council's Housing Strategy), to provide choice, and contribute towards the creation of sustainable, balanced and inclusive communities; and each dwelling to be constructed to meet requirement M4(2) accessible and adaptable dwellings, unless it is built in line with M4(3) wheelchair adaptable dwellings, of the Building Regulations 2015, or subsequent government standard. On developments of 60 or more (net) dwellings the Council will require all of the above, and: <ol style="list-style-type: none"> a minimum of 5% of new affordable dwellings should be built to meet requirement M4(3) wheelchair accessible dwellings of the Building Regulations 2015, or subsequent government standard. 	<p>No Likely Significant Effect</p> <p>This is a development management policy relating to housing mix, tenure and types. As such this policy is not expected to result in a net increase in residential development nor does this policy allocated sites for re-development. As such, this policy is no expected to pose as a likely significant effect to European Sites and can be screened out from further discussion.</p>

Policy	Description	HRA Implications
	<p>c. On development sites of 500 or more dwellings the Council will require all of the above, and:</p> <ul style="list-style-type: none"> i. a minimum of 5% self-build homes which can include custom housebuilding; and ii. provision for Specialist Accommodation taking account of local housing need in accordance with the criteria set out in Policy HP04 Specialist Accommodation. <p>B. Where a development site has been divided into parts, or is being delivered in phases, the area to be used for determining whether this policy applies will be the whole original site.</p> <p>C. The inclusion of self-build and custom build homes and Specialist Residential Accommodation on smaller sites will also be encouraged.</p>	

Policy	Description	HRA Implications
HP02: Protecting the Existing Housing Stock	<p>A. To ensure that housing supply is protected, the net loss of existing dwellings will be resisted. The Council will only support development proposals that would result in the net loss in the number of dwellings where one or more of the following criteria are met:</p> <ul style="list-style-type: none"> a. the continued use of the building as a dwelling is undesirable due to proven environmental constraints; and b. the loss of the dwellings would be outweighed by the provision of an essential community service or another form of residential accommodation. <p>B. In justifying any change of use between residential use classes, proposals must demonstrate how they are responding to established housing need as demonstrated in Council's most up-to-date Strategic Housing Market Assessment.</p>	<p>No Likely Significant Effect</p> <p>This is a development management policy relating to protection of existing housing stock. As such this policy is not expected to result in a net increase in residential development nor does this policy allocated sites for re-development. As such, this policy is no expected to pose as a likely significant effect to European Sites and can be screened out from further discussion.</p>
HP03 Residential Density	<p>A. Proposals for new residential development should take a design led approach to density which ensures schemes are sympathetic to local character and make efficient use of land.</p> <p>B. Residential development proposals will generally be expected to achieve a net density of at least 35 dwellings per hectare net or higher, unless the special character of the surrounding area suggests that such densities would be inappropriate, or where other site constraints make such densities unachievable.</p> <p>C. Development proposals will be expected to achieve a higher density, generally above 65 dwellings per hectare net in the Town Centre, District Shopping Centres, and Local Centres listed below Policy PC08 Retail Hierarchy of Designated Centres, or other locations with good public transport accessibility, subject to Policy HP14 Responding to Context and Policy HP16 Buildings Design.</p>	<p>No Likely Significant Effect</p> <p>This policy is related to housing density and design within town centers and within more rural settings. This policy does not provide for any new development, but is a development management policy and is therefore not considered to pose as a likely significant effect to the European Sites that are located within catchment to Brentwood. As such, this policy is screened out from further discussion.</p>
HP04: Specialist Accommodation	<p>A. The Council will encourage and support proposals which contribute to the delivery of Specialist Accommodation, provided that the development:</p> <ul style="list-style-type: none"> a. meets demonstratable established local community need; b. is readily accessible to public transport, shops, local services, community facilities and social networks and, where appropriate, employment and day centres; c. would not result in the over concentration of any one type of accommodation; d. where appropriate, provides suitable landscaping and amenity space; and e. where appropriate, is in accordance with Policy NE10 New Development, Extension and Replacement of Buildings in the Green Belt. <p>B. Subject to viability, where accommodation falls within use class C3 an appropriate proportion of affordable housing in accordance with Policy HP05 Affordable Housing will be required with the mix of tenures negotiated by the Council.</p>	<p>No Likely Significant Effect</p> <p>This policy supports the development of specialist accommodation; however, this is a development management policy that does not in itself identify any quantum or location of development. As such, this policy is not expected to pose as likely significant effects to the integrity of European Sites.</p>

Policy	Description	HRA Implications
	C. A condition may be imposed restricting occupation to persons requiring specialist accommodation where deemed necessary.	
HP05: Affordable Housing	<p>A. The Council will require the provision of 35% of the total number of residential units to be provided and maintained as affordable housing within all new residential development sites on proposals of 11 or more (net) units or sites of 10 or less units which have a combined gross internal floorspace in excess of 1,000 square meters.</p> <p>B. In considering the suitability of affordable housing, the Council will require that:</p> <ul style="list-style-type: none"> a. the tenure split be made up of 86% Affordable/Social Rent and 14% as other forms of affordable housing (this includes starter homes, intermediate homes and shared ownership and all other forms of affordable housing as described by national guidance or legislation) or regard to the most up to date SHMA; b. the affordable housing be designed in such a way as to be seamlessly integrated to that of market housing elements of a scheme (in terms of appearance, build quality and materials) and distributed throughout the development so as to avoid the over concentration in one area; and c. the type, mix, size and cost of affordable homes will meet the identified housing need as reported by the Council's most up-to-date Strategic Housing Market Assessment and Housing Strategy. <p>C. In seeking affordable housing provision, the Council will have regard to scheme viability; only where robust viability evidence demonstrates that the full amount of affordable housing cannot be delivered, the Council will negotiate a level of on-site affordable housing that can be delivered taking into account the mix of unit size, type and tenure and any grant subsidy received.</p> <p>D. The Council will only accept a financial contribution in lieu of on-site provision where it can be satisfactorily demonstrated that on-site provision is neither feasible nor viable.</p> <p>E. Where a site has been sub-divided or is not being developed to its full potential so as to fall under the affordable housing threshold, the Council will seek a level of affordable housing to reflect the provision that would have been achieved on the site as a whole had it come forward as a single scheme for the allocated or identified site.</p> <p>F. Planning obligations will be used to ensure that the affordable housing will remain at an affordable price for future eligible households, or for the subsidy to be recycled to alternative affordable housing provision.</p> <p>G. The requirement to provide affordable housing will apply to all residential development falling under use class C3 with the exception of Gypsy & Traveller Pitches or Travelling Showman Plots.</p>	<p>No Likely Significant Effect</p> <p>This is a development management policy that describes the proportion of affordable housing required from development within Brentwood. As such, this policy does not allocate housing within Brentwood and is therefore not considered to pose as a likely significant effect to the integrity of European Sites located within catchment of Brentwood.</p>
HP06: Standards for New Housing	All residential development shall comply with the following: Internal Residential Space	<p>No Likely Significant Effect</p> <p>This is a development management policy</p>

Policy	Description	HRA Implications
	<p>A. All new build housing will achieve appropriate internal space through compliance with the nationally-described space standard.</p> <p>External Residential Space</p> <p>B. New residential units will be expected to have direct access to an area of private and/or communal amenity space. The form of amenity space will be dependent on the form of housing and could be provided in a variety of ways, such as a private garden, roof garden, communal garden, courtyard balcony, or ground-level patio with defensible space from public access. In providing appropriate amenity space, development should:</p> <ul style="list-style-type: none"> a. consider the location and context of the development, including the character of the surrounding area; b. take into account the orientation of the amenity space in relation to the sun at different times of year; c. address issues of overlooking and enclosure, which may otherwise impact detrimentally on the proposed dwelling and any neighbouring dwellings; and d. design the amenity space to be of a shape, size and location to allow effective and practical use of and level access to the space by residents. <p>Housing Quality</p> <p>C. Consideration should be given to how smart infrastructure can be integrated into the communal areas, including waste disposal points, shared batteries for renewable energy sources etc.</p> <p>D. All new-build residential development to incorporate sustainable design features to reduce carbon dioxide and nitrogen dioxide emissions, and the use of natural resources, in line with Policy BE02 Sustainable Construction and Resource Efficiency, Policy BE03 Carbon Reduction, Renewable Energy and Water Efficiency, and Policy BE08 Sustainable Drainage.</p> <p>E. These standards are applicable for both private and affordable housing in Brentwood.</p> <p>F. Compliance with the criteria should be shown on all submitted layouts and floorplans and be clearly demonstrated in the Design and Access Statement submitted with the planning application.</p>	<p>relating to current building standards. This includes aspects of internal space and amenity space. This policy does not therefore identify any location, type or quantum of development to be provided within Brentwood. It is therefore not expected that this policy would pose as a likely significant effect to the integrity of European Sites that are located within catchment of Brentwood Borough.</p>

Policy	Description	HRA Implications
HP07: Provision for Gypsies and Travellers	<p>In order to meet identified need, a total of 13 permanent pitches for Gypsies and Travellers as defined by national planning policy for the period 2016-2033 will be provided:</p> <ul style="list-style-type: none"> a. through consideration of the regularisation of 8 pitches in accordance with Policy HP08 Regularising Suitable Existing Traveller Sites; and b. through the incorporation of a minimum of 5 serviced Gypsy and Traveller pitches as part of the Dunton Hills Garden Village allocation, to be delivered in the first five years of development and in accordance with the criteria set out in Policy HP11 Proposals for Gypsies, Travellers and Travelling Showpeople on Windfall Sites. 	<p>No Likely Significant Effect</p> <p>This policy allocates a total of 13 sites for Gypsies and Travellers. Whilst this is a small quantum of development which in isolation is unlikely to impact on a European site, in combination considerations are required.</p>
HP08: Regularising Suitable Existing Traveller Sites	<p>The Council will support an application for planning permission on the following sites for permanent Gypsy and Traveller accommodation, as shown on the Brentwood Policies Map and Appendix 5, and listed below, subject to compliance with identified requirements:</p> <p>A. Site Ref GT16</p> <ul style="list-style-type: none"> a. Site Address: Oaktree Farm (Greenacres), Chelmsford Road b. Number of Pitches: 7 c. Proposals for development at this site should comply with the following site-specific requirements: <ul style="list-style-type: none"> i. A landscape framework to be submitted to provide suitable boundary treatment to include a mixture of native trees and shrubs around the site to safeguard the character and appearance of the area. ii. Given the location of the site within the Green Belt any proposals for expansion will not be allowed. <p>B. Site Ref GT17</p> <ul style="list-style-type: none"> a. Site Address: Hunters Green, Albyns Lane, Navestock b. Number of Pitches: 1 c. Proposals for development at this site should comply with the following site-specific requirement: <ul style="list-style-type: none"> i. Given the location of the site within the Green Belt any proposals for expansion will not be allowed. 	<p>No Likely Significant Effect</p> <p>This policy allocates two new sites for Gypsies and Travellers (7 pitches). Whilst this is a small quantum of development which in isolation is unlikely to impact on a European site, in combination considerations is required.</p> <p>It is noted that the two allocations noted in this policy are located more than 22km from the recreational ZOI for the Blackwater Estuary Ramsar and SPA and the portion of Essex Estuaries SAC that coincides.</p>
BEHP09: Safeguarding Permitted Sites	<p>A. The existing Gypsy and Traveller sites listed below, and as shown on the Brentwood Policies Map, will be safeguarded from alternative development, unless it can be demonstrated that the site is no longer required to meet any identified Traveller need across the borough, or acceptable replacement accommodation can be provided.</p>	<p>No Likely Significant Effect</p> <p>This policy does not allocated new pitches; rather this policy ensures that existing gypsy and traveller sites are safeguarded from</p>

