# North Benfleet Neighbourhood Development Order Environmental Impact Assessment Screening Report

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# 1. Introduction

## 1.1 Background

1.1.0 This EIA Screening report supports a formal request for an Environmental Impact Assessment (EIA) screening opinion submitted to Basildon Borough Council (BBC) pursuant to Regulation 6 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (herein referred to as the 'EIA Regulations'), in relation to the North Benfleet Neighbourhood Development Order (NDO) for a residential-led development with commercial/community buildings and internal roads (herein referred to as the 'Proposed Development' or the 'North Benfleet NDO').

1.1.1 In accordance with the requirements of Regulation 6 (2) of the EIA Regulations, this request provides information to assist the Basildon Council Planning Policy team in adopting an EIA screening opinion in relation to the Proposed Development and determining whether an Environmental Statement (ES) is required to accompany the North Benfleet NDO.

# 2. Site Location and Overview of the Proposed Development

### Description of the Site and Surroundings

2.1.1 North Benfleet is a village in the parish of Bowers Gifford and North Benfleet, in the borough of Basildon, Essex. The village is situated to the north of Bowers Gifford, approximately 5 km east of the town of Basildon, 17.5 km south of Chelmsford, and approximately 45 km east of central London.

2.1.2 The Neighbourhood Plan Area for the parish was approved by BBC Cabinet Member for Planning on 18th July 2016[1]. The defined Neighbourhood Plan Area is illustrated on Figure 1 in Appendix 1.

2.1.3 The site of the Proposed Development (referred to hereafter as the 'Site') is currently a plotlands[2] area (comprising a grid system of self-built settlements with numerous landowners) within North Benfleet which contains residential and industrial buildings. The Site covers a total area of 79.8 Hectares (ha) and is centred on Ordnance Survey grid reference TQ 75295 89813. The extent of the Site is shown on Figure 2 in Appendix 1.

2.1.4 The Site is bound by Burnt Mills Road to the north and Pound Lane to the east. To the south of the Site lies the village of Bowers Gifford and a series of fields are situated along the Site's western boundary. Pound Lane connects to the A127 to the north of the Site and the A130 to the south of the Site.

2.1.5 The Site currently comprises low density, rural housing. The dwellings comprise bungalows or chalet bungalows and are set out along the numerous roads within the plotlands[3]. Existing vegetation throughout the Site provides some screening. Large paddocks and fields are also present. The existing development within this plotland is set out sporadically along the roads. A number of internal roads are present within the Site, including Cat Tree Lane, Grange Road and Acacia Road.

[1] https://e-voice.org.uk/bgnb-parishcouncil/assets/documents/decision-notice-2
[2] Plotlands refers to small pieces of land laid out in regular plots on which a number of self-built settlements were established in the south-east of England from the late 1800s and up to the Second World War. The Second World War and the planning regulations which followed brought an end to most new plotland development from being created.
[3] https://www.basildon.gov.uk/media/8029/Basildon-Council-Plotlands-Study-2017-June-2017/pdf/Basildon_Council_-_Plotlands_Study_2017_-_June_2017.pdf?m=636556008880000000

2.1.6 Pitsea National Rail train station is the closest train station to the Site, located approximately 2.5km to the south-west of the Site. Bus route 21 also passes along Pound Lane and provides services to Basildon. Further bus services are accessible from London Road to the south of Bowers Gifford (bus route 28). There are no airports in proximity to the Site.

2.1.7 Figure 3 in Appendix 1 illustrates the key environmental constraints within the Site and surrounding area.

2.1.8 Both North Benfleet and the adjacent village of Bowers Gifford are located within the London Area Green Belt. The adopted Local Plan for BBC comprises the Basildon District Local Plan Saved Policies 2007, which originally formed part of the Basildon District Local Plan, adopted in March 1998 with Alterations in September 1999. The Saved Policies represent the local planning policies currently applied by the Council to inform determination of planning applications in the Borough and enforce planning control.

2.1.9 The proposals map that accompanied the Basildon District Local Plan identifies 13 plotland areas, which include North Benfleet. Policy BAS GB7 was saved in 2007 and states:

*'Except as outlined in policy BAS GB8, the re-use or adaptation of suitable buildings will be allowed in the Green Belt provided that:*

*i) the building is in keeping with its surroundings by reason of its form, bulk and general design, and the conversion works proposed would not be detrimental to the character of the building itself;*

*ii) the creation of any residential curtilage does not harm the openness or visual amenities of the green belt;*

*iii) the buildings are of permanent and substantial construction, and are capable of conversion without major or complete reconstruction, other than limited extension;*

*iv) the proposed use would not be significantly more harmful to residential and visual amenities than the previous use and conflict with the openness of the green belt;*

*v) the proposed use would not result in inappropriate outside storage of any materials, machinery and/or vehicles; and*

*vi) the surrounding roads should be adequate to accommodate the increase in vehicle traffic generated, having regard to the physical and environmental capacity of the roads and their function in the county road hierarchy.'*

2.1.10 A draft new local plan for BBC was prepared and submitted to the Planning Inspectorate, however this was withdrawn in March 2022. BBC is in the process of preparing a new Local Plan which will set out the overall planning framework to support growth and development in the Borough. The new Local Plan will cover the entire Basildon administrative area and include strategic priorities and a long-term vision for the area. It is anticipated that the draft new Local Plan will be published at the end of 2025 and adopted at the end of 2027.

## Description of Proposed Development

2.1.11 The NDO will establish the principle and parameters for the Proposed Development which will comprise a residential-led mixed use development. The Proposed Development will include open spaces a local centre, a loop road and a variety of dwelling types, which will reflect the existing local character through adherence to a Design Code.

2.1.12 The Proposed Development may require some demolition of industrial buildings along Cat Tree Lane. The potential demolitions are in an area of approximately 2.68 ha within the Phase 1 area and include a number of single storey shed structures totalling around 5,800m$^2$ of floorspace, and areas of hardstanding and shipping containers which are currently used as car breakers yards, car parts sales and boarding kennels. This area is shown on the demolition plan on Figure 4 of Appendix 1.

2.1.13 Key design features and parameters of the North Benfleet NDO include:

- Up to a maximum of 300 dwellings (use class C3).
- A local centre, of approximately 350m$^2$ (Classes E and F) to be located in Phase 1.
- A new loop road to adoptable standards to provide access to the undeveloped areas in Phases 1 to 5.
- General lighting upgrades and improvements.

2.1.14 All development within the proposed NDO must comply with a Design Code to ensure that the existing character of North Benfleet village is not adversely impacted. The Design Code will be used to guide and control the detailed design of proposals as they come forward. The Design Code will comprise two elements:

- A Code for Mini Masterplans setting out the phasing and the relationship of development to the setting to minimise impacts on the Green Belt, and providing guidance on place making. It will include development parameters for each Phase and the information that will be required to support detailed proposals for the development of multi plot areas within the Phase 1 to 5 areas of the, NDO (details relating to the proposed phasing are provided in the following section).
- A Code for Plot Infill setting out parameters for the development of individual plots as standalone infill development. Parameters will include building lines, building footprints and setback distances, and parking provision with guidance on materials, curtilage treatments and landscape.