Policy	Description	HRA Implications																																																
	<p>B. Any other site that is subsequently granted a permanent planning permission for Gypsy and Traveller use shall be safeguarded in accordance with this policy.</p> <table> <tr> <th>Site ref.</th><th>Location</th><th>No. of pitches</th></tr> <tr> <td>GT1</td><td>Clementines Farm, Murthering Lane, Navestock</td><td>1</td></tr> <tr> <td>GT2</td><td>Deep Dell Park (Willow Farm), Ingatestone</td><td>6</td></tr> <tr> <td>GT3</td><td>Lilliputs, Blackmore</td><td>2</td></tr> <tr> <td>GT4</td><td>Meadow View, Blackmore</td><td>2/3</td></tr> <tr> <td>GT5</td><td>Pond End, Kelvedon Hatch</td><td>1/2</td></tr> <tr> <td>GT6</td><td>Ponderosa, Kelvedon Hatch</td><td>1</td></tr> <tr> <td>GT7</td><td>Poplar Farm, Ingatestone</td><td>2/3</td></tr> <tr> <td>GT8</td><td>Roman Triangle, Mounthnessing</td><td>5</td></tr> <tr> <td>GT9</td><td>Rye Etch, Navestock</td><td>3</td></tr> <tr> <td>GT10</td><td>The Willows', Kelvedon Hatch</td><td>3</td></tr> <tr> <td>GT11</td><td>Tree Tops, Navestock</td><td>3</td></tr> <tr> <td>GT12</td><td>Warren Lane, Doddinghurst</td><td>1</td></tr> <tr> <td>GT13</td><td>Wenlock Meadow</td><td>1</td></tr> <tr> <td>GT14</td><td>Hope Farm, Navestock</td><td>3</td></tr> <tr> <td>GT15</td><td>Orchard View, Navestock</td><td>4</td></tr> </table> <p>C. Of the sites listed above, applications for the removal of temporary personal planning permissions for Gypsy and Traveller sites to permanent planning permissions for Gypsy and Traveller sites will be supported by the local planning authority provided the occupant meet the definition of a Gypsy, Traveller or Travelling Showperson as defined in national planning policy.</p>	Site ref.	Location	No. of pitches	GT1	Clementines Farm, Murthering Lane, Navestock	1	GT2	Deep Dell Park (Willow Farm), Ingatestone	6	GT3	Lilliputs, Blackmore	2	GT4	Meadow View, Blackmore	2/3	GT5	Pond End, Kelvedon Hatch	1/2	GT6	Ponderosa, Kelvedon Hatch	1	GT7	Poplar Farm, Ingatestone	2/3	GT8	Roman Triangle, Mounthnessing	5	GT9	Rye Etch, Navestock	3	GT10	The Willows', Kelvedon Hatch	3	GT11	Tree Tops, Navestock	3	GT12	Warren Lane, Doddinghurst	1	GT13	Wenlock Meadow	1	GT14	Hope Farm, Navestock	3	GT15	Orchard View, Navestock	4	development. As such, this policy is not expected to pose as a likely significant effect to European Sites.
Site ref.	Location	No. of pitches																																																
GT1	Clementines Farm, Murthering Lane, Navestock	1																																																
GT2	Deep Dell Park (Willow Farm), Ingatestone	6																																																
GT3	Lilliputs, Blackmore	2																																																
GT4	Meadow View, Blackmore	2/3																																																
GT5	Pond End, Kelvedon Hatch	1/2																																																
GT6	Ponderosa, Kelvedon Hatch	1																																																
GT7	Poplar Farm, Ingatestone	2/3																																																
GT8	Roman Triangle, Mounthnessing	5																																																
GT9	Rye Etch, Navestock	3																																																
GT10	The Willows', Kelvedon Hatch	3																																																
GT11	Tree Tops, Navestock	3																																																
GT12	Warren Lane, Doddinghurst	1																																																
GT13	Wenlock Meadow	1																																																
GT14	Hope Farm, Navestock	3																																																
GT15	Orchard View, Navestock	4																																																

Policy	Description	HRA Implications
HP10: Sub-division of Pitches or Plots	<p>A. The local planning authority will consider proposals for the sub-division of authorised Gypsy, Traveller and Travelling Showpeople sites on a case by case basis, and provided that all the following criteria are met:</p> <ul style="list-style-type: none"> a. the living environment of residents on the proposed site and neighbouring land is protected; b. sites are of a suitable size to enable the creation of additional pitches or plots; c. the sub-division of Gypsy and Traveller sites do not result in a total of more than 10 pitches on a site; d. there is no significant loss of soft and hard landscaping and amenity provision within the existing site, particularly where conditioned by a previous consent; e. there is no significant adverse impact on the intrinsic character and beauty of the countryside; and f. there is no adverse impact in terms of highways access and vehicle movement. <p>B. It will be necessary for the application to demonstrate the need for the additional provision in relation to the requirement of Policy HP07, the lack of alternative provision and specific circumstances of the applicant.</p>	<p>No Likely Significant Effect</p> <p>This policy provides requirements to the sub-division of Gypsy, Traveller and Travelling Showpeople sites. Listed within the requirements are aspects relating to loss of soft and hard landscapes and the impacts on the intrinsic beauty of the countryside. This policy does not provide for any increase in development, but rather provides development management guidance relating to sub-division of pitches. It is therefore considered unlikely that this policy will have an impact on European Sites.</p>
HP11: Proposals for Gypsies, Travellers and Travelling Showpeople on Windfall Sites	<p>A. Planning permission for Gypsy and Traveller caravan sites and sites for Travelling Showpeople (as defined in the governments Planning Policy for Travellers) on unallocated land outside development frameworks, and outside the Green Belt, will only be granted in accordance with all the following criteria:</p> <ul style="list-style-type: none"> a. the site is well related to existing communities and accessible to local services and facilities, such as shops, primary and secondary schools, healthcare and public transport; b. safe and convenient vehicular access to the local highway network can be provided; c. essential services (water, electricity and foul drainage) are available on site or can be made available on site; d. there is no significant adverse impact on the intrinsic character and beauty of the countryside; e. the site would not lead to the loss of, or adverse impact on, important historic and natural environment assets; f. there is no significant risk of land contamination or unacceptable risk of flooding; g. the site provides a suitable living environment for the proposed residents and there is no significant adverse impact on the amenity of nearby residents; h. the site is of sufficient size to accommodate the proposed number of caravans, vehicles and ancillary areas; i. the capacity of the site does not exceed 10 pitches or plots; and 	<p>No Likely Significant Effect</p> <p>This is a development management policy relating to proposals on unallocated land. It does not in itself identify any quantum or location of development. There are no linking impact pathways present.</p>

Policy	Description	HRA Implications
	<p>j. plots for Travelling Showpeople should also be of sufficient size to enable the storage, repair and maintenance of equipment.</p> <p>B. Gypsy and Traveller sites are inappropriate development in the Green Belt. Any proposals in the Green Belt would have to demonstrate they comply with National and Local Policy regarding development in the Green Belt. If, through the application of such Policy, provision of a Gypsy and Traveller site in the Green Belt is considered acceptable in principle, the proposed development is required to comply with the criteria set out within this policy.</p>	

Policy	Description	HRA Implications
HP12: Planning for Inclusive Communities	<p>To plan for and build inclusive environment that supports our residents and communities, the Council will work with partners, stakeholders and developers to:</p> <ol style="list-style-type: none"> provide access to good quality community spaces, services and amenities and infrastructure that accommodate, encourage and strengthen communities; create places that foster a sense of belonging and social interaction, where communities can develop and thrive; ensure that streets and public spaces are planned for everyone to move around and spend time in comfort and safety, are convenient and welcoming with no disabling barriers, providing independent access without additional undue effort, separation or special treatment; ensure buildings and places are designed in a way that everyone regardless of their ability, age, income, ethnicity, gender, faith, sexual orientation can use confidently, independently, with choice and dignity, avoiding separation or segregation; and ensure that new buildings and spaces are designed to reinforce inclusivity of neighbourhoods and are resilient and adaptable to changing community requirements. 	<p>No Likely Significant Effect</p> <p>This policy safeguards community spaces and amenities. This policy ensures that development is inclusive for all and as such this policy is regards development management and design rather than site allocations. As such this policy is unlikely to have significant effects to the integrity of European Sites and is screened out of further discussion.</p>
HP13: Creating Successful Places	<p>Proposals that meet high design standards to deliver safe, inclusive, attractive and accessible places will be supported. They should:</p> <ol style="list-style-type: none"> provide a comprehensive design approach that deliver high quality, safe, attractive, inclusive, durable and healthy places to live and work in; support the efficient use of land and infrastructure, through uses, mix and density/development intensity; deliver buildings, places and spaces that can adapt to changing social technological, economic and environmental conditions; consider sustainable design and layout at the earliest stage of design, where landscaping, public frontages, building orientation and the impact of microclimate can be considered within the layout to positively enhance the townscape and provide attractive places that improve people's health and sense of vitality; create permeable, accessible and multifunctional streets and places that promotes active lifestyle and integrates different modes of transport, parking and servicing; access, routes and connectivity for cyclists and pedestrians through and out from development sites should be superior to that provided for motorists so that walking and cycling becomes the natural choice for journeys around the locality; ensure public and private amenity spaces of both existing and future development are inclusive, usable, safe and enjoyable; these include indoor and outdoor space, outlook, natural lighting, ventilation, matters of privacy, overlooking; create a range of opportunities for natural surveillance and observation; 	<p>No Likely Significant Effect</p> <p>A development management policy relating to creating successful places. This policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.</p>

Policy	Description	HRA Implications
	<p>i. mitigate the impact of air, noise, vibration and light pollution from internal and external sources, especially in intrinsically dark landscapes and nature conservation, as well as residential areas;</p> <p>j. integrate a mix of building typologies that meet the diverse needs of people in the borough;</p> <p>k. meet the principles of inclusive design, active design principles, and facilitate an inclusive environment for people of all abilities and age, ethnicity, gender, economic circumstances, and faith;</p> <p>l. be designed to minimise criminal activities or perceived threat of crime and improve community safety; and</p> <p>m. respond positively to the context, for example by reusing sustainable materials, finishes and street furniture that are suitable to the location and context.</p> <p>In addition, proposals should reflect the requirements of Brentwood Borough's Masterplan requirements where applicable.</p>	

Policy	Description	HRA Implications
HP14: Responding to Context	<p>A. Successful design is founded upon an understanding and respect for an area's unique built, natural and cultural context. Development will be supported where it is demonstrated that it responds positively to its context and has drawn inspiration from the key characteristics of its surroundings.</p> <p>B. The Council will require applicants to demonstrate how proposals:</p> <ol style="list-style-type: none"> identify and respond positively to existing features of natural, historic or local importance on and close to the proposed development site; use appropriate local characteristics to inform the use, layout, massing, scale, detailing, materials, location of entrances and landscape design of new development; enhance, reinforce or improve the quality and appearance of the surrounding area and the way it functions; and be well connected to, and integrated with, the immediate locality and wider area. 	<p>No Likely Significant Effect</p> <p>This policy is related to development and building design. It is therefore not consider to pose as a likely significant effect to the integrity of European Sites located within catchment of Brentwood.</p>
HP15: Permeable and Legible Layout	<p>Development proposals will be favourably considered where the planning and design of layout:</p> <ol style="list-style-type: none"> create a permeable and legible street system that connects well with the existing links within and outside of the development; arrange building forms, access points, routes, public and private spaces, and ancillary functions in an efficient, safe, workable, spatially coherent and attractive manner; incorporate existing site features of value; and safeguard the amenities of occupiers and nearby properties. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to scheme layout. This policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.</p>
HP16: Buildings Design	<p>A. In ensuring high quality design standard, new buildings will be supported where it can be demonstrated that they:</p> <ol style="list-style-type: none"> have a positive impact on their setting in terms of siting, scale and massing, materials and detailing, use and ground floor activity, wider townscape and landscape impacts; are safe, convenient and accessible for all users to a level in excess of building regulations minima; design measures to reduce the environmental footprint of the buildings, in line with Policy BE03 Carbon Reduction, Renewable Energy and Water Efficiency; support and integrate biodiversity in the built environment; are constructed in a sustainable manner and are easily adaptable to needs of future occupiers; successfully integrate functional needs such as storage, refuse and recycling, bicycles and car parking, electric car charging points; and incorporate safe emergency evacuation facilities for all building users. <p>B. Alterations and extensions to existing buildings will be permitted where they consider A and:</p> <ol style="list-style-type: none"> reflect, or positively respond to, the existing building form, material palette and architectural 	<p>No Likely Significant Effect</p> <p>This policy is related to building design, this include preventing impacts to the surrounding landscape. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.</p>

Policy	Description	HRA Implications
	<p>detailing in keeping with Policy HP14 Responding to Context;</p> <p>b. proposals for doors, windows and roof profiles respect the character and proportions of the original building and surrounding context;</p> <p>c. do not unacceptably overlook, overshadow or visually dominate neighbouring properties;</p> <p>d. respect the space between buildings where this contributes to the character of an area; and</p> <p>e. retain sufficient amenity space, bin storage, vehicle access and cycle and car parking.</p>	

Policy	Description	HRA Implications
HP17: Paving Over Front Garden	<p>Where planning permission is required for proposals for the paving over of front gardens, the following criteria should be met:</p> <ul style="list-style-type: none"> a. The proposal appropriately manages surface water run-off, particularly for those areas of the borough with high levels of surface water flooding in line with Policy NE06 Flood Risk; and b. The proposal will not have a negative impact on the character and setting of the immediate area, particularly where applications fall within conservation areas or in the curtilage of a listed building. 	<p>No Likely Significant Effect</p> <p>This policy ensures that paving over gardens does not negatively impact upon surface water discharge and the environment. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.</p>
HP18: Designing Landscape and the Public Realm	<p>Landscape and public realm must be designed as an integral part of new development proposals. High quality development will be supported where they can demonstrate how their proposals:</p> <ul style="list-style-type: none"> a. are designed in relation to the function and character of the spaces and surrounding area; b. retain or enhance existing features including open spaces, trees, natural habitats or other features which make a positive contribution to the character, appearance or significance of the local area; c. incorporate green and blue infrastructure in an appropriate manner to the scale of adjacent buildings and the space available; d. enhance biodiversity through the use of native planting and/or selected species capable of adapting to climate change; e. coordinate the design and siting of street furniture, boundary treatments, lighting, signage and public art; f. factor microclimate and daylight into the design proposals; g. use high quality materials, finishes and street furniture that are suitable to the location and context and help create local distinctiveness; h. adopt the principles of inclusive design and facilitate an inclusive environment for all users; and i. demonstrate how public spaces are to be maintained for the life of the development. 	<p>No Likely Significant Effect</p> <p>This policy encourages development to including landscape design within development proposals, this includes open space and the planting of trees. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.</p>
HP19: Conservation and Enhancement of Historic Environment	<p>A. All development proposals that affect heritage assets and their settings will be required to:</p> <ul style="list-style-type: none"> a. conserve, sustain and enhance designated and non-designated heritage assets including views into and out of conservation areas and their settings; and be sensitively sited and integrated in accordance with advice in accordance with national policy and guidance; b. submit a Heritage Statement providing sufficient information on the significance of the heritage asset, the potential impacts of the proposal on their character and setting, how a proposal has 	<p>No Likely Significant Effect</p> <p>This policy encourages the preservation of historic landscapes within Brentwood. As such, this policy is not expected to pose as a likely significant effect to European Sites and can</p>

Policy	Description	HRA Implications
	<p>been modified to mitigate harm; where archaeological potential is identified this should include an appropriate desk-based assessment and, where necessary, a field evaluation; and</p> <p>c. provide clear justification for any works that would lead to harm or substantial harm to a heritage asset through detailed analysis.</p> <p>B. Proposals that make sensitive use of heritage assets, particularly where these bring redundant or under used buildings or areas, especially any on English Heritage's at Risk Register, into appropriate use will be encouraged.</p> <p>C. When considering proposals for development that affect non-designated heritage assets, the Council will take into account the scale of any harm or loss and the significance of the heritage asset as set out in accordance with national policy and guidance.</p>	<p>therefore be screened out from further discussion.</p>

Policy	Description	HRA Implications
HP20: Listed Buildings	<p>A. Proposals for development affecting or within the vicinity of a listed building should be accompanied by a Heritage Statement that describes the significance of the listed building affected and includes full details of the siting, design, access arrangements and external appearance of the development so that it is possible to assess whether the proposals are sympathetic to its character and setting.</p> <p>B. Changes of use of listed buildings and any associated works of alteration, including external illumination, may be permitted where this would contribute economically towards the restoration, retention or maintenance of the listed building and/or group of buildings, while preserving the historic, spatial or structural integrity of the building or its setting.</p> <p>C. Proposals for the alteration or extension of listed buildings will only be permitted where these are sympathetic to the buildings' character and appearance, and whether features of special architectural or historic interest are preserved, restored or complemented.</p> <p>D. Proposals involving the partial demolition or full demolition of a grade II listed building will only be permitted in exceptional circumstances; development involving the partial demolition or full demolition of a grade I or II* listed building will only be permitted in wholly exceptional circumstances, where all of the following criteria are met:</p> <ol style="list-style-type: none"> the building cannot be used for its existing, previous or original purpose or function; nor can it be changed to any reasonable and viable use; conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; the historic character or appearance of the main building would be maintained or improved by the demolition of a curtilage building(s); the harm or loss is outweighed by the benefit of bringing the site back into use; substantial benefits to the community would derive from the nature, form and function of the proposed development; and demolition would not result in the creation of a long-term cleared site to the detriment of adjacent listed buildings. <p>E. Where development is authorised subject to the above criteria, permission will be subject to agreement that any consequential demolition shall not be carried out until all relevant details of the proposed development have been approved and a contract has been entered into for its subsequent execution.</p>	<p>No Likely Significant Effect</p> <p>This policy encourages the preservation of listed buildings within Brentwood. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.</p>
HP21: Conservation Areas	<p>A. Buildings or parts of buildings, open spaces, trees, vistas or other features which make a positive contribution to the character, appearance or significance of the Conservation Area should be preserved or enhanced.</p> <p>B. All development or redevelopment in or within the vicinity of a Conservation Area will only be</p>	<p>No Likely Significant Effect</p> <p>This policy provides mitigation measures for impacts of development on heritage</p>

Policy	Description	HRA Implications
	<p>permitted where the Council is satisfied that:</p> <ul style="list-style-type: none"> a. development does not adversely affect the streetscape, skyline or significant views; b. the development is proportional in scale, and complementary in design, with the adjoining buildings and wider area; c. where any or part demolition is proposed, the structure makes no material contribution to the character or appearance of the area, or the structure is considered to make a negative contribution to the appearance of the Conservation Area; d. where a change of use is proposed, there will be no adverse effect on the appearance or setting of the building; and e. where an alteration is proposed, it is appropriate and sympathetic in design, scale, materials and colour to the rest of the building. <p>C. Proposals for any scheme, including alteration or replacement of shopfronts within a designated Conservation Area must include a historic and architectural evaluation within the Design and Access Statement. The level of detail provided should be proportionate to the importance of the heritage asset. Proposals will be expected to be of a high-quality design and detailed information will be required.</p> <p>D. Outline planning permission will not be given for new buildings in a Conservation Area.</p>	<p>conservation areas. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.</p>

Policy	Description	HRA Implications
HP22: Local Heritage Assets	<p>A. There is a general presumption in favour of the retention of local heritage assets, including buildings, structures, features and gardens of local interest as detailed in the Council's Local List. In addition, the Council will conserve the traditional landscape and nature conservation character of Protected Lanes, including their verges, banks, ditches and natural features such as hedgerows and other structural elements contributing to the historic features of the lanes.</p> <p>B. Where planning permission is required, proposals will be favourably considered where they retain the significance, appearance, character or setting of local heritage assets.</p> <p>C. Any proposals that would have a materially adverse impact on the physical appearance of Protected Lanes or generate traffic of a type or amount inappropriate for the traditional landscape and nature conservation character of a Protected Lane, will not be permitted.</p>	<p>No Likely Significant Effect</p> <p>This policy encourages the preservation of listed buildings, features and gardens within Brentwood. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.</p>
HP23: Scheduled Monuments and Archaeological Remains	<p>A. The desirability of preserving a scheduled monument or their equivalent and its setting is a material consideration in the determination of planning applications. Planning permission will not be permitted for development which would adversely affect a scheduled monument, or other locally or nationally important sites and monuments, or their settings.</p> <p>B. A full Archaeological Assessment must be included with any planning application affecting areas of known or suspected archaeological importance to ensure that provision is made for the preservation of important archaeological remains. In areas considered less likely to have significant remains, full investigation or a watching brief may be required by planning condition.</p> <p>C. Where proposals affect archaeological sites and other designated assets, preference will be given to preservation in situ unless it can be shown that archaeological mitigation through recording, assessment, analysis report and deposition of archive is more appropriate.</p> <p>D. Any development that may affect archaeological remains will need to demonstrate the likely impact upon the remains and the proposed mitigation to reduce that impact.</p>	<p>No Likely Significant Effect</p> <p>This policy encourages the preservation of scheduled monuments and archaeological remains within Brentwood. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.</p>
PC01: Cultivating a Strong and Competitive Economy	<p>A. The Council and its partners will seek to maintain high and stable levels of local economic growth, enabling the borough's economy to diversify and modernise through the growth of existing businesses and the creation of new enterprises. Support will be given to proposals that secure job growth with 'high value' business and retail.</p> <p>B. This will be secured by:</p> <ol style="list-style-type: none"> improving access to a range of employment opportunities for borough's residents; providing sufficient employment and industrial space in sustainable locations to support economic development and regeneration; intensification of vacant and underutilised employment floorspace and sites and the regeneration of previously developed land in sustainable locations; renewal and improvement to the quality of business premise and office space of different 	<p>No Likely Significant Effect</p> <p>This policy is related to the economy of Brentwood through the safeguarding of current business and business premises. Whilst economic development has the potential to result in increased atmospheric pollution contributions, this policy does not identify any quantum or type of economic development. As such, this policy does not allocate sites for employment/ business development is therefore unlikely to pose as a significant effect to the European Sites located</p>

Policy	Description	HRA Implications
	<p>sizes;</p> <p>e. enhancing and protecting the important role of small and medium sized commercial enterprises;</p> <p>f. directing major new retail, office and leisure investment to the borough's Designated Centres according to their significance on the retail hierarchy, stimulating improvement and regeneration;</p> <p>g. supporting the borough's rural economy and growing agricultural enterprises;</p> <p>h. maintaining current tourist attractions and encouraging new opportunities to increase the number of visitors to the borough; and</p> <p>i. maximising the value of existing and future public transport, walking and cycling network, to support economic activity in line with Policy BE11 Strategic Transport Infrastructure, Policy BE13 Sustainable Means of Travel and Walkable Streets and Policy BE14 Sustainable Passenger Transport.</p>	<p>within catchment of Brentwood.</p>

Policy	Description	HRA Implications
PC02: Job Growth and Employment Land	<p>A. Provision is made for 5,000 additional jobs to be provided in the borough over the Plan period at an average rate of 250 per year.</p> <p>B. Job growth will be provided for by:</p> <ol style="list-style-type: none"> a total of circa 47.39 ha of new employment land (B-use) allocations and continued support for existing employment sites and appropriate redevelopment where appropriate; and retail floorspace provision and policies supporting retail, leisure and commercial growth. <p>C. Areas allocated for employment purposes are set out in Policy PC03 Employment Land Allocations and identified on the Brentwood Policies Map.</p>	<p>Likely Significant Effect</p> <p>This policy aims to provide a total of 5,000 additional jobs within the Borough over the course of the Plan period.</p> <p>In isolation there are no realistic linking impact pathways present, none the less in combination assessment is required.</p>
PC03: Employment Land Allocations	<p>Within those areas allocated for general employment and office development, set out in Figure 7.6 and on the Brentwood Policies Map, the Council will seek to achieve and retain a wide range of employment opportunities. Redevelopment or change of use of business, office, general industry and distribution for non B-class uses will only be permitted where:</p> <ol style="list-style-type: none"> the proposal is for employment generating sui generis uses or other non-residential uses that provide significant employment with no reasonable prospect of locating elsewhere in the borough, and there is no identified need for the site or buildings for B-class uses; the proposal is wholly for affordable housing, the site is vacant, and development would not prejudice continuation of adjacent employment uses; the proposal is for any other use and the application is supported by a statement of efforts made to secure re-use for class B1-B8 or similar uses and other non-residential use that provides employment, which evidence demonstrates there is no realistic prospect of the site or buildings being used or re-used, including through redevelopment, for these purposes; or the site or buildings would be physically unsuitable for re-use for class B1-B8 or similar use, even after adaptation (including sub-division into smaller units), refurbishment or redevelopment, in terms of siting, design, access, layout and relationship to neighbouring buildings and uses. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to employment land allocations. This policy does not in itself allocate any employment sites and does not identify any quantum of development and is therefore not expected to pose as a likely significant effect to the integrity of European Sites.</p>
PC04: Development And Expansion Of Business Space	<p>A. New offices, research and development and research facilities are encouraged to come forward within the following locations:</p> <ol style="list-style-type: none"> in Designated Centres, providing they are of an appropriate scale and are part of mixed-use schemes with active frontage uses where practicable at ground floor level; in the areas within walking and cycling distance to the train stations. <p>B. Proposals for the development of these uses elsewhere in the borough will be considered on their merits and alongside the policies of the plan.</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to the development and expansion of business space. This policy does not in itself allocate any employment sites and does not identify any quantum of development and is therefore not</p>

Policy	Description	HRA Implications
	C. Development of larger employment sites, with multiple occupiers, should consider whether shared social spaces could be provided within the site, to enhance the vitality and attractiveness of the site.	expected to pose as a likely significant effect to the integrity of European Sites.
PC05: Employment Development Criteria	<p>A. Development for employment uses (Class B1, B2 or B8) and any associated employment generating sui generis uses will be encouraged provided the proposal:</p> <ul style="list-style-type: none"> a. is of a scale and nature appropriate to the locality; b. provides appropriate landscaping and screening; c. is accessible by public transport, walking and cycling; d. ensures vehicular access avoids residential streets and country lanes, or mitigates impacts on these; and e. the proposal does not give rise to significant traffic movements within rural areas. <p>B. Developments that would potentially generate a significant amount of movement must submit sufficient information to assess its likely transport impacts as well as how these impacts would be effectively mitigated, and considered in a Transport Assessment, as set out in Policy BE16.</p>	<p>No Likely Significant Effect</p> <p>A development management policy that provides criteria for employment development. This policy does not identify any quantum or location of development and is therefore not expected to pose as a likely significant effect to the integrity of European Sites.</p>
PC06: Supporting the Rural Economy	<p>The Council will promote a sustainable rural economy by supporting appropriate, small scale rural enterprise. The Council will seek to retain Class B uses or other 'sui generis' uses of a similar employment nature. Proposals to diversify the range of economic activities on a farm or in a rural area will be supported where proposals:</p> <ul style="list-style-type: none"> a. the use does not fall within Class A use classes unless limited small-scale and ancillary; b. is accessible, and traffic generation can be satisfactorily accommodated by the existing or planned local road network, ensuring access arrangements are acceptable to the scale and type of development with no adverse effect on the road network; c. benefit the local community and do not adversely affect quality of life or the amenity of local residents; d. conserve and enhance local character and maintain the openness of Green Belt in line with policy NE09 Green Belt; e. are consistent in scale and environmental impact with their rural location; f. have no detrimental impact on existing village shops and business; g. have no unacceptable effect on water quality or flooding, watercourses, biodiversity or important wildlife habitats; and h. work collaboratively with Essex County Council, communications operators and providers, to provide high quality communications infrastructure and support initiatives, technologies and developments which increase and improve coverage and quality throughout the borough, in line 	<p>No Likely Significant Effect</p> <p>A development management policy relating to supporting the rural economy. It is noted that economic development has the potential to result in increased atmospheric pollution contributions, however this policy does not identify any quantum, location or type of economic development. As such, it is unlikely that this policy will have significant impacts on the integrity of European Sites located within catchment of Brentwood. This policy can therefore be screened out from further discussion.</p>

Policy	Description	HRA Implications
	with Policy BE10 Connecting New Development to Digital Infrastructure.	