2.1.15 The Design Code will also provide a set of 'rules' for development based on parameters for:

- The Loop road: including design guidance for roadways, pavements and cycling provision.
- Street grid completion: where areas within Phases 1-5 will require the completion of the original street grid pattern. Guidance will be provided on the layout of new plots and their relationship to the new and existing roads to create active street frontages.
- Existing roads: where there are opportunities for improvements to the existing roads through their integration into the new loop road layout.

2.1.16 The residential development will generally be individual dwellings of the chalet bungalow type, in keeping with existing character of the plotlands. The Design Code will provide restrictions on layout, scale massing and materials of new dwellings with parameters for building set backs separation and overlooking, open space provision, curtilage and parking. The Design Code is intended to deliver 2 to 3 bed homes to meet local needs and loosely adopt BBC's housing bed ratio requirements. The Design Code will restrict the amalgamation of plots and the development of large properties that are out of keeping with the scale of the plotlands.

### Construction of the Proposed Development

2.1.17 The Proposed Development will come forward through a combination of infill development on individual plots and multi plot development in the less developed areas of the plotlands, which will be constructed in five phases.

2.1.18 Phase 1 will come first as it is required for the access that will serve the proposed loop road. The Design Code plans show an access off Pound Lane along the line of Cat Tree Lane which would be upgraded to meet adoptable standards. Note: the exact location and alignment of the access and the loop road shown on Figure 5 in Appendix 1 is indicative and will be determined through the detailed design that will be part of the Mini Masterplans design process.

2.1.19 Following the completion of the Phase 1 section of the loop road, there is flexibility in the sequencing of the following phases provided that access onto Pound Lane via the loop road is available for use before dwellings are occupied. Phase 5 can be delivered either with an independent access off Burnt Mills Road or via a link into the Phase 4 loop road.

2.1.20 Plot Infill development will deliver up to 100 of the 300 new dwellings with the remaining 200 dwellings delivered in the phased areas of the NDO approximately as follows:

- Phase 1 56 dwellings
- Phase 2 64 dwellings
- Phase 3 34 dwellings
- Phase 4 30 dwellings
- Phase 5 16 dwellings

2.1.21 The Development Parameters and phasing plan is shown on Figure 5 in Appendix 1.

2.1.22 For the purposes of this EIA Screening request, the following indicative construction programme is assumed:

- Plot Infill: 2024 - 2030
- Phase 1: 2024 – 2027
- Phase 2: 2026 – 2030
- Phase 3:2028 – 2031
- Phase 4: 2030 - 2033
- Phase 5: 2031 - 2033

## 2.2 Determining the need for an EIA

2.2.1 Schedule 1 of the EIA Regulations lists types of developments for which EIA is mandatory, these constitute major developments that are likely to have significant effects. For all other developments, which fall under Schedule 2, the need for an EIA is determined on the basis of set criteria.

2.2.2 For developments which fall under Schedule 2, the need for EIA is determined using set criteria, which are outlined below:

- The development is EITHER in a sensitive area[4] as defined by the EIA Regulations OR exceeds the size threshold for that type of development specified within Schedule 2; AND
- Is likely to have significant effects on the environment by virtue of factors, such as its nature, size or location. Schedule 3 of the EIA Regulations provides

[4] "sensitive area" means any of the following: a) land notified under section 28(1) (sites of special scientific interest) of the Wildlife and Countryside Act 1981, b) a national Park, c) the Broads, d) a property appearing on the World Heritage List, e) a scheduled monument, f) an area of outstanding natural beauty, g) a European site

criteria which are to be taken into account when determining whether a proposed scheme is likely to have significant effects on the environment.

2.2.3 The Proposed Development is not Schedule 1 development, as defined in the EIA Regulations. Schedule 2 of the EIA Regulations sets out descriptions of development and applicable thresholds including criteria for the purposes of the definition of 'Schedule 2 development'. The Proposed Development falls under Schedule 2 category 10(b) 'urban development projects'.

2.2.4 Schedule 2 category 10(b) sets out the following thresholds for urban development projects:

*(i) The development includes more than **1 hectare of urban development which is not dwellinghouse development**; or*
*(ii) the development includes **more than 150 dwellings**; or*
*(iii) the overall area of the development **exceeds 5 hectares**.*

2.2.5 The Proposed Development is not located within an environmentally 'sensitive area' as defined by Regulation 2(1) of the EIA Regulations. However, the total area of the Proposed Development Site is approximately 79.8 ha comprising approximately 22.5 ha of developable land for Phases 1 to 3a and 42.0 ha of developed plotland area where infill will be permitted. Therefore, the North Benfleet NDO meets the above Schedule 2 category 10(b) thresholds.

2.2.6 Consideration of the potential for significant environmental effects associated with the Proposed Development is provided in Section 3 below.

# 3. Potential Environmental Effects

3.1.1 The characteristics and location of the Proposed Development have been considered when assessing the impact of the Proposed Development on the environment and the potential for likely significant effects to result from the Proposed Development. The North Benfleet NDO seeks to establish key principles relating to the nature and scale of the Proposed Development and will be supported by a Design Code, which is to be developed in conjunction with BBC. Whilst the design of the Proposed Development is not yet fixed, the Development Parameters and other information described in this Section 2 above is considered adequate for the purposes of establishing the likely environmental effects arising from Proposed Development in relation to the EIA Screening process.

3.1.2 For the purposes of this EIA Screening request, the Proposed Development has been appraised against the following topics:

- Air quality;
- Noise and vibration;
- Biodiversity and designated sites for nature conservation;
- Geology and ground conditions;
- Water resources, flood risk and drainage;
- Built heritage and archaeology;
- Landscape and visual impact;
- Waste and resources;
- Traffic and transport;
- Greenhouse gases (GHG) and climate change;
- Socio-economics;
- Major accidents and disasters;
- Health and wellbeing; and
- Cumulative effects.

3.1.3 The below sections provide commentary on these topics, including the current baseline, potential impacts of the Proposed Development (during construction and once complete and operational) and potential mitigation measures.

3.1.4 Figure 3 in Appendix 1 shows the environmental context of the Site.

## 3.2 Traffic and Transport

### Baseline

3.2.1 The Site is located 5 km to the east of Basildon Town Centre and can be accessed via Pound Lane which connects to the A127 and A130. There are a number of internal roads currently within the Site, including Cat Tree Lane, Grange Road and Acacia Road. A public footpath is present to the east of the Site which extends from north to south.

3.2.2 The closest National Rail Train Stations are Pitsea, 2.5 km to the south west of the Site, and Basildon, 5.25 km to the west, both provide frequent services to London Fenchurch Street and a service every half an hour to Southend Central.