Policy	Description	HRA Implications
PC07: Retail and Commercial Leisure Growth	Provision is made for 4,844 square metres (net) of comparison retail floorspace and 3,833 square metres (net) of convenience floorspace to be provided in the borough over the Plan period.	<p>No Likely Significant Effect</p> <p>This policy allocates retail floorspace within Brentwood Borough.</p> <p>In isolation there are no realistic linking impact pathways present, however in combination assessment relating to atmospheric pollution and water quality is required.</p>
PC08: Retail Hierarchy of Designated Centres	<p>The retail hierarchy and Designated Centres</p> <p>A. The Council will promote the continued roles and functions of the Designated Centres to positively contribute towards their viability, vitality, character and structure. The Designated Centres and Primary Shopping Area are detailed in Figure 7.7 and shown on the Brentwood Policies Map.</p> <p>B. The retail hierarchy of Designated Centres in Brentwood Borough is as follows:</p> <ol style="list-style-type: none"> Brentwood Town Centre should be the first choice for retail, leisure and main town centre uses. District Shopping Centres will be a focus of more localised retail, commercial, flexible work space, community facilities and services that reduce the need to travel and contribute towards more sustainable and neighbourhood-scale living. Local Centres include small shops of a local nature, serving a small catchment. They have an important role in providing day to day shops and services that are accessible to residents in villages and rural parts of Brentwood, especially in areas more remote from the larger centres. <p>The sequential approach and impact assessment</p> <p>C. Retail, leisure, office and other main town centre uses will continue to be directed to these centres in line with the sequential approach to retail development locations set out in the NPPF .</p> <p>D. Development should contribute positively to the attractiveness, vitality, safety, environmental quality, historic character, employment opportunities and social inclusiveness of these centres.</p> <p>E. Change of use of upper floors above commercial premises to working space and/or residential will be encouraged provided that reasonable facilities and amenities are provided for, that development does not result in the loss of ancillary storage space or other beneficial use to the extent that it would make a ground floor unit unviable, and that the development would not prevent off street servicing of any ground floor unit.</p> <p>F. Any retail developments proposed outside these centres must be subject to a retail impact</p>	<p>No Likely Significant Effect</p> <p>A development management policy providing the retail hierarchy within Brentwood. There are no linking impact pathways present and this policy can be screened out.</p>

Policy	Description	HRA Implications
	assessment, where the proposed gross floorspace is greater than 2,500 sqm. A retail impact assessment may be required below this threshold where a proposal could have a cumulative impact or an impact on the role or health of nearby centres within the catchment of the proposal.	

Policy	Description	HRA Implications
PC09: Brentwood Town Centre	<p>A. The Council will conserve the positive qualities of Brentwood Town Centre while enhancing and improving negative aspects of function and appearance.</p> <p>B. Development in the Town Centre should contribute to the Council's aim of improving the capacity and quality of the public realm throughout Brentwood Town Centre, contribute to a vibrant High Street and the surrounding Conservation Area in line with the Town Centre Design Guide.</p> <p>C. Shopfronts and signage have significant impacts on its surroundings therefore proposals are required to incorporate high quality, attractive shopfronts that enhance the street scene, in line with the Council's adopted Town Centre Shopfront Guidance SPD.</p> <p>D. Where necessary, design must incorporate technology and property management, parking and traffic movement mitigations to reduce congestion.</p> <p>Chapel Ruins, Baytree Centre and South Street areas</p> <p>E. This area provides a link to strategic sites on the High Street therefore improving its permeability and integration into the wider public realm network will create a more welcoming and flexible space at the heart of the Town Centre, enable its historical settings to be celebrated. Proposals should demonstrate how they:</p> <ul style="list-style-type: none"> a. contribute to the enhancement of public realm around Chapel Ruins and the Conservation Area, retain and enhance their significance and character; b. complement the retail function and maintain or add to the vitality, viability and diversity of the Town Centre, by means such as mixed-use schemes that include retail, leisure and residential; c. facilitate safe and pleasant pedestrian movement through improved alleyways, lighting, wayfinding and landscaping; and d. assist in uplifting and transforming the Baytree Centre and integrate it with the other parts of the Town Centre. <p>William Hunter Way, Chatham Way Car Park and Crown Street</p> <p>F. The Council will work with developers and partners to improve the public realm links in these areas, and through the redevelopment of the car parks, create a mixed-use scheme to provide new residential, retail, flexible working space and commercial floorspace.</p> <p>G. Proposals in these areas should demonstrate how they:</p> <ul style="list-style-type: none"> a. contribute to the improvements to frontages and public realm through landscaping and redevelopment; b. provide additional shopfronts and double fronted shops, if development involves the rear of premises on the north side of the High Street; c. facilitate safe and pleasant pedestrian movement through improved alleyways lighting, wayfinding and landscaping; and d. re-provide an appropriate quantum of parking, ensure that parking is well designed and 	<p>No Likely Significant Effect</p> <p>A development management policy relating to Brentwood town centre. There are no linking impact pathways present and this policy can be screened out.</p>

Policy	Description	HRA Implications
	<p>integrated into the public realm.</p> <p>Linkages to Brentwood station</p> <p>H. Improvements to the rail service to London will increase Brentwood Town Centre's regional public transport accessibility. The Council will seek to enhance public realm and way finding around Brentwood station, foster a stronger sense of place and sense of arrival, improve the linkages from the Town Centre to the station, with Kings Road being the primary focus.</p> <p>I. Proposals should demonstrate how they:</p> <ul style="list-style-type: none"> a. contribute to the enhancement of public realm around Brentwood station, Kings Road and Kings Road junction through design, landscaping and redevelopment; b. facilitate safe and convenient traffic movement with priority given to pedestrians and cyclists, by means such as improved junctions, cycle paths, lighting and wayfinding; c. add to the vitality and vibrancy of the Town Centre by providing an appropriate mix and balance of uses including residential, employment, commercial and amenity spaces; and d. provide an appropriate quantum of parking, whilst ensure that parking is well designed and integrated into the public realm. 	

Policy	Description	HRA Implications
PC10: Mixed Use Development in Designate Centres	<p>Within the boundary of Designated Centres as set out in Policy PC08 Retail Hierarchy of Designated Centres and defined on the Brentwood Policies Map:</p> <p>A. Mixed use development will be supported if it:</p> <ol style="list-style-type: none"> is in proportion to the scale and function of the centre; contains an appropriate mix of ground floor uses; and makes efficient use of the site and is considered to be of sufficient density. <p>B. Proposals resulting in the loss of centre uses at ground floor level to non-centre uses, as defined in Figure 7.8, which results in an unacceptable mix of uses will not be permitted.</p> <p>C. Non-retail development that are classed as centre uses, as defined in Figure 7.8, should:</p> <ol style="list-style-type: none"> complement the retail function and maintain or add to the vitality, viability and diversity of the centre; provision is made for an active frontage, such as a window display, which is in keeping with the character of the shopping area; would not give rise to a detrimental effect, individually or cumulatively, on the character or amenity of the area through smell, litter, noise or traffic problems; and proposals for new hot food takeaways (use class A5) within 400m walking distance from the entrance points of primary or secondary schools will be restricted in order to promote the health and well-being of school pupils. Exceptions will apply to Primary Shopping Areas within this 400m buffer zone. Hours of opening will be limited to after 5pm on school days and lunch time opening will only be permitted where schools within 400m do not allow pupils to freely leave school premises during lunch breaks. <p>D. Changes of use from retail to another centre use as set out in Figure 7.8 will only be permitted where the development would satisfy the above criteria and retain an appropriate mix and balance of uses which will provide for the needs of local residents.</p> <p>E. Proposals for separate units of retail, offices, leisure, cultural, community facilities and residential on upper floors are supported provided that the use would have a safe and convenient access, a separate refuse and recycling store, and would not inhibit the functioning of the ground floor use. Centre uses and employment uses should be given priority over residential uses unless it can be demonstrated that this would lead to an imbalance of uses.</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to mixed use development. There are no linking impact pathways present and this policy can be screened out.</p>
PC11: Primary Housing Areas	<p>A. Retail use should remain the predominant use in Primary Shopping Areas as set out in Policy PC08 Retail Hierarchy of Designated Centres, and defined on the Brentwood Policies Map.</p> <p>B. Proposed retail development will be supported if they:</p> <ol style="list-style-type: none"> contribute to the area's attractiveness, accessibility and vibrancy by adding to or providing a 	<p>No Likely Significant Effect</p> <p>A development management policy relating to Primary Housing Areas. There are no linking</p>

Policy	Description	HRA Implications
	<p>range of shops to meet local needs, including opportunities for small, independent shops;</p> <p>b. would not result in subdivision of an existing large retail unit;</p> <p>c. be fully integrated with the existing shopping area; and</p> <p>d. facilitate safe, convenient and pleasant pedestrian movement through improved lighting and landscaping.</p> <p>C. Proposals resulting in the loss of retail uses at ground floor must demonstrate that:</p> <p>a. the use is no longer viable, by evidence of active marketing to the public for at least 12 months, showing that the premises are not reasonably capable of being used or redeveloped for a retail use; and</p> <p>b. development would not result in 3 or more non-retail use units in adjoining premises.</p> <p>D. Proposals for retail and commercial leisure development outside the borough's Primary Shopping Areas over 2,500 square metres will only be permitted provided an accompanying impact assessment can satisfactorily demonstrate that:</p> <p>a. associated travel demand can be satisfactorily accommodated by the transport network with appropriate mitigation;</p> <p>b. the proposal does not give rise to any detrimental impact on amenities in the surrounding area; and</p> <p>c. travel by more sustainable forms of transport than the private car will be achieved.</p>	<p>impact pathways present and this policy can be screened out.</p>

Policy	Description	HRA Implications
PC12: Non-centre Uses	<p>Proposals for non-centre uses in the Designated Centres should demonstrate how they:</p> <ul style="list-style-type: none"> a. complement the retail function and makes a positive contribution to the vitality, viability and diversity of the Designated Centre it is located within; b. would not create an over-concentration of non-centre uses which are harmful to the function of the centre; c. provision is made for an active frontage in keeping with the character of the shopping area; d. would not give rise, either alone or cumulatively, to a detrimental effect on the character or amenity of the area through smell, litter, noise or traffic problems. Demonstrates any potential related problems can be overcome satisfactorily to protect amenities of surrounding residents. Details of extraction, filtration, refrigeration or air conditioning units should be submitted with any application; and e. for proposals creating more than two residential flats above ground floor level, the development would not result in the loss of ancillary storage space or other beneficial use to the extent that it would make a ground floor unit unviable, and the development would not prevent off street servicing of any ground floor unit. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to Non-centre uses. There are no linking impact pathways present and this policy can be screened out.</p>
PC13: Night Time Economy	<p>After-hours cultural, entertainment and leisure uses in Designated Centres will be encouraged as part of mixed use development. After-hours leisure should raise standards and broaden the appeal of the night-time economy. Proposals should:</p> <ul style="list-style-type: none"> a. be safe and welcoming; b. allow people to walk and cycle around the centre with ease; c. offer a vibrant choice of leisure and entertainment for a diversity of ages, lifestyles and cultures, including families and older people; d. provide a mix of activities that reinforce local character and identity; e. would not give rise, either alone or cumulatively, to a detrimental effect on the character or amenity of the surrounding residential area through smell, litter, noise or traffic problems. Proposals should demonstrate any potential related problems can be overcome satisfactorily to protect amenities of surrounding residents; and f. provide evidence of responsible management and stewardship arrangements to ensure there is no disturbance to surrounding properties and residents or harm to surrounding area amenity. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to the night time economy. There are no linking impact pathways present and this policy can be screened out.</p>
PC14: Protecting and Enhancing Community Assets	<p>The Council recognises the importance of community assets, including those registered as Assets of Community Value (ACV), as part of social infrastructure and seeks to ensure that:</p> <ul style="list-style-type: none"> a. existing community assets will be protected from inappropriate changes of use or redevelopment; b. new facilities should be easily accessible by public transport, cycling and walking and will be 	<p>No Likely Significant Effect</p> <p>This policy safeguards community assets such as community centres and public transport from re-development/ change of use. This policy is</p>

Policy	Description	HRA Implications
	<p>prioritised in Designated Centres;</p> <p>c. development proposals that provide high quality, inclusive community assets that addresses a local or strategic need and supports service delivery strategies will be supported;</p> <p>d. development proposals that seek to make best use of land, including the co-location of different forms of community assets and the rationalisation or sharing of facilities, will be encouraged and supported;</p> <p>e. development proposals that would result in a loss of community assets will be discouraged unless it can be demonstrated that:</p> <p>i. there are realistic proposals for re-provision that continue to serve the needs of the neighbourhood and wider community; or</p> <p>ii. the loss is part of a wider public service transformation plan which requires investment in modern, fit for purpose infrastructure and facilities to meet future population needs or to sustain and improve services.</p> <p>f. redundant community assets should be considered for full or partial use as other forms of social infrastructure before alternative developments are considered.</p>	<p>therefore not expected to pose as a likely significant effect to the integrity of the European Sites located within catchment of Brentwood.</p>