3.2.3 Bus route 21 connects the Site to Basildon town centre, as well as connecting close to Pitsea train station. During the week the service operates five times a day in each direction, the frequency increases to eight times a day on Saturdays and the service does not operate on Sundays. The nearest bus stop is Clifton Road, which is located within the Site adjacent to Pound Lane.

### Construction

3.2.4 The Proposed Development includes the construction of an internal loop road, which would be completed in stages, providing access for development of residential, community /commercial buildings in each phase.

3.2.5 During construction it is anticipated that there would be a short-term increase in the volume of Heavy Goods Vehicles (HGVs) traffic on the highway network. However, construction vehicles would use the strategic highway network to access the Site (such as the A127 and A130) and would avoid using local roads where possible (with development in North Benfleet being limited to the loop road construction), which would minimise traffic effects within North Benfleet and Basildon.

3.2.6 Furthermore, the NDO will require through a condition that each Mini Masterplan for each Phase would include a Construction Environment Management Plan (CEMP) which would be prepared and implemented by the Contractor(s) and set out standard industry practice measures to manage the effects of construction traffic. Whilst construction of the Proposed Development would generate additional HGV trips on the highway network, due to the scale of the development the HGV trips are unlikely to significantly increase the existing traffic flows on these roads, and any effect would be temporary.

### Operation

3.2.7 Once the Proposed Development is complete and operational, vehicular trips are anticipated to increase compared to the existing conditions. Vehicular access to the residential elements of the Proposed Development and the commercial and community buildings will be via the internal loop road off Pound Lane. The loop road will facilitate connections to the existing internal roads within the Site to improve connectivity across the Site.

3.2.8 In addition, pedestrian facilities will be provided throughout the Site to enhance permeability and connections to the existing pedestrian and cycle routes in the wider area.

3.2.9 The existing infrastructure and access to public transport around the Site would support the use of sustainable transport modes by future residents, workers and visitors to the Proposed Development.

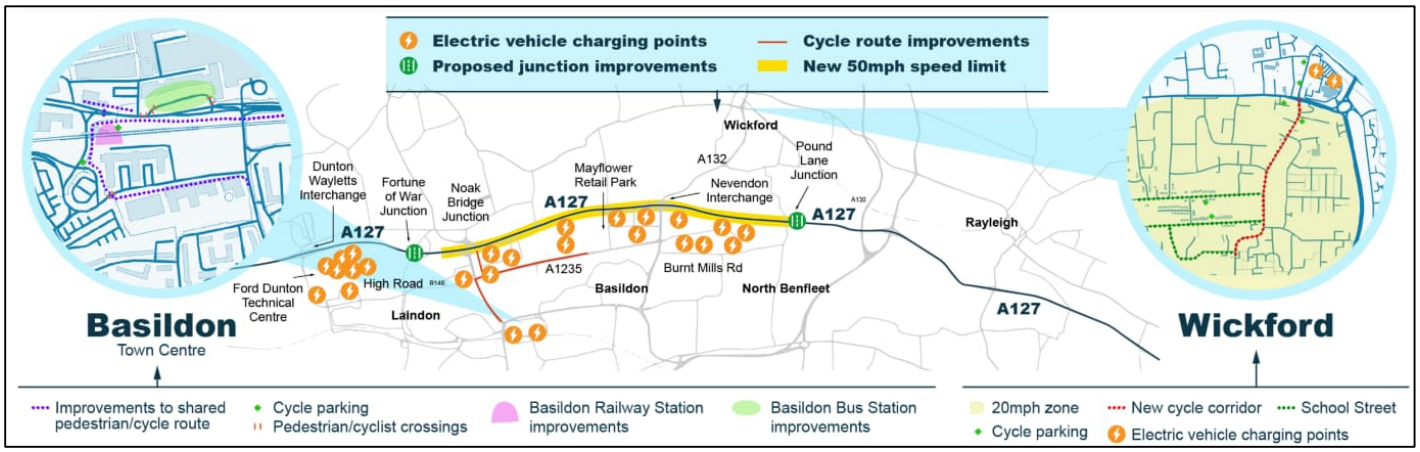
3.2.10 A Transport Assessment will be required for each Mini Masterplan detailing any transport impacts relating to the Proposed Development (such as impacts on junction capacity) and will identify what measures, if required, will be taken to manage the anticipated transport impacts. The scope of the Transport Assessment will be agreed with highways officer(s) at BBC and Essex Highways.

## 3.3 Air Quality

### Baseline

3.3.1 The main source of air pollution within Essex, including North Benfleet, is from the major road network[5], comprising the A30, A130, and A127. The Government's 2017 National Air Quality Plan[6] identified a number of locations along the A127 in Essex which were likely to be exceeding air quality thresholds for nitrogen dioxide ($NO_2$). Therefore, Essex County Council (ECC), BBC and Essex Highways have implemented various schemes and initiatives in order to improve the overall air quality in the Basildon area. These include a 'non-charging clean air zone' comprising speed reduction from 70mph to 50mph on the A127 between the Fortune of War Junction and Pound Lane Junction (north of North Benfleet) (implemented in 2020), electric vehicle charging points, and upgrades to cycling facilities (as shown in Plate 3-1 below).

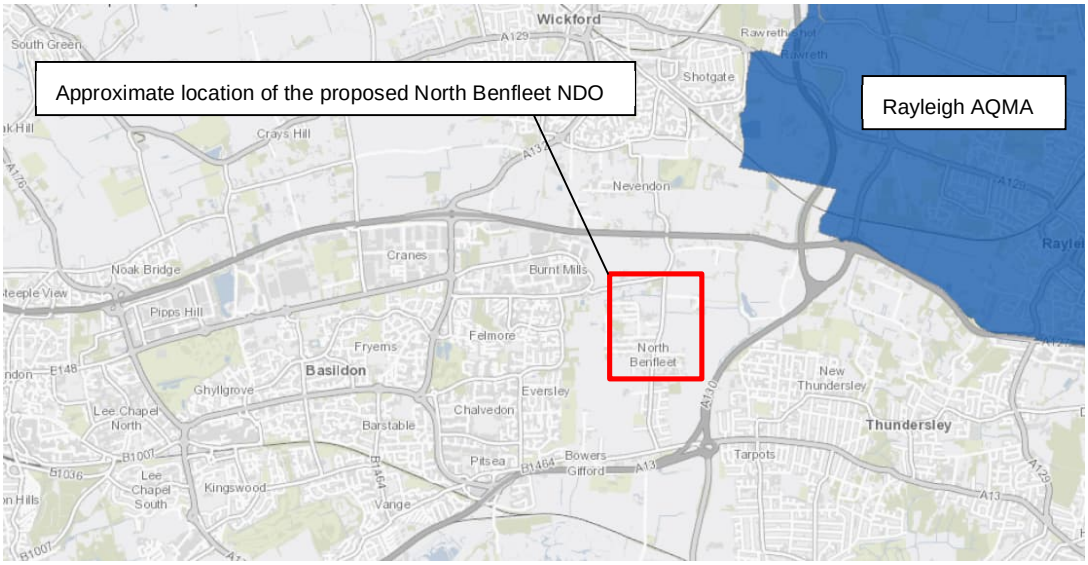
**Plate 3-1: Air Quality Improvement Initiatives in the Borough of Basildon** *(Source: Essex Highways)*




3.3.2 The Site is not located within an Air Quality Management Area (AQMA)[7]. The nearest AQMAs are Rochford and Rayleigh, both of which are located to the north east of the Site (see Plate 3-2 below). Rochford AQMA was designated in 2010 due to exceedances of particulate matter ($PM_{10}$), however this was revoked in 2013. Rayleigh AQMA was designated in 2015[8] due to exceedances of the air quality objective set out in the UK National Quality Strategy for nitrogen dioxide ($NO_2$ Annual Mean).