Policy	Description	HRA Implications
PC15: Education Facilities	<p>A. The change of use or re-development of existing or proposed educational establishments and their grounds will not be permitted unless:</p> <ul style="list-style-type: none"> a. it can be clearly demonstrated that the use of the site is genuinely redundant and no other alternative educational or community use can be found; or b. satisfactory alternative and improved facilities will be provided; or c. the area of the site to be redeveloped is genuinely in excess of government guidelines for playing field provision, taking into account future educational projections. <p>B. Where there is a demonstrable need for new educational facilities, planning permission will be granted for appropriate and well-designed proposals which broadly meet the criteria for new education facilities set out in the ECC's Developers' Guide to Infrastructure Contributions.</p> <p>C. The Council recognises the differences in location and design requirements between rural and urban based new education proposals in the borough and will assess applications accordingly.</p> <p>D. Where necessary, the Council will utilise planning obligations or CIL to help mitigate any adverse impacts on an educational facility and assist in delivering development that has a positive impact on the community.</p> <p>E. Developers should engage with the Local Education Authority at the earliest opportunity and work cooperatively to ensure the phasing of residential development and appropriate mitigation, in line with ECC's Developers' Guide to Infrastructure Contributions, is identified in a timely manner to ensure appropriate education provision can be secured.</p> <p>F. Proposals for educational facilities in the Green Belt will be looked into positively where a requirement for a Green Belt location is demonstrated and with regard to Green Belt policies, including Policy NE09 Green Belt, and NE10 New Development, Extension and Replacement of Buildings in the Green Belt.</p>	<p>No Likely Significant Effect</p> <p>This policy does not allocated sites for development; rather this policy safeguards education facility, such as a schools, are safeguarded from development. As such this policy is not expected to pose as a likely significant effect to European Sites.</p>
PC16: Buildings for Institutional Purposes	<p>A. Where there is a demonstrable need for the facilities, as a result of existing deficiency or regeneration or new development, planning permission will be granted for appropriate and well-designed proposals in sustainable locations on sites of sufficient size.</p> <p>B. Redevelopment, change of use to, or new buildings for institutional purposes will be permitted where the Council is satisfied that:</p> <ul style="list-style-type: none"> a. the scale, range, quality and accessibility of facilities are improved; b. the proposal is within or in close proximity to the community that the facilities are intended to serve; c. the site is easily accessible by public transport, walking and cycling, impacts on the transport network are mitigated to an acceptable level and parking provision is in line with Policy BE17 Parking Standards; and/or d. the impact of any associated residential development is mitigated. 	<p>No Likely Significant Effect</p> <p>This policy does not allocate sites for the development for institutional purposes. This policy describes that development must be sustainable in design. As such, this policy is not expected to pose as a likely significant effect to European Sites.</p>

Policy	Description	HRA Implications
NE01: Protecting and Enhancing the Natural Environment	<p>A. The Council will support proposals which minimise the use of natural resources and proactively conserve and enhance the quality of the natural environment according to their international, national and local significance, aiming to achieve:</p> <ol style="list-style-type: none"> ecological connections between significant sites through multi-functional green and blue infrastructure provision; biodiversity net-gain across all green and blue infrastructure; ecological and ecosystem restoration; and habitat and species conservation and enhancement (both statutory and non-statutory, including priority habitats and species) of international, national and local importance commensurate with their status. <p>B. Proposals will not be permitted if potential impacts will lead to the deterioration or loss, either direct or indirect, of the borough's natural designated and non-designated heritage assets, including biodiversity, geodiversity, landscape character and any other aspect of ecological potential, priority habitats and/or species, water cycle, green wedges, ancient woodlands and landscapes.</p> <p>C. Development should avoid adverse impact on existing natural heritage assets as a first principle and enable net gains by designing in landscape and biodiversity features and enhancements. Where adverse impacts are unavoidable, they must be adequately and proportionately mitigated in accordance with their international, national and local significance. Proposals must demonstrate how they have taken all necessary steps of avoidance, minimisation and then mitigation; if insufficient to fully address adverse impacts, consideration will be given to compensation measures. Following this process, a proposal will only be supported subject to the following hierarchy:</p> <ol style="list-style-type: none"> where a site of international importance, being a Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar site, would be affected, there has to be exceptional overriding reasons of human health, public safety or environmental benefit; impact on these international (European) sites will also be subject to Policy NE02; where a site of national importance, such as a Site of Special Scientific Interest (SSSI) or National Nature Reserve (NNR), would be affected, there has to be exceptional circumstances where the need for, and the benefits of, the proposal significantly outweigh both the potential impacts on the features of the site that make it of national importance and any broader impacts on the national and regional network of such sites; and where a site of local importance, such as a Local Wildlife Site (LWS), a protected species, a priority habitat or species, a site of local or regional importance, the achievement of water body good ecological potential, or the biodiversity value of the proposed development site as part of the 	<p>No Likely Significant Effect</p> <p>This policy safeguards and enhances the natural environment including international designated sites. As such this policy is not expected to pose as a likely significant effect to the integrity of European Sites and is screened out from further discussion.</p>

Policy	Description	HRA Implications
	<p>wider network, would be affected, the need for and the benefits of the proposal must clearly outweigh the assessed impacts.</p> <p>D. Proposals will be required to demonstrate that all potential adverse impacts on natural heritage assets are accompanied by an appropriate appraisal, investigating all individual and cumulative potential impacts and demonstrate what measures are to take place to avoid adverse impacts. Where appropriate development proposals will be required to be accompanied by:</p> <ul style="list-style-type: none"> a. an ecological survey as appropriate to the nature and scale of the proposal, identifying links to similar ecosystems within proximity of the development site in line with Policy BE18 Green and Blue Infrastructure; b. a landscape scheme detailing new planting requirements and where appropriate, replacement trees of a value commensurate or greater to that which is lost, boundary treatments and proposals for ecological enhancement; c. an arboricultural assessment detailing the measures to conserve and/or justification for the removal of any trees or hedgerows during on-site construction; d. details of landscaping maintenance arrangements; and e. a method statement for any land raising and/or dispersal of excavated or dredged materials. 	

Policy	Description	HRA Implications
NE02: Recreational Disturbance Avoidance and Mitigation Strategy (RAMS)	<p>A. New residential development within the RAMS Zone of Influence will be subject to proportionate contributions to deliver all mitigation measures identified (including strategic measures) through project level HRAs, to mitigate any recreational disturbance impacts in compliance with the Habitat Regulations and Habitats Directive.</p> <p>B. Proposals will need to implement on-site options for avoidance and/or reduction in recreational disturbance impact through sensitive layout and design measures and green and blue infrastructure proportionate to the scale of the development.</p> <p>C. The Council will seek appropriate financial contributions towards off-site mitigation as prescribed in the Essex Coastal RAMS mitigation strategy and the Epping Forest RAMS mitigation strategy (as applicable).</p>	<p>No Likely Significant Effect</p> <p>A positive policy identifying the need for development to contribute to the relevant RAMS as required, thus providing protection to European sites from in combination effects of increased recreational pressure. This policy is therefore expected to be of benefit to these sites and unlikely to be of any significant effect.</p>
NE03: Trees, Woodlands, Hedgerows	<p>A. Development will not be permitted where it would have a detrimental effect on, or result in the loss of, significant landscape heritage or a feature of ecological importance, including trees, woodlands or hedgerows.</p> <p>B. A development proposal will only be supported where it seeks to conserve and enhance any existing tree, woodland, hedge and/or hedgerow of value that would be affected by the proposed development.</p> <p>C. Where potential adverse impacts on trees, woodland, hedges and hedgerows is unavoidable, a proposal must demonstrate that the impact has been investigated. Where investigations show that such adverse impacts are possible a statement will be required to:</p> <ol style="list-style-type: none"> assess all trees, woodland, hedges and/or hedgerows that are likely to be affected by the proposal, describing and assessing their value; set out how the details of the proposal have been decided upon in terms of their impact on the value of trees, woodland, hedges and hedgerows and how adverse impacts will seek to be avoided, or if unavoidable how they will be minimised. <p>D. The loss, threat or damage to any tree, woodland, hedge and/or hedgerow of visual, heritage or nature conservation value will only be acceptable where:</p> <ol style="list-style-type: none"> it is addressed firstly by seeking to avoid the impact, then to minimise the impact, and finally where appropriate, to include mitigation measures; or there are sound arboricultural reasons to support the proposal. <p>E. Where impacts remain the need for, and benefits of, the development in that location must clearly outweigh the loss, threat or damage.</p> <p>F. Where loss, threat or damage cannot be fully addressed through minimisation and/ or</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to trees, woodlands and hedgerows. This policy is not expected to pose as a likely significant effect to European Sites.</p>

Policy	Description	HRA Implications
	<p>mitigation measures the proposal may be supported if alternative measures such as reinstatement of features, additional landscaping, habitat creation or tree planting, will compensate for the harm and can be implemented and established before development starts.</p> <p>G. Proposals for major scale development will be required to include additional new trees to form part of the landscaping for the proposal, the form of which will be determined by negotiation.</p> <p>H. Trees or groups of trees subject to Tree Preservation Order protection will be protected from damage or removal, including their root protection zone.</p>	

Policy	Description	HRA Implications
NE04: Thames Chase Community Forest	<p>A. Development proposals which fall within the Thames Chase Community Forest Area will be expected to make a positive contribution towards its implementation in addition to other relevant policies within the Local Plan.</p> <p>B. Developers will be expected to work collaboratively in partnership with the Land of the Fanns Partnership to develop scheme proposals through the masterplanning process, in line with Policy SP06 Effective Delivery of Development.</p>	<p>No Likely Significant Effect</p> <p>This policy safeguards the Thames Chase Community Forest. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.</p>
NE05: Air Quality	<p>A. Development is required to meet or exceed the 'air quality neutral' standard, especially within Air Quality Management Areas (AQMAs) and where development is near to, or promotes, land uses to be used by those particularly vulnerable to poor air quality (such as children and older adults).</p> <p>B. Development proposals should minimise exposure to existing poor air quality and make provision to address local air quality exceedances through design solutions and measures such as the use of low or zero emission transport, reduced reliance on private motor vehicles, buffer zones around schools and other community infrastructure, amongst others.</p> <p>C. Development proposals should give equal weight to the consideration of indoor air quality, with building design solutions specifying proven ventilation systems, especially with proposals which consider energy efficient building solutions, to avoid the unintended consequences of poor indoor ventilation.</p> <p>D. An air quality impact assessment, based on current best practice, is required as part of the planning application for:</p> <ol style="list-style-type: none"> major developments; employment led developments developments which will require substantial earthworks or demolition; developments which include education and health facilities or open space (including child play space); new build developments in areas of sub-standard air quality; and developments which propose the use of Combined Heat and Power, biomass boilers or similar solutions that might impact air quality. <p>E. Where an air quality assessment indicates that a development will cause harm to air quality or where end users could be exposed to poor air quality, development will be resisted unless mitigation measures are adopted to reduce the impact to acceptable levels.</p> <p>F. New build developments which propose to provide any private, communal, publicly accessible open space or child play space in areas of sub-standard air quality are required to demonstrate that they have considered the positioning and design of the open space to reduce exposure of</p>	<p>No Likely Significant Effect</p> <p>This policy promotes improvements in air quality. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.</p>

Policy	Description	HRA Implications
	future users to air pollution.	
NE06: Flood Risk	<p>A. Proposed development will be required to avoid where possible flood risk to people and property and manage any residual risk, taking account of the impacts of climate change by:</p> <ol style="list-style-type: none"> applying the sequential test, directing development away from areas at risk of flooding, including those areas associated with surface water flood risk; if necessary, applying the exception test; safeguarding land from development that is required for current and future flood management; and using opportunities offered by new development to reduce the causes and impacts of flooding. <p>B. In areas designated as functional flood plains, or Critical Drainage Areas development will only be permitted in accordance with national policy and guidance, and then only if:</p> <ol style="list-style-type: none"> proposals are located in the lowest appropriate flood risk zone with regard to guidance set in the Brentwood Strategic Flood Risk Assessment as part of the sequential test; development would not constrain the natural function of the flood plain, either by impeding flow or reducing storage capacity; and development is constructed so as to remain operational even at times of flood through resistant and resilient design. <p>C. Where development is permitted within flood risk areas, it must demonstrate that, where required, it will reduce fluvial and surface water flood risk and manage residual risks through appropriate flood mitigation measures, including emergency planning and response. These measures may include, but are not restricted to:</p> <ol style="list-style-type: none"> land management, landscape and planting measures; SuDS, including source control techniques; water efficiency measures and, where appropriate, grey water use; strategic water storage; flow diversion and attenuation; and property level protection, which can include appropriate finished floor levels, safe area(s), emergency flood planning and flood resilience measures. <p>D. Applications will need to demonstrate that the sewerage provider has been contacted to identify whether the sewerage network has adequate capacity both on and off-site to serve the development and to assess the need to contribute to any additional connections for the development to prevent flooding or pollution of land and water courses.</p> <p>E. Where sewerage capacity is identified as insufficient, development will only be permitted if it is demonstrated that improvements will be completed prior to occupation of the development.</p> <p>F. Where the site is located within a Critical Drainage Area (CDA), development may have the</p>	<p>No Likely Significant Effect</p> <p>This policy aims to reduce flood risk. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.</p>