[5] Basildon Air Brochure (2020) – Online. Available at: https://www.essexhighways.org/uploads/docs/basildon_air_brochure_digital.pdf
[6] https://www.gov.uk/government/publications/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2017
[7] DEFRA – AQMAs – Online. Available at: https://uk-air.defra.gov.uk/aqma/maps/
[8] Department for Environment, Food and Rural Affairs (2007). The Air Quality Strategy for England, Scotland, Wales, and Northern Ireland.

### Plate 3-2: Location of nearest AQMA




3.3.3 The 'Air Quality Annual Status Report' (ASR) produced by Basildon Council in 2020[9] shows the location of diffusion tube monitoring stations in the surrounding areas, these comprise: Dunton and Laindon; Pitsea; Basildon; and Wickford and North Basildon. No diffusion tube monitoring locations are situated in the Site. In 2019, all diffusion tube monitoring sites measured $NO_2$ levels well below the 40 µ/m$^3$ annual mean $NO_2$ objective concentration set out in the UK Air Quality Strategy[10].

3.3.4 Sensitive receptors to air quality impacts arising from the construction of the Proposed Development, and once it is complete and operational, typically include residential properties, community facilities and designated ecological sites that include features which are sensitive to local air pollution.

3.3.5 Receptors located within and surrounding the Site which are sensitive to changes in air quality include:

- Local residents;
- Local businesses including construction suppliers, car and tyre shops, beauty salons, local shops and dog grooming/boarding services;
- Users of community facilities; and
- Visitors to Pound Lane Mission Church, local cafés and restaurants.

3.3.6 The nearest designated ecological site is Pitsea Marsh Site of Special Scientific Interest (SSSI) which is located approximately 2 km south west of the Proposed Development. Pitsea SSSI is designated for its mosaic of habitats including scrub, grassland, reedbed and fen, open water, and saltmarsh[11]. There are no known receptor pathways between the Site and the SSSI.

## Construction

3.3.7 Construction of the Proposed Development, including demolition of existing buildings. has the potential to impact air quality at nearby sensitive receptors.

3.3.8 The main impacts during construction would arise from fugitive emissions of dust due to activities such as demolition, earthworks and construction, and increases of

[9]ASR – Basildon. Online. Available at: https://essexair.org.uk/Reports/Basildon2020ASR.pdf
[10] Department for Environment, Food and Rural Affairs (2007). The Air Quality Strategy for England, Scotland, Wales and Northern Ireland.
[11] Pitsea Mash SSSI - https://designatedsites.naturalengland.org.uk/PDFsForWeb/Citation/1004095.pdf

$PM_{10}$ and $NO_2$ concentrations due to emissions from construction traffic and plant (i.e. non-road mobile machinery (NRMM)). These impacts would be localised and temporary in nature, and the Contractors would be required to implement best practice means to reduce the risk of dust impacts on nearby sensitive receptors. In addition, given the scale of the development, the HGV trips are unlikely to significantly increase the traffic flows and thereby traffic emissions on the A127 and A130, and deliveries could be managed to avoid peak times or through 'just in time' deliveries to reduce idling of vehicles.

3.3.9 No significant effects on air quality during construction are therefore considered likely. In addition, the main effects of dust arisings would occur within 250m of the emission source. Given that there are no statutory designated ecological sites within 250m of the Site, no effects from dust emissions during construction of the Proposed Development on statutory designated sites are anticipated.

### Operation

3.3.10 The operation of the Proposed Development introduces the potential for increased air quality impacts associated with increased vehicle movements. However, due to the size, low density and nature of the Proposed Development, and existing air quality conditions at the Site and in the surrounding area, it is unlikely that this would significantly affect air quality.

## 3.4 Noise and Vibration

### Baseline

3.4.1 It is anticipated that road traffic is the dominant noise source at the Site, particularly in areas closest to the major road networks to the north and east.

3.4.2 The Department for Environment, Food and Rural Affairs (DEFRA) produced a Noise Action Plan[12] in 2019, which outlines the estimated number of people exposed above various noise levels from road traffic noise in the area of Basildon/North Benfleet, as shown in Table 3-1 below.

**Table 3-1: Defra Noise Action Plan Data for Basildon/North Benfleet (2019)**

| | Noise Level (dB) | Number of People |
|---|---|---|
| **Estimated number of people exposed above various noise levels due to road traffic noise, $L_{den}$** *(day-evening night)* | ≥55 | 15,000 |
| | ≥60 | 7,000 |
| | ≥65 | 3,000 |
| | ≥70 | 1,000 |
| | ≥75 | <500 |
| **Estimated number of people exposed above various noise levels due to road traffic noise, $L_{night}$** *(night time period of 23:00 to 07:00 hours)* | ≥50 | 8,000 |
| | ≥55 | 4,000 |
| | ≥60 | 1,000 |
| | ≥65 | <500 |

[12] Defra – Noise Action Plan: Agglomerations (Urban Areas) (2019) – Online. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/813776/noise-action-plan-2019-agglomerations-appendix.pdf

| | | |
|---|---|---|
| | ≥70 | <500 |
| **Estimated number of people exposed above various noise levels due to road traffic noise, $L_{A10,18h}$** *(noise level exceedance for 10% of the measurement period)* | ≥55 | 15,000 |
| | ≥60 | 8,000 |
| | ≥65 | 4,000 |
| | ≥70 | 1,000 |
| | ≥75 | <500 |

3.4.3 Receptors likely to be sensitive to noise impacts comprise:

- Local residents; and
- Local businesses including construction suppliers, car and tyre shops, beauty salons, local shops and dog grooming/boarding services.

## Construction

3.4.4 Construction activities will include demolition and construction of hardstanding/buildings, and it is likely that nearby noise sensitive receptors, as outlined above, may experience increased noise levels from construction activities and construction traffic.

3.4.5 Noise and vibration levels during construction would be managed through the implementation of best practice means in accordance with BS 5228[13]. This could include use of acoustic screens around machinery for example. Noise and vibration during demolition and construction will be temporary and minimised through standard industry practice construction environmental management measures, implemented by way of a CEMP. Therefore, no significant effects due to construction noise and vibration are considered likely.

## Operation

3.4.6 Once the Proposed Development is complete and operational, consideration should be given to impacts arising from noise and vibration from surrounding sources affecting the Proposed Development (i.e. the suitability of the Site for its intended residential use), and any noise and vibration generated by the Proposed Development which could affect nearby noise sensitive uses.

3.4.7 The existing plotlands development within North Benfleet comprises low density, rural housing. The dwellings are all relatively modern bungalows or chalet bungalows and are unlikely to generate levels of noise or vibration that would result in significant effects on future residents, making the Site suitable for its proposed use in noise and vibration terms.

3.4.8 Noise and vibration could be generated by the Proposed Development due to operational traffic, noise generating activities within the Proposed Development (e.g. commercial uses and servicing areas) and fixed plant (such as buildings services plant).

3.4.9 Significant adverse noise and vibration effects are not anticipated from operational road traffic as a result of the Proposed Development as it is expected that there will be an insignificant increase in traffic volumes on the local road network during the AM and PM peak hours.

[13] BS 5228 -1:2009 Code of practice for noise and vibration control on construction and open sites – Part: Noise

3.4.10 As such, significant adverse noise and vibration effects on the nearby land-uses are not considered likely.

## 3.5 Biodiversity and Designated Sites for Nature Conservation

### Baseline

3.5.1 An Ecological Constraints report has been prepared using data obtained from a desk study to assess any ecological constraints to inform the NDO and the findings are summarised below.

3.5.2 Defra's Multi-Agency Geographic Information for the Countryside (MAGIC) database[14], aerial photography and Google street view show that the Site is largely composed of low density residential development dispersed across the Site with intervening vegetation comprising gardens, fields, hedges and trees, and scattered commercial premises in the north-east of the Site. There are also at least nine ponds located within the Site, predominantly in the north-east of the Site.

3.5.3 Investigation of the Priority Habitat dataset on the MAGIC database showed that the Site contains three kinds of notable habitats[15]: deciduous woodland, traditional orchards, and hedgerows. The Site contains habitats with the potential to support the following notable and protected species[16]: badger (*Meles meles*), species of bats, hazel dormouse (*Muscardinus avellanarius*), great crested newt (*Triturus cristatus*), reptiles, and nesting birds. A data search received from the local biological records centre (Essex Field Club) returned recent records for badgers, reptiles, notable bird species and great crested newts from the area surrounding the Site; there were none from within the Site boundary. There are no records of invasive non-native species within the Site or within a 1km radius of the Site, though there is the potential for such species to be present.

3.5.4 The land surrounding the Site (to the north, east and west) is mainly in agricultural use while land to the south, is the residential part of Bowers Gifford. Within 0.75 km of the northern, eastern and southern boundaries of the Site are dual carriageways and highways.

3.5.5 There are seven internationally statutorily designated sites within 10km of the Site[17]:

- Benfleet and Southend Marshes Ramsar and Special Protection Area (SPA) located approximately 4km south east of the Site which is designated for its mudflats and wintering bird assemblages;
- Essex Estuaries Special Area of Conservation (SAC) located approximately 5.4 km north east of the Site. The SAC is designated for its undeveloped, coastal plain estuarine system with associated open coast mudflats and sandbanks;
- Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) Ramsar and SPA located approximately 5.4 km north east of the Site which are designated for their saltmarsh, aquatic and terrestrial invertebrates, nationally scarce plants and important bird populations; and
- Thames Estuary and Marshes Ramsar and SPA located approximately 9 km south west of the Site which is designated for the same criteria as Crouch and Roach Estuaries.

[14] DEFRA, (2023); Magic Maps. Available at: https://magic.defra.gov.uk/MagicMap.aspx
[15] Notable habitats are taken as principal habitats for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; habitats listed under the Essex Biodiversity Action Plan (BAP); hedgerows identified as being 'important' under the wildlife criteria of the Hedgerow Regulations 1997, ancient woodlands and veteran trees.
[16] Notable species are taken as principal species for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; any species listed in an IUCN Red Data Book; and any other species listed under the Essex BAP
[17] all distances have been taken from the NDO boundary at the closest point

3.5.6 Information was provided to inform a Habitats Regulations Assessment (HRA) of the new Basildon Local Plan was undertaken in 2015 and the latest report dates from October 2018[18]. To inform the Essex coastal Local Plans an Essex Coast Recreational Disturbance Avoidance & Mitigation Strategy (RAMS) was produced in early 2019[19]. This confirmed the recreational zone of influence for all the Essex coastal European sites. The Benfleet and Southend Marshes SPA/Ramsar site was identified as having a core recreational catchment (or zone of influence) of 4.3km and the Crouch and Roach Estuaries SPA/Ramsar and overlapping Essex Estuaries SAC was identified as having a core recreational catchment (or zone of influence) of 4.5km. The Site falls within the zone of influence of the Benfleet and Southend Marshes SPA/Ramsar site and therefore has the potential to operate negatively in combination with other growth in Basildon, as such it is anticipated that a financial contribution towards implementing the RAMS is likely to be required to mitigate for the effects of the Proposed Development.

3.5.7 In March 2022, Natural England issued a letter to a series of local authorities flagging that a nutrient neutrality requirement would apply to any net increase in residential populations of particular catchments within those authorities, in order to protect certain SACs and SPAs. However, Basildon Borough Council was not included in the list of affected authorities.

3.5.8 Pitsea Marsh SSSI, which is of national biodiversity value, is located approximately 2 km south west of the Site[20]. Pitsea Marsh SSSI comprises a mosaic of habitats, including scrub, grassland, reedbed and fen, open water and saltmarsh. Currently the northern half of the SSSI has no public access, however the southern half is Wat Tyler Country Park which may be already subject to disturbance from the public, e.g. dog walking potentially disturbing waterfowl. Therefore, recreation may have an impact on the SSSI.

3.5.9 Nevedon Bushes Local Nature Reserve (LNR) and Coombe Wood LNR are located within 2 km of the Site.

3.5.10 No Ancient Woodland is located within the Site boundary. Although several areas of Ancient Woodland are in the local area, the nearest which is Nevendon Bushes, is approximately 1.4 km west of the Site. As this site is publicly accessible by car, hence there may be impacts on this habitat because of increased recreational pressure.

3.5.11 The South Essex Marshes RSPB Reserve is located approximately 2.1 km south of the Site boundary.

### Construction

3.5.12 There would be no direct impacts or losses from international or national sites designated for their conservation value, due to the construction of the Proposed Development including pathways for air and water.

3.5.13 Indirect impacts to non-statutory sites nearby will be managed by implementing best-practice measures with respect to dust, noise and air/water pollution in a Construction and Environmental Management Plan (CMP) or equivalent.