Policy	Description	HRA Implications
	potential to impact on the CDA in respect of surface water flooding. As a result of this, the site will require an individually designed mitigation scheme to address this issue.	
NE07: Contaminated Land and Hazardous Substances	<p>A. Development proposals involving the use, movement or storage of hazardous substances will only be permitted within employment areas and planning permission will only be granted for development on, or near to land which is suspected to be contaminated, where the Council is satisfied that:</p> <ol style="list-style-type: none"> there will be no threat to the health or safety of future users or occupiers of the site or neighbouring land; there will be no adverse impact on the environment and quality of local groundwater or quality of surface water; and there would be no unacceptable adverse impacts on property. <p>B. The Council will require applicants proposing development on or near known or potentially contaminated land to submit a detailed site characterisation and tiered risk assessment and to identify any remedial measures that need to be carried out (including remedial treatment and monitoring arrangements), provided in a detailed Remediation Scheme. Evidence of remediation should be to the satisfaction of the relevant statutory regulators.</p> <p>C. Planning permission will not be permitted for development on sites that lie near or adjacent to a hazardous substance site or notifiable installation, if the safety of the future occupiers of the development could be adversely affected by the normal permitted operations of the existing uses.</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to contaminated land and hazardous substances. There are no linking impact pathways present and this policy can be screened out.</p>
NE08: Floodlighting and Illumination	<p>A. Development proposals involving floodlighting or any other means of illumination (other than advertisements) will only be permitted where the scheme:</p> <ol style="list-style-type: none"> is appropriate for the intended use and has been appropriately designed to limit inappropriate light direction and intensity; is energy efficient; provides the minimum level of light necessary to achieve its purpose; uses an appropriate light spectrum and specification that will not be harmful to nocturnal wildlife or human health; minimises losses to the night sky and does not give rise to any increase in sky glow; and ensures the appearance of the installation when unlit is acceptable, provides adequate protection from glare and light spill particularly in sensitive locations, such as residential areas, sites of nature conservation interest, and have no adverse effect on amenity, highway safety, landscape or historic character. <p>B. Applicants will need to submit a full lighting strategy, proportionate to their application, specifying details of lights, their power and type, overall level and distribution of illumination and</p>	<p>No Likely Significant Effect</p> <p>This policy aims to minimize/ reduce noise pollution by providing mitigation for all development proposals. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.</p>

Policy	Description	HRA Implications
	times of operation. Conditions may be imposed to restrict lighting levels and hours of use or require measures to be taken to minimise adverse effects.	
NE09: Green Belt	<p>A. The Metropolitan Green Belt within Brentwood Borough (as defined in the Brentwood Policies Map) will be preserved from inappropriate development so that it continues to maintain its openness and serve its key functions.</p> <p>B. All development proposals within the Green Belt will be considered in accordance with the provisions of the NPPF; development within the Green Belt will only be permitted if it maintains the Green Belt's openness and does not conflict with the purposes of the Green Belt or harm its visual amenities. Planning applications will not be supported, and will be refused if they:</p> <ol style="list-style-type: none"> are deemed to impact the five purposes of the Green Belt; do not contribute to the beneficial use of the Green Belt; are not considered appropriate development; and other material considerations apply. <p>C. Consideration will be given to Gypsy and Traveller allocations within the Green Belt as long as it meets the requirements set out in Policy HP08 Regularising Suitable Existing Traveller Sites.</p> <p>D. Consideration will also be given to planning applications related to not inappropriate sports and recreational facilities provided they meet the following criteria:</p> <ol style="list-style-type: none"> the openness of the Green Belt is not compromised; in the situation for parking facilities, where appropriate, permeable surface should be considered to avoid surface water flooding; where the relocation and/or replacement of a sport and/or recreational building is being proposed, the building footprint is to be no larger than the existing footprint; and the proposal adheres to the policy requirements as set out in BE41 Open Space, Sport and Recreational Facilities. <p>E. Proposals related to sustainable energy technologies will be supported as long as it adheres to the requirements set out in this policy, Policy BE03 Carbon Reduction, Renewable Energy and Water Efficiency and Policy BE04 Establishing Low Carbon and Renewable Energy Infrastructure Network.</p>	<p>No Likely Significant Effect</p> <p>This policy safeguards green belt land. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.</p>
NE10: New Development, Extension and Replacement of Buildings in Green Belt	<p>A. Within the defined Green Belt, the construction of new buildings or structures is considered inappropriate development in the Green Belt. Exceptions to this are:</p> <ol style="list-style-type: none"> building for agriculture and forestry; new buildings or extension for education and community uses which can demonstrate a requirement for a Green Belt location; provision of not inappropriate facilities, including outdoor sport, outdoor recreation, cemeteries, 	<p>No Likely Significant Effect</p> <p>A development management policy relating to development in the green belt. It does not identify any type, quantum or location of development. This policy is not expected to pose as a likely significant effect and is therefore</p>

Policy	Description	HRA Implications
	<p>burial grounds, and allotments, as long as development preserves the openness of the Green Belt and does not conflict with the purposes of including land within it, and the proposal adheres to Policy NE09 Green Belt and Policy BE23 Open Space, Sport and Recreational Facilities;</p> <p>d. the extension or alteration of a building, provided that it does not result in disproportionate additions over and above the size of the original building; in case of a dwelling extension, the following conditions must also be met:</p> <ul style="list-style-type: none"> i. the existing dwelling is lawful, permanent, designed and originally constructed for residential use; ii. a substantial identifiable part of the original dwelling remains in place; iii. the design of the extension is appropriate to the host building and its setting and does not harm the openness or function of the Green Belt; iv. applications to extend domestic curtilage into the Green Belt will not be permitted; v. extension of a dwelling resulting from the conversion of a rural building will not be permitted, notwithstanding permitted development rights; vi. in addition to all the criteria above, proposals to extend dwellings within the Green Belt but outside established areas in the Green Belt as identified in Policy NE11, the total size of the dwelling as extended (including conservatories) does not exceed the original habitable floor space by more than 30%; where appropriate, a condition will be imposed to prevent this habitable floorspace limitation from being exceeded through the implementation of permitted development right; <p>e. the replacement of a building, provided the new building is in the same use and not materially larger than the one it replaces and the following conditions are met:</p> <ul style="list-style-type: none"> i. the proposal would not lead to an expansion or intensification of the activity on the site; ii. any replacement dwelling will be expected to be located in the position of the existing dwelling, except where the local planning authority considers an alternative sitting to be more appropriate in Green Belt or amenity terms; iii. where the existing dwelling is a bungalow, it should be replaced by a bungalow; iv. extensions to replacement dwellings will only be permitted where the habitable floorspace of the replacement dwelling and the total habitable floorspace of any extensions permitted would not be greater than 30% above the original habitable floor area of the previous dwelling which had been replaced; vii. in addition to all the criteria above, the replacement or substantial rebuilding of permanently occupied dwellings within the Green Belt but outside established areas in the Green Belt as identified in Policy NE11 will only be allowed subject to the following criteria: <ul style="list-style-type: none"> (i) where the existing dwelling has not been previously extended or where it has been extended 	<p>screened out from further discussion.</p>

Policy	Description	HRA Implications
	<p>by less than 30% above the original habitable floor space: the floor space of the replacement dwelling will be no larger than 30% above the original habitable floor space; or</p> <p>(ii) where the existing dwelling has been extended by more than 30% above the original habitable floor space: the replacement habitable floor space of the replacement dwelling will be no larger than the existing habitable floor space;</p> <p>(iii) where appropriate, a condition will be imposed removing permitted development rights to extend the building, use the roof space for habitable purposes and erect walls, fences or further out-buildings, in order to prevent this habitable floorspace limitation from being exceeded;</p> <p>(iv) the visual mass of the replacement dwelling should be no greater than that of the existing dwelling;</p> <p>f. limited infilling in villages and limited affordable housing for local community needs in accordance with other policies set out in this Plan;</p> <p>g. limited infilling, or the partial or complete redevelopment of previously developed sites (brownfield land), whether redundant or in continuing use (excluding temporary buildings), which would not have a greater impact on the openness of the Green Belt and the purpose of including land within it than the existing development; and</p> <p>h. local transport infrastructure which can demonstrate a requirement for a Green Belt location and would preserve the openness of the Green Belt and not conflict with its purposes.</p> <p>B. The Council will encourage the beneficial use of the Green Belt, through opportunities to improve access, outdoor sport and recreation; retain and enhance landscapes, visual amenity and biodiversity; or improve damaged and derelict land.</p> <p>C. The following settlements are excluded from the Green Belt as identified on the Brentwood Policies Map: Blackmore, Brentwood, Doddinghurst, Herongate, Hook End, Hutton, Hutton Mount, Ingatestone, Ingrave, Kelvedon Hatch, Mountnessing, Pilgrims Hatch, Shenfield, Stondon Massey, West Horndon and Wyatts Green.</p> <p>D. Microgeneration integral to individual new development are encouraged and may be acceptable under permitted development. Where permitted development does not apply, the renewable energy installations should not impact on the openness, function and permanence of the Green Belt or conflict with the purpose of the land within it. Proposals for larger scale renewable energy projects in the Green Belt will need to demonstrate very special circumstances.</p> <p>E. This policy is not intended to relate to uses created via the re-use of rural buildings.</p>	

Policy	Description	HRA Implications
NE11: Established Areas of Development and Structures in the Green Belt	<p>A. Within established areas of frontage ribbon development included within the Green Belt listed below, planning permission for change of use to residential, new residential development on genuine infill plots, replacement of existing dwellings, or extensions to existing dwellings will be allowed subject to criteria set down in other policies in this Plan being satisfied. Relevant frontages are:</p> <ul style="list-style-type: none"> - 39-47, 51-109 Coxtie Green Road; - 1-19 Bellhouse Lane; - Between Coppersfield and Greenoaks, Doddinghurst Road (Parkwood); - 1-13 (excluding 2), 21-56 (excluding 24, 26) Nags Head Lane; - the Thorns/ the Briars, Ongar Road; - 54-88 Billericay Road; and - 554-664 Rayleigh Road. <p>B. New buildings and extension for education and community uses which can demonstrate a requirement for a Green Belt location should refer to Policy NE10 New Development, Extension and Replacement of Buildings in the Green Belt.</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to established areas of development and structures within the green belt. It does not identify any type, quantum or location of development. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.</p>
NE12: Previously Developed Land in Green Belt	<p>A. Proposals for redevelopment of previously developed sites (brownfield) within the Green Belt will be permitted where redevelopment:</p> <ol style="list-style-type: none"> a. contributes towards local housing needs or provides new jobs; b. would not have significantly greater impact on the openness of the Green Belt; c. improves the setting of the Green Belt through more appropriate landscaping; d. provides community benefits to both the new and existing local community; e. supplies or improves travel links to nearby existing communities, such as villages; and f. contributes to the borough's sustainable development principles as set out in other policies in the Plan. <p>B. The Council will assess the proposed development based on the following:</p> <ol style="list-style-type: none"> a. the size, scale, massing and spread of new development compared to the existing; b. the visual impact of the development compared to the existing; c. the activities / use of the new development compared to the existing; and d. whether the location of the site is sustainable and appropriate to the type of development proposed. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to previously developed land within the green belt. It does not identify any type, quantum or location of development. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.</p>
NE13: Site Allocations in Green Belt	<p>A. Sites allocated to meet housing needs in the Green Belt will be expected to provide significant community benefits, both for surrounding existing communities and those moving into new homes on site.</p> <p>B. These sites will be de-allocated from the Green Belt to allow development to take place and</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to site allocations within the green belt. It does not identify any type, quantum or location of</p>

Policy	Description	HRA Implications
	provide new defensible boundaries to protect the open countryside for future generations. Site boundaries to form the new Green Belt boundaries are set out on relevant sites in Appendix 2.	development. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion..
NE14: Agricultural Workers Dwellings	<p>New Dwellings</p> <p>A. Planning permission will only be granted for a new agricultural, horticultural, forestry worker's dwelling where:</p> <ol style="list-style-type: none"> evidence has been submitted to the satisfaction of Brentwood Borough Council that there is a viable agricultural, horticultural or forestry business need for a permanent dwelling in that location; there are no suitable alternative dwellings available or could be made available in the locality to meet the needs of the agricultural holding; there is a long-term need for agricultural worker dwellings; the size and accommodation levels to be included in the proposed dwelling is commensurate with the needs of the holding; and the development is in all other respects acceptable against other relevant policies in the plan and the requirements as set out in the NPPF and NPPG. <p>B. Conditions will be attached to any permission limiting the occupancy to that required for the holding concerned or other agricultural use nearby.</p> <p>Removal of Occupancy Conditions on Existing Dwellings</p> <p>C. Planning permission will be granted for the removal of a restrictive agricultural worker occupancy concerned or other agricultural use nearby where it can be evidenced that there is no long-term need for an agricultural worker's dwelling in the locality.</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to agricultural workers dwellings. It does not identify any type, quantum or location of development. This type of development will be delivered as windfall development. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.</p>
NE15: Re-use and Residential Conversion of Rural Buildings	<p>A. The Council will support the re-use, conversion or adaptation of rural buildings for other employment generating uses, tourism, leisure, community or residential uses, provided the development proposal meets all the following criteria:</p> <ol style="list-style-type: none"> it does not have a greater impact on the openness of the Green Belt and the purpose of including land within the Green Belt than the original or current lawful use; the new use should not require elements which might conflict with the openness and function of the Green Belt; the applicant can demonstrate that the building is of permanent and substantial construction; the conversion of the building would not result in a major or complete reconstruction; and the proposed re-use should not have an unacceptable detrimental impact on the fabric and character of the building due to unsympathetic changes to or the introduction of features such as windows, door openings and chimneys. 	<p>No Likely Significant Effect</p> <p>A development management policy relating to the re-use and residential conversion of rural buildings. It does not identify any type, quantum or location of development. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.</p>