3.5.14 The following protected species may be potentially affected by the Proposed Development: badger, bats, hazel dormouse, and nesting birds, reptiles and, or great crested newt. To assess potential ecological effects during construction and operation, an initial scoping survey is recommended to further investigate the likely presence of these species on the Site. With respect to the latter species, there are

[18] LUC, (2018); Basildon Borough Local Plan HRA Report, Habitats Regulations Assessment, October 2018
[19] Essex County Council and Place Services, Essex Coast Recreational disturbance Avoidance & Mitigation Strategy (RAMS) Habitats Regulations Assessment Strategy document 2018 - 2028
[20] DEFRA, (2023); Magic Maps. Available at: https://magic.defra.gov.uk/MagicMap.aspx

no waterbodies are within the Cat Tree Lane demolition area, though one water body is within 50 m and multiple water bodies are within 250m of this zone.

3.5.15 If protected species are found on the Site and if they will be impacted by the proposed Scheme, e.g. habitat used by badger, bats, birds, hazel dormouse and, or great crested newt, mitigation licences may be required for the construction phase.

3.5.16 If Invasive Non Native Species (INNS) species are present, an INNS management plan is recommended which would be implemented during construction and if necessary, post construction.

### Operation

3.5.17 If any European protected species mitigation licences are required, monitoring actions may be required in the operational phase of the Proposed Development.

3.5.18 The Proposed Development will achieve gains for biodiversity by installing species-specific habitat features, appropriate native planting, management regimes that encourage biodiversity and establishing a dark corridor or low lighting scheme design.

3.5.19 The Basildon Local Plan Strategic Policy Enhancing Biodiversity and Green and Blue Infrastructure[21] commits to delivering biodiversity net gain in all future developments in Basildon.

3.5.20 The Design Code will be used to guide and control the detailed design of proposals as they come forward. All development within the proposed NDO must comply with the Design Code. The Design Code provides guidance on achieving biodiversity enhancement through:

- Identifying existing landscape elements including the perimeter hedge lines and trees, which will form part of the green infrastructure for the scheme with links into the surrounding nature corridors.
- The Mini Masterplan Design Code requires a green infrastructure and open space contribution to be made for each Phase to improve biodiversity and provide open space amenity.
- The Plot Infill Design Code requires individual plots to deliver biodiversity gains and follow the hierarchy of avoidance, mitigation and then compensation as part of the design process.

3.5.21 As indicated above, the Site falls within the zone of influence of the Benfleet and Southend Marshes SPA/Ramsar site and therefore has the potential to operate negatively in combination with other growth in Basildon. It is anticipated that a financial contribution towards implementing the RAMS will be required to mitigate the adverse effects of the Proposed Development on nearby European sites. This is likely to take the form of a section 106 contribution.

### Conclusion

3.5.22 The avoidance and mitigation measures outlined above in relation to ecology have been included in the NDO and supporting Design Code. This will ensure that any significant effects on important ecological features are avoided or mitigated.

3.5.23 If mitigation measures and biodiversity enhancements are included within the development brought forward by the NDO, an increase in biodiversity would be achieved.

[21] https://basildonlocalplan.commonplace.is/en-GB/proposals/enhancing-biodiversity-and-green-and-blue-infrastructure/start

## 3.6 Geology and Ground Conditions

### Baseline

3.6.1 British Geological Survey (BGS) mapping[22], shows that the geology beneath the Site comprises London Clay Formation - Clay, silt and sand with superficial head deposits of Clay, silt, sand and gravel. The superficial deposits are classified as a secondary (undifferentiated) aquifer and the London Clay is classified as an unproductive Aquifer.

3.6.2 There are no historic landfills within the NDO. Two historic landfills are located within 2 km of the Site: 'Nevendon Road', located approximately 1.6 km to the north west, and, 'Nevendon Road off A127', located approximately 1.9 km north east of the Site. Traditionally 'plotlands' comprise previously agricultural land and therefore there may be some localised contamination associated with historical farming use. In addition, there may be some point sources of contamination associated with existing businesses located within the Site. The Mini Masterplans will require a Phase 1 Preliminary Risk Assessment to be submitted where there are existing uses on or adjacent to the land to be developed which may have a contamination risk.

3.6.3 There are no Nitrate Vulnerable Zones[23] (NVZs) within 2km of the Site boundary, nor does the Site fall within a Source Protection Zone (SPZ) or Drinking Water Safeguard Zone (for surface and ground water).

3.6.4 Online mapping provided by Zetica[24], indicates that North Benfleet has a moderate risk of unexploded ordnance (UXO). An UXO Risk Assessment should be undertaken to determine potential risks during any intrusive works such as site investigation, earthworks and construction.

### Construction

3.6.5 During construction potential impacts include exposure of any contaminated soils, generation of dust, migration of contamination to groundwater and surface water, and accidental leaks and spillages. All construction works would be carried out in accordance with best practice and legislative requirements to ensure that no fuel contaminated run-off penetrates the ground and to prevent contamination to underlying soils or groundwater. Although construction equipment and materials will be present on the Site, this will be temporary and equipment will be stored appropriately, including the use of bunds and drip trays.

3.6.6 Should any asbestos be discovered, then its removal would follow best practice guidance and would be undertaken by licenced contractors for disposal off site to an appropriately licenced waste management facility.

3.6.7 By implementing appropriate mitigation measures no significant effects on geology and ground conditions are anticipated during construction.

### Operation

3.6.8 The Proposed Development comprises residential and commercial uses which are considered to be low risk in terms of potential sources of contamination. Any mitigation required based on local ground conditions will be embedded as part of the detailed design and therefore any effects during the operation of the Proposed Development on geology and ground conditions are not likely to be significant.

[22] Interactive maps available at: BGS Geology Viewer (BETA)
[23] EA Interactive Map: https://environment.data.gov.uk/farmers/
[24] Zetica UXO online risk maps available at: https://zeticauxo.com/downloads-and-resources/risk-maps/

## 3.7 Water Resources, Flood Risk and Drainage

### Baseline

3.7.1 The bedrock underlying the Site is classified as an unproductive Aquifer. The superficial deposits are classified as secondary (undifferentiated) aquifer. No groundwater Source Protection Zones are located within the Site or immediate surroundings.

3.7.2 According to the Environment Agency online Flood Map for Planning[22], a Main River runs parallel to the eastern boundary of the Site, Pound Lane Ditch, which is partly open and partly culverted. In addition a number of small unnamed surface waterbodies are located in the northern area of the Site and also surrounding the Site, including the North Benfleet Brook which extends through Wick Country Park to the north of the Site.

3.7.3 The online Flood Map for Planning[25] indicates that part of the north east of the Site is classified as Flood Zones 2 and 3 (see Figure 3 in Appendix 1). Flood Zone 2 indicates that the land has between a 1% and 0.1% chance of flooding from rivers or between a 0.5% and 0.1% chance of flooding from the sea. Flood Zone 3 means that the land has a high probability of flooding, with a 1% or more chance of flooding from rivers or a 0.5% more chance of flooding from the sea.

3.7.4 As areas of the Site are in Flood Zones 2 and 3, a site-specific Flood Risk Assessment (FRA) is required for the Mini Masterplans in line with the requirements of the National Planning Policy Framework (NPPF)[26]. The FRA should demonstrate how flood risk will be managed now and over the development's lifetime, taking climate change into account, and with regard to the vulnerability of its users. This will involve contacting the Environment Agency and requesting the most up to date flood risk information for the site. The Sequential Test, and where necessary the Exception Test, should be applied to locate development in areas at the lowest risk of flooding. A surface water drainage strategy will also be required to demonstrate how surface water will be managed without increasing risk to third party land.

3.7.5 The Environment Agency online Flood Map for Surface Water[27] indicates that a considerable proportion of the Site is located within a high risk area, as shown in Plate 3-3.

[25] https://flood-map-for-planning.service.gov.uk/
[26] Ministry of Housing, Communities and Local Government, 2021, The National Planning Policy Framework. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf
[27] Environment Agency Flood Map for Surface Water. Online. Available at: https://check-long-term-flood-risk.service.gov.uk/map?easting=575909&northing=190572&map=SurfaceWater

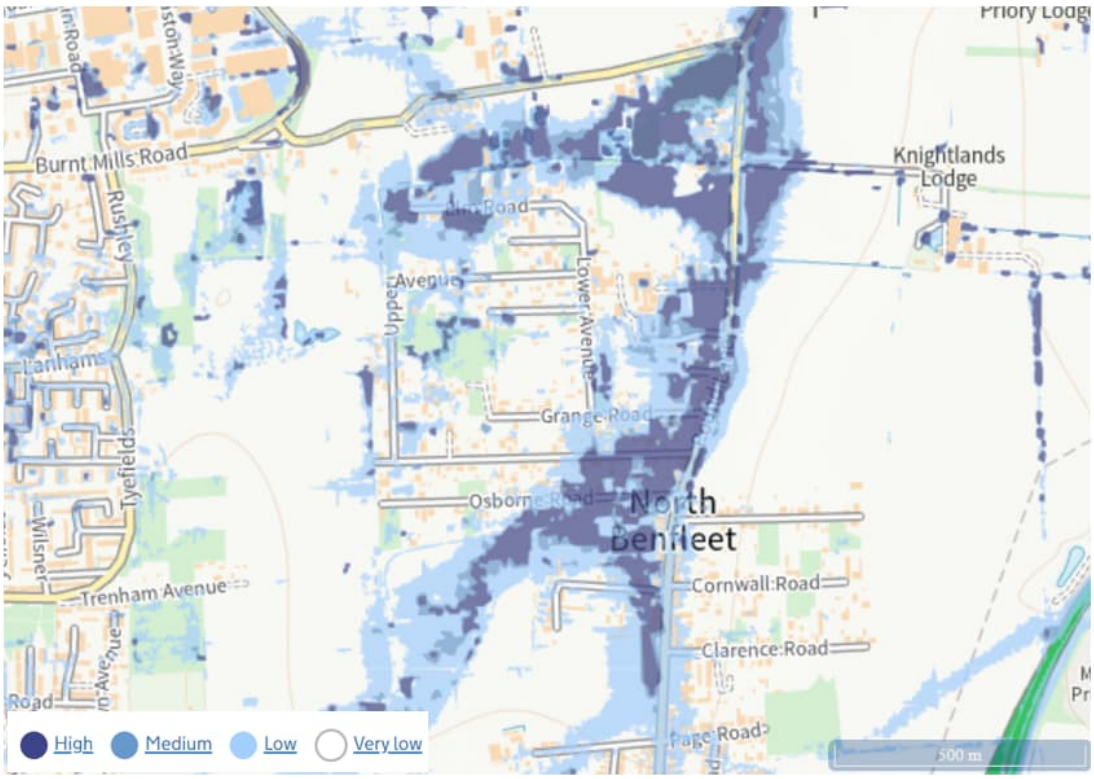



**Plate 3-3: Environment Agency Flood Map for Surface Water**

3.7.6 The Site is located within the BAS 16 Bowers Gifford Critical Drainage Area (CDA), where multiple or interlinked sources of flood risk may cause flooding during a severe rainfall event[28]. Surface water flows from the south-west to the north of the CDA, towards North Benfleet Brook (which runs adjacent to Pound Lane). A potential surface water flooding hotspot has been identified in the CDA. A significant amount of surface water ponding occurs to the west of Pound Lane, as a result of the local topography. Part of the north of the CDA is within Flood Zone 2 and 3 of the North Benfleet Brook.

3.7.7 Details of the flood risk in Basildon Borough and existing flood defences are set out in the South Essex Level 1 Strategic Flood Risk Assessment (SFRA)[29]. Sources of flooding in Basildon Borough which are relevant to the Site include fluvial flood risk from the River Crouch and its tributaries and surface water flooding, which can be attributed to topographic depressions and obstructions to surface water flow. The SFRA reports a flood event in September 1968 from the North Benfleet Brook which affected 54 properties in Bowers Gifford and the surrounding area and localised flooding to properties on Pound Lane has occurred in recent years, including in 2001.

### Construction

3.7.8 There would be no works directly to the Main River that runs parallel to the eastern boundary of the Site, nor would the Proposed Development require crossing of this watercourse.

3.7.9 During construction, there remains the potential for indirect adverse effects to surface water receptors from construction site runoff and spillages via surface water drainage. Control measures would be implemented to reduce the risks associated

[28] URS Scott Wilson, 2012, South Essex Surface Water Management Plan, Phases II, III and IV. Final April 2012. https://www.basildon.gov.uk/media/5316/South-Essex-Surface-Water-Management-Plan-April-2012/pdf/URS_Scott_Wilson_-_South_Essex_Surface_Water_Management_Plan_-_April_2012.pdf?m=635255559414000000

[29] AECOM, 2018, South Essex Level 1 Strategic Flood Risk Assessment. Final Report April 2018. https://www.basildon.gov.uk/media/8955/South-Essex-Level-1-SFRA-April-2018-Excluding-Appendices/pdf/South_Essex_Level_1_SFRA_-_April_2018_-_Excluding_Appendices.pdf?m=636858327891200000

with these impacts, for example by use of a buffer zone between the works and existing waterbodies, whereby only limited works would be permitted in the vicinity of the waterbodies. In addition, measures to control the storage, handling and disposal of fuel, solvents and other substances will need to be in place prior to and during construction to reduce the risk of pollution. These measures will be described in a CEMP to be prepared and agreed with BBC prior to commencement of construction.

3.7.10 There is the potential for the works to impact groundwater present in the underlying superficial deposits; however the residential development will generally comprise individual dwellings of the chalet bungalow type, in keeping with existing character of the plotlands, and would not include basements. Control measures to be implemented through a CEMP would reduce potential impacts on groundwater.

3.7.11 Overall it is considered that with standard control measures in place and appropriate design, any effects on the water environment and flood risk arising from construction would not be significant.