Policy	Description	HRA Implications
	<p>B. In the case of traditional rural buildings, the proposed use must be compatible with the historic character and significance, and structural integrity of the building. A historic building assessment of the structures may be required as part of the planning application with the potential for a full historic record to be completed as a condition of the application prior to conversion.</p> <p>C. Where appropriate, conditions will be imposed removing permitted development rights to extend the property, alter the external appearance, construct buildings or structures (including walls/fences) within the curtilage, and change the use.</p> <p>D. Permission will not be granted for the re-use of an agricultural building erected under class A of Part 6 of Schedule 2 of the General Permitted Development Order as amended within 10 years of its substantial completion.</p>	

Policy	Description	HRA Implications
R01 (I): Dunton Hills Garden Village Strategic Allocation	<p>A. In accordance with Policy SP04, land at Dunton Hills (east of the A128, south of the A127 and north of the C2C railway line, approximately 259.2 ha in size) is allocated for residential-led development to deliver Dunton Hills Garden Village.</p> <p>B. The scheme will deliver a mix of uses to comprise at least 2,700 homes and up to around 4,000 homes, together with the necessary community, utility, transport and green and blue infrastructure (GBI) to support a self-sustaining, thriving and healthy garden village.</p> <p>C. Successful development of the site will require:</p> <ul style="list-style-type: none"> a. the Garden Communities principles to be fully embedded, demonstrating how these have informed the detailed masterplan; b. proposals to creatively address the key site constraints and sensitively respond to the unique qualities and opportunities afforded by the historic landscape and environmental setting to deliver a distinctive and well-designed garden village in line with the ambitious vision and strategic aims and objectives for Dunton Hills; and c. a holistic and comprehensive locally-led garden village masterplan to be established, co-designed with the relevant stakeholders, along with the necessary and proportionate design guide to frame and guide the consistent quality and delivery across the site by different contractors over the delivery period. <p>D. The proposed scheme must deliver all the necessary supporting spatial components and infrastructure to address the specific site constraints, potential impacts and harness the site opportunities as set out by the strategic Dunton Hills aims and objectives. Permission for mixed-use development will be granted subject to the parameters and components specified below:</p> <ul style="list-style-type: none"> a. delivery of at least 2,700 dwellings during the Plan period, including affordable housing and specialist accommodation in line with Policy HP05 and Policy HP04, a balanced variety of housing typologies and tenure, including provision of self-build plots in line with Policy HP01; b. the provision of a minimum of 5 serviced Gypsy and Traveller pitches, in line with Policy 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution require further investigation.</p>

Policy	Description	HRA Implications
	<p>HP07(b);</p> <ul style="list-style-type: none"> c. a proportionate amount of employment space to accommodate a creative range of employment uses suitable for a vibrant village centre, including use class A1-A5 and appropriate B1; d. educational buildings with linked playfields/playgrounds appropriate to the scale of development; e. community and health infrastructure proportional to the scale of development, and in line with best practice principles of healthy design; f. green and blue infrastructure to be a minimum of 50% of the total land area; g. retail provision to form the vibrant village core in the form of a 'District Shopping' level service centre with additional Local Centre(s) in line with Policy PC08, as appropriate to the scale and phasing of the development. h. the necessary transport routes, connections and facilities to mitigate any road transport impacts, as detailed in Policy BE16 and SA28 (ii) H; i. strategically designed and appropriately phased infrastructure, employing the most up to date technologies to ensure a smart, sustainable and a resilient basis for drainage and flood management in line with Policy BE08, water management including potable/ non-potable and opportunities for grey water harvesting in line with BE03, efficient and cost saving energy networks in line with Policy BE04, superfast broadband in line with Policy BE10. 	
R01 (II): Spatial Design of Dunton Hills Garden Village	<p>A. The locally-led garden village will be developed collaboratively to achieve a high quality Dunton Hills Garden Village development. Consent for development will be permitted if the masterplan and supporting design guidance for the scheme demonstrate how the spatial vision, design principles as well as Policies HP12 - HP18 on securing high-quality of place-making is achieved to guide a coherent development across the whole allocation site.</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to the spatial design of Dunton Hills Garden Village. There are no linking impact pathways present and as such this policy can be screened out.</p>

Policy	Description	HRA Implications
	<p>Distinctive Character, Harmonic Design, Compact Density</p> <p>B. Proposals must demonstrate how they will meet and embed key qualities to ensure distinctive, harmonic and popular design is achieved, by ensuring:</p> <ul style="list-style-type: none"> a. the unique character of Dunton Hills is informed by its distinct spatial, landscape and heritage qualities. b. the design of sub-neighbourhoods and streets, that may take on their own unique character, are harmoniously integrated to form an overall Dunton Hills Garden Village identity - through the coherent and complementary use of materials and design of the public realm in line with Policy HP18. c. an appropriate range of densities are achieved across the site to ensure a compact and highly networked, walkable and fine-grained environment with a highly connected street-based layout. This should be demonstrated by an accompanying density plan. <p>Ecological Networks, Biodiversity Net Gain, Green Infrastructure and Public Realm</p> <p>C. A green and blue infrastructure (GBI) plan should be submitted that demonstrates how the design of GBI will be an integral part of the masterplan layout to achieve multi-functional, coherent and connected GBI in line with Policy BE18. The GBI plan should be informed by a comprehensive wildlife and habitat survey and heritage and landscape character assessment. The GBI Plan should incorporate the following:</p> <ul style="list-style-type: none"> a. a highly connected and biodiverse ecological network that incorporates existing habitats of value and natural features, and where relevant new habitats such as trees, tree lines and hedges, hedgerows, ponds and lakes, among others, in line with Policy NE01, NE03 and NE04; b. a variety of activity nodes and treatments for recreation and leisure opportunities throughout the GBI, including public natural parkland, pockets of village greens, local nature reserve, allotment sites, sports pitches and fields; c. a streetscape that continues the green infrastructure through the residential areas and village centre with creative landscape schemes including tree-lined streets, grass verges 	

Policy	Description	HRA Implications
	<p>and rain gardens;</p> <ul style="list-style-type: none"> d. an appropriate amount and depth of green infrastructure screening adjacent to A127, A128, rail tracks to mitigate noise and air pollution; e. well-designed interfaces between the green open space and the built structures should ensure passive surveillance, with coherent and gradual transitions and clear boundaries and vistas; and f. a green infrastructure buffer / wedge on the eastern boundary with Basildon Borough to achieve visual separation to help significantly improve the landscaped and habitat value thus reinforcing the beneficial purpose and use of the green belt in that zone. <p>Sport, Recreational, Leisure and Public Open Space</p> <p>D. The provision for leisure, recreation and sport opportunities must be an integral part of the GBI Plan; it should incorporate as a minimum the following provision:</p> <ul style="list-style-type: none"> a. an appropriate amount of sports and recreation provision to provide a variety of pitch sizes and facilities in line with Policy BE23; b. the GBI following Nightingale Lane should incorporate a heritage trail with signage and history information boards; c. pathways through the GBI network will be made of permeable material and follow a coherent treatment throughout the village. The pathways will all connect into a circular walk, with interconnected shortcut routes and be signposted offering directions to key destination points; and d. an appropriate number of play spaces shall be incorporated throughout the GBI network, with an emphasis on quality natural play provision to encourage outdoor adventure play and learning. <p>Views</p> <p>E. Key views shall be safeguarded and maintained and become distinctive features on the</p>	

Policy	Description	HRA Implications
	<p>development. This should be informed by a key views assessment and proposals should demonstrate the following:</p> <ul style="list-style-type: none"> a. how the urban layout will incorporate safeguarded views in terms of the structure, morphology and how the streets and avenues are orientated to maintain the landscape corridors; b. how visual separation will be achieved on the eastern boundary of the site; and c. how the settlement orientations might also take advantage of opportunities for passive heating and cooling. <p>Embedding Heritage Assets</p> <p>F. Development should retain, integrate and where possible enhance both designated and non-designated heritage assets to provide an attractive and distinctive garden village in line with Policies HP19, HP20 and HP22. Incorporation of these assets should be informed by a Landscape Character Assessment and Heritage Statement in line with guidance, having key consideration for the following provisions:</p> <ul style="list-style-type: none"> a. protection and enhancement of existing public rights of way; b. the historic core and listed buildings of the farmstead are well integrated as part of the Dunton Hills Village Centre; and c. protection of listed buildings during the construction phase and during any retrofitting to ensure the structures are fit-for-purpose for new uses. <p>Active Travel</p> <p>G. Development should incorporate sustainable transport measures in line with Policy BE13, integrating 'Active by Design' measures to promote healthy travel options. A dedicated segregated cycle network should be incorporated into the streetscape, making cycling safe to use by all ages to help discourage car use for short internal trips. Where possible, this should be integrated with the off-street cycle routes throughout the GBI network to ensure safe</p>	

Policy	Description	HRA Implications
	<p>routes to schools and other recreation facilities.</p> <p>Transport Impact Mitigations</p> <p>H. The development will mitigate any predicted road impacts, in line with Policies BE11 and BE16. This should be informed by the latest Transport Assessment, which should be monitored and re-evaluated throughout the lifespan of the build-out, to account for changes in transport technology and wider strategic transport network changes. As a minimum, mitigations will include:</p> <ul style="list-style-type: none"> a. junction improvements, including any necessary traffic calming measures at the key gateways off the arterial roads into the garden village, to create a sense of arrival; b. a dedicated bus route to make it easy to access West Horndon station as well as nearby employment locations and key social infrastructure; c. a funded bus service to nearby school facilities in the early phases of the work, until such services are available onsite; d. the necessary West Horndon station improvements to accommodate a bus terminus and turnaround, as well as infrastructure for bike storage; and e. illustrative plans to indicate how key connections to the surrounding green infrastructure destinations and key nearby employment sites can be achieved. <p>Clean Vehicle Alternatives</p> <p>I. Proposals should not allow for the dominance of cars and car travel. The scheme should promote car-limiting and clean vehicle alternatives in line with Policies BE12 and BE15. Emphasis should be on:</p> <ul style="list-style-type: none"> a. incorporating car sharing clubs and electric vehicle only development; b. time limiting car parking in the central locations; and 	

Policy	Description	HRA Implications
	<p>c. clean air zones around the main schools and community buildings.</p> <p>Street Hierarchy</p> <p>J. The street hierarchy shall be designed to promote a highly connected, permeable garden village that promotes walking and cycling, yet accommodate the vehicular accessibility requirements for servicing, refuse, emergency access and bus routing. Proposals should demonstrate how they are incorporating the following provisions:</p> <p>a. the development shall be a 20 mile an hour zone ensuring the safety of the public realm;</p> <p>b. main street(s) into the garden village from the main arterial routes (A127/A128) will adopt a tree-lined boulevard approach and be designed to slow down the traffic, making it clear that it is now a neighbourhood zone;</p> <p>c. enhancement of public footpaths, public rights of way routes (such as Nightingale Lane) and any bridleways throughout the GBI network, to coherently connect back to the residential pedestrian links; and</p> <p>d. residential streetscape should be designed to incorporate grass medians, verges and trees/ tree lined avenues to help slow down the traffic and give the road an instant village feel.</p> <p>Village Centre(s) – Retail, Community and Employment Opportunities</p> <p>K. Proposals for the placement and design of the village centre(s) should be informed by an appropriate retail hierarchy study that assesses village centre needs, based on the supply and demand of the surrounding area. As a minimum this should incorporate the following:</p> <p>a. the location of the main village centre should incorporate the historic farmstead in the centre of the site, creating a heritage legacy for the village centre;</p> <p>b. the village centre(s) should be designed to be mixed-use, with a range of commercial and community uses along ground floor frontages and a mix of uses on upper floors including residential and small-scale employment;</p>	

Policy	Description	HRA Implications
	<p>c. the village centre(s) should provide localised opportunities for employment with a variety of work spaces, including flexible incubator/affordable spaces that are complementary to district-level service centre uses; and</p> <p>d. delivery of employment spaces should demonstrate a healthy-by-design approach, informed by leading industry guidance on the design of healthy and productive workplaces.</p> <p>Social Infrastructure</p> <p>L. Proposals for the design of social infrastructure such as schools, health facilities and community spaces must demonstrate how they have incorporated key learning points and knowledge from the interior design sectors to deliver environments conducive to human health and social wellbeing. Design proposals which demonstrate the following will be supported:</p> <p>a. design informed by the latest knowledge and principles of human-centred design, biophilic design, and sustainable healthcare;</p> <p>b. design which demonstrates the adoption of relevant industry standards, such as BREAM or WELL standard; and</p> <p>c. facilities that are designed to be flexible to allow for wider community uses; for example, the use of the school in out-of-school hours for activities such as adult learning classes, other community activities, or the use of the school playing fields for community sports.</p>	
R01 (III): Scheme Delivery and Legacy Management	<p>Locally-led Garden Village</p> <p>A. As a locally-led garden village, the private sector should work pro-actively and collaboratively with the public sector to plan and design the masterplan and design principles for the scheme. This will require:</p> <p>a. community involvement to inform the design and delivery requirements from the outset; the approach should be outlined in a supporting Community Engagement Strategy;</p>	<p>No Likely Significant Effect</p> <p>A development management policy relating to the design and delivery of Dunton Hills Garden Village. There are no linking impact pathways present and as such this policy can be screened out.</p>

Policy	Description	HRA Implications
	<p>partnership working with key industry and public sector stakeholders is encouraged, especially to inform the evolution of the masterplan and determine the complex infrastructure requirements, in line with county level requirements; and</p> <p>b. implement of a Jobs Brokerage Scheme to ensure that new jobs created on site go to local people.</p> <p>Development Phasing</p> <p>B. The development and phased delivery of DHGV must ensure the timely delivery of the required on-site and off-site infrastructure to address the impact of the new garden village and help the early establishment of a cohesive community. Proposals should be accompanied by a phasing plan to demonstrate how delivery will be phased, managed, accelerated and governed, without compromising quality.</p> <p>Stewardship</p> <p>C. At the appropriate time, planning applications must include a supporting statement setting out the long-term sustainable governance and stewardship arrangements (management, maintenance and renewal) for the community assets including green-blue infrastructure, the public realm and community and other relevant facilities to be funded by the developer. Considerations should be given to devices such as legal covenants in deeds to establish responsibilities over certain matters of care, such as front gardens, communal gardens, public realm.</p>	
R02: Land At West Horndon Industrial Estate	<ul style="list-style-type: none"> - provision for around 580 new homes of mixed size and type, including affordable housing; - provision for one small to medium sized care home (around 60 bed scheme as part of the overall allocation); and - provision for 5% custom build across the entire allocation area. 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R03: Land North Of	<ul style="list-style-type: none"> - provision for around 825 new homes of mixed size and type, including affordable housing; 	<p>No Likely Significant Effects.</p>

Policy	Description	HRA Implications
Shenfield	<ul style="list-style-type: none"> - provision for at least 2.1 ha of land for educational use (primary school); - provision for one small to medium sized care home (around 60 bed scheme as part of the overall allocation); - provision for 5% custom build across the entire allocation area; and - consideration for provision of appropriate new employment development on land north of Chelmsford Road (A1023). 	<p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R04 and R05: Ford Headquarters and Council Depot	<ul style="list-style-type: none"> - provision for around 473 new homes of mixed size and type, including affordable housing; - provision for one small to medium sized care home (around 60 bed scheme as part of the overall allocation); - provision for 5% custom build across the entire allocation area; and - consideration of provision of new employment development on site 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R06: Land off Nags Head Lane	<ul style="list-style-type: none"> - provision for around 125 new homes of mixed size and type. 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R07: Sow and Grow Nursery	<ul style="list-style-type: none"> - provision for around 38 new homes of mixed size and type, including affordable housing. 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R08: Land At Mascalls Lane	<ul style="list-style-type: none"> - provision for around 9 new homes of mixed size and type. 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no</p>

Policy	Description	HRA Implications
		<p>impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R09: Land Off Warley Hill	<ul style="list-style-type: none"> - provision for around 43 new homes of mixed size and type. 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R10: Brentwood Railway Station Car Park	<ul style="list-style-type: none"> - provision for around 100 new homes of mixed size and type, including affordable housing. 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R11: Westbury Road Car Park	<ul style="list-style-type: none"> - provision for around 45 new homes of mixed size and type, including affordable housing. 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R12: Land At Hunter House	<ul style="list-style-type: none"> - provision for around 48 new homes of mixed size and type, including affordable housing. 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no</p>

Policy	Description	HRA Implications
		<p>impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R13: Chatham Way Car Park	<ul style="list-style-type: none"> - provision for around 31 new homes of mixed size and type, including affordable housing. 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R14: William Hunter Way Car Park	<ul style="list-style-type: none"> - provision for around 300 new homes of mixed size and type, including affordable housing; and - provision for retail use. 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R15: Wates Way Industrial Estate	<ul style="list-style-type: none"> - provision for around 80 new homes of mixed size and type, including affordable housing; and - provision for retail/ commercial use. 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R16 & R17: Land off Doddinghurst Road	<ul style="list-style-type: none"> - provision for around 200 new homes of mixed size and type, including affordable housing. 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no</p>

Policy	Description	HRA Implications
		<p>impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R18: Land Off Crescent Drive	<ul style="list-style-type: none"> - provision for around 55 new homes of mixed size and type, including affordable housing. 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R19: Land At Priests Lane	<ul style="list-style-type: none"> - provision for around 75 new homes of mixed size and type, including affordable housing; and - potential for the provision of a small to medium sized care home (around 40 bed scheme as part of the overall allocation). 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R20: The Eagle And Child Public House	<ul style="list-style-type: none"> - provision for around 20 new homes of mixed size and type, including affordable housing. 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R21: Land South Of Ingatestone	<ul style="list-style-type: none"> - provision for around 161 new homes of mixed size and type 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no</p>

Policy	Description	HRA Implications
		<p>impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R22: Land Adjacent To The A12, Ingatestone	<ul style="list-style-type: none"> - provision for around 57 new homes of mixed size and type 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R23: Brizes Corner Field	<ul style="list-style-type: none"> - provision for around 23 new homes of mixed size and type 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R24: Land off Stocks Lane	<ul style="list-style-type: none"> - provision for around 30 new homes of mixed size and type 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R25: Land North of Woollard Way	<ul style="list-style-type: none"> - provision for around 40 new homes of mixed size and type - a minimum of 25% of the proposed dwellings to be reserved for people with a strong and demonstrable local connection or those over 50 years of age. These dwellings should 	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no</p>

Policy	Description	HRA Implications
	<p>comprise affordable housing. A person with a strong local connection should meet one of the following criteria:</p> <ul style="list-style-type: none"> existing local residents requiring separate accommodation; or close relatives of existing local residents who have a demonstrable need to either support or be supported by them; or people whose work provides an important and necessary local service. <p>In the context of this policy “local” means a parish or ward, or in exceptional circumstances, adjacent parishes or wards.</p>	<p>impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
R26: Land North of Orchard Piece	<ul style="list-style-type: none"> provision for around 30 new homes of mixed size and type A minimum of 25% of the proposed dwellings to be reserved for people with a strong and demonstrable local connection or those over 50 years of age. These dwellings should comprise affordable housing. A person with a strong local connection should meet one of the following criteria: <ul style="list-style-type: none"> (i) existing local residents requiring separate accommodation; or (ii) close relatives of existing local residents who have a demonstrable need to either support or be supported by them; or (iii) people whose work provides an important and necessary local service. <p>In the context of this policy “local” means a parish or ward, or in exceptional circumstances, adjacent parishes or wards.</p>	<p>No Likely Significant Effects.</p> <p>Due to the distances involved, there are no impact pathways present.</p> <p>In combination impact pathways relating to water quality and air pollution may require further investigation.</p>
E11: Brentwood Enterprise Park	<p>Land south east of M25 Junction 29, as shown in Appendix 2, is allocated to provide high quality employment development and significant number of jobs. Development proposals should consider the following:</p> <p>Amount and type of development:</p> <ul style="list-style-type: none"> 26 ha of employment land (principally use classes B1, B2 and B8) taking account of market needs along with ancillary and supporting uses. <p>Supporting on-site development:</p> <ul style="list-style-type: none"> ancillary uses, for example: <ol style="list-style-type: none"> use class C1 hotel; use classes A1 to A4 including small shops and eateries; and/or 	<p>No Likely Significant Effects.</p> <p>This policy allocates a single development site for employment purposes at the Brentwood Enterprise Park. This allocation has previously been subject to HRA⁷² which enabled this allocation to be screened out alone. In combination impact pathways relating to water quality and air pollution require further investigation.</p>

⁷² AECOM. (January 2018) Habitats Regulations Assessment of Brentwood District Council Draft Local Plan: Preferred Site Allocations Regulation 18 Consultation (January 2018). Brentwood District Council

Policy	Description	HRA Implications
	<p>iii. use class D1 including day nurseries, creches and health services.</p> <p>Development principles:</p> <ul style="list-style-type: none"> - landscaping and earthworks within the gross site area and in particular in the southern part of the allocated area, will enable the formation of a developable site and provide improved visual amenity between the site and surrounding land. Landscaping provided is to be retained thereafter; - site is identified as a key gateway location and development should reflect this in terms of design quality; - consideration of adjoining Local Wildlife Site (Hobbs Hole); - maintain Public Right of Way through site; and - full traffic assessment and Travel Plan to accompany an application. <p>Infrastructure requirements:</p> <ul style="list-style-type: none"> - potential for on-site early years and childcare nursery school provision; - highway works including potential access points via M25 Junction 29 and Warley Street (B186) and associated slip roads; - provision for public transport links with the surrounding area; and - provision for improved walking and cycling links with the surrounding area. 	
E12: Childerditch Industrial Estate	<p>Land at Childerditch Industrial Estate, as shown in Appendix 2, is allocated for employment use. Development proposals should consider the following:</p> <p>E. Amount and Type of Development</p>	<p>No Likely Significant Effects.</p> <p>This policy allocates a single development site for employment purposes. In combination impact pathways relating to water quality and</p>

Policy	Description	HRA Implications
	<p>a. 20.64 ha of employment land (principally use classes B1, B2, B8 and any associated employment generating sui generis uses), including elements of landscaping to improve visual amenity.</p> <p>F. Development Principles</p> <p>a. access via eastbound A127;</p> <p>b. provision for improved walking and cycling links with the surrounding area;</p> <p>c. full traffic assessment and Travel Plan to accompany an application;</p> <p>d. consideration for improvements to A127 junction; and</p> <p>e. provides opportunity to expand an existing employment site and improve site layout.</p>	<p>air pollution require further investigation.</p>
E10: Codham Hall Farm	<p>Land north east of M25 Junction 29 is allocated for employment use as shown in Appendix 2. Development proposals should consider the following:</p> <p>G. Amount and Type of Development</p> <p>a. 9.6 ha of employment land (principally use classes B1, B2, B8 and any associated employment generating sui generis uses); and</p> <p>b. 8.0 ha of land to provide for landscaping, amenity, access and ancillary uses to support the sustainability of the site.</p> <p>H. Development Principles</p> <p>a. access via M25 Junction 29;</p> <p>b. consideration of adjoining Local Wildlife Site (Codham Hall Wood);</p>	<p>No Likely Significant Effects.</p> <p>This policy allocates a single development site for employment purposes. In combination impact pathways relating to water quality and air pollution require further investigation.</p>

Policy	Description	HRA Implications
	<ul style="list-style-type: none"> c. maintain Public Right of Way through site; and d. provision of improved walking and cycling links with the surrounding area. 	
E13: East Horndon Hall	<p>Land at East Horndon Hall is allocated for employment use. Development proposals should consider the following:</p> <p>I. Amount and Type of Development</p> <ul style="list-style-type: none"> a. 5.5 ha of employment land (principally use classes B1, B2, B8 and any associated employment generating sui generis uses), including elements of landscaping to improve visual amenity. <p>J. Development Principles</p> <ul style="list-style-type: none"> a. improved links with Dunton Hills Garden Village proposals; b. access via Tilbury Road; c. provision for improved walking and cycling links; d. full traffic assessment and Travel Plan to accompany an application; and e. protect and enhance the setting of nearby listed buildings, East Horndon Hall and All Saints Church. 	<p>No Likely Significant Effects.</p> <p>This policy allocates a single development site for employment purposes. In combination impact pathways relating to water quality and air pollution require further investigation.</p>
E08: Land Adjacent to A12 And Slip Road, Ingatestone	<p>Land adjacent to A12 and slip road, Ingatestone is allocated for employment use. Development proposals should consider the following:</p> <p>K. Amount and Type of Development</p>	<p>No Likely Significant Effects.</p> <p>This policy allocates a single development site for employment purposes. In combination impact pathways relating to water quality and</p>

Policy	Description	HRA Implications
	<p>a. 2.06 ha of employment land (principally use classes B1, B2, B8 and any associated employment generating sui generis uses).</p> <p>L. Development Principles</p> <p>a. primary purpose of the allocation is to deliver jobs for the area and so consideration will be given to other uses that enable job opportunities, taking account of market needs.</p> <p>b. access via Roman Road with potential highway improvements;</p> <p>c. provision for improved walking and cycling links with the surrounding area; and</p> <p>d. full traffic assessment and Travel Plan to accompany an application</p>	<p>air pollution require further investigation.</p>