### Operation

3.7.12 During operation, the Proposed Development is anticipated to connect to existing foul drainage network. In accordance with policy requirements, surface water runoff from the Proposed Development would be managed through sustainable drainage systems (SuDS) incorporated into the design, where reasonably practicable, the details of which will be confirmed by the Developer.

3.7.13 As part of the Site is within Flood Zones 2 and 3 and a considerable proportion of the Site is located within a high risk area in relation to surface water flooding there is the potential for flooding to occur. To reduce these effects, all residential development will be in Flood Risk Zone 1 areas, the local centre, if in a Flood Zone 2 area, will be subject to an FRA to ensure that correct measures are set out to reduce the risk of flooding. Construction laydown areas and welfare units will be located outside of the flood risk areas. Any development which is constructed in Flood Zone 2 will be two storeys in height with non-residential uses situated on the ground floor. Flood risk management plans will be prepared prior to the commencement of occupation. Development in areas at a high risk of surface water flooding will also be avoided where possible, and a drainage strategy will be produced to manage and mitigate any potential risks from surface water flooding.

## 3.8 Built Heritage and Archaeology

### Baseline

3.8.1 A review of the Defra MAGIC website[30] was undertaken to identify heritage assets within the Site and its surroundings, as well as heritage records within the Site. There are no World Heritage Sites, Registered Parks and Gardens, Historic Battlefields, Historic Wreck Sites or Conservation Areas within the Site. There are no Scheduled Monuments within 1 km of the Site, the nearest being 3.3km to the west – ‘Moated site and fishponds at Botelers’.

3.8.2 Listed buildings within the Site and within a 1 km radius of the Site are outlined below and shown on Figure 3 in Appendix 1:

- Tiffayne’s Farmhouse – Grade II – in the north-east corner of the Site;
- Cottage at Junction with Burnt Mill Road – Grade II – adjacent to the Site;
- Bradfield’s Farmhouse – Grade II – adjacent to the Site;
- Horseshoe cottage – Grade II – 250 m to the north-east of the Site;
- Church of All Saints – Grade II* - 380 m to the east of the Site;
- Saddlers’ Hall Farmhouse – Grade II – 600 m to the south-east of the Site; and

[30] https://magic.defra.gov.uk/

- Great Chalvedon Hall – Grade II – 760 m to the west of the Site.

### Construction

3.8.3 The Site currently comprises low density, rural housing on former agricultural land.

3.8.4 There is the potential for unknown buried assets to be present within the Site, therefore, an archaeological desk-based assessment (DBA) will be provided as part of the NDO, including a review of historic information and an appraisal of the archaeological potential of the Site. The conclusions of the archaeological DBA will identify the need or otherwise for further archaeological studies. If necessary, a field evaluation may need to be undertaken prior to the commencement of construction works, which could be secured through an appropriately worded planning condition.

3.8.5 If unexpected remains are discovered during construction, works should cease and advice from an archaeological specialist should be sought before continuing with the works. This requirement should be detailed in a CEMP, which is to be prepared and implemented by the Contractor(s). With these control measures in place, impacts on buried assets would be unlikely to be significant.

3.8.6 There are a number of built heritage assets in the area, including within the Site. Whilst the Tiffayne's Farmhouse (Grade II) is within the Site boundary, it is located in the north-east area of the Site and there would be no direct works to this asset as part of the Proposed Development. The Contractor(s) would be required to ensure that protective control measures are in place (managed through a CEMP) to ensure there are no direct impacts on this Grade II listed building. The Design Code will provide restrictions relating to layout, scale, massing and materials of new dwellings in the form of a Code for Mini Masterplans with parameters for the plot ratio, separation and overlooking, open space provision, curtilage and parking. A Code for Plot Infill will also be included in the Design Code which will set out parameters for building lines, building footprints and setback distances. This will ensure the Proposed Development is in keeping with the existing area and to reduce impacts on the setting of the nearby Listed Buildings.

### Operation

3.8.7 Whilst designated and non-designated heritage assets will continue to be afforded protection under the provisions of the NPPF, it is recognised that the Proposed Development has the potential to negatively affect historic character and detract from historic settlement qualities, being susceptible to insensitive design and layout in new development. A Heritage Statement will be prepared to accompany the NDO which will demonstrate how the design of the Proposed Development will minimise impacts on heritage assets, such as through careful layout of the development and using materials in keeping with the existing area. Visual intrusion affecting the setting of nearby listed buildings is unlikely due to the low level (up to two storeys) and low density of the Proposed Development.

3.8.8 There is the potential for operation of the Proposed Development to enhance designated and non-designated heritage assets within the wider area and/or their settings. This may include public realm and access improvements, or opportunities to better reveal the significance of an asset.

## 3.9 Landscape and Visual Impact

3.9.1 In considering the potential landscape and visual impacts arising from the Proposed Development a clear distinction has been drawn between landscape resources and visual receptors, and these are defined as follows:

- Landscape resources relate to the physical characteristics or components of the environment, which together form the character of the landscape, including buildings, roads, paths, vegetation and water areas; and

- Visual receptors are individuals whose views of that landscape may change as a result of the Proposed Development, e.g. residents, visitors to the area or transport users passing through the area.

### Baseline

3.9.2 The Site is located within the North Benfleet and Nevendon Settled Claylands Landscape Character Area and the Site belongs to the National Character Area (NCA) Profile 111: Northern Thames Basin[31], which has experienced increased pressure relating to the construction of housing developments, schools and other amenities to meet the demands of the expanding population.

3.9.3 The majority of the Site is located within the London Area Green Belt, which aims to retain areas of largely undeveloped, wild, or agricultural land, however, the Site is already a developed area and the Proposed Development seeks to make efficient use of brownfield land to meet local housing needs.

### Construction

3.9.4 Construction activity and views of construction works have the potential to impact the landscape character and visual amenity of nearby receptors. Construction activity and plant may be visible to existing residents within the Site, however, the overall height of the Proposed Development would be relatively low (up to two storeys above ground level). Any effects during construction would be temporary and the retention of vegetation where possible would help to screen views of construction from within and outside of the Site.

3.9.5 As summarised above, the Site comprises an area which is already developed, with the Proposed Development comprising individual plot infill/redevelopment subject to a Design Code. The Proposed Development would therefore not result in the loss of Green Belt.

3.9.6 Overall it is considered that with standard control measures in place and appropriate design, any effects on the landscape and visual amenity arising from construction would not be significant.

### Operation

3.9.7 The overall scale and appearance of the Proposed Development will aim to integrate with the North Benfleet context, helping to minimise the impacts on the landscape character. Although there is the possibility for the landscape and visual amenity to change for the current residents of the Site, dwellings within the Proposed Development will be kept to two storeys in height with the majority of new dwellings being single storey bungalows or 1.5 storey chalet bungalows and therefore will have minimal impact to the landscape. The Design Code will provide restrictions on layout, scale massing and materials of new dwellings, serving as a with parameters for separation and overlooking, open space provision, curtilage and parking.

3.9.8 There is a potential for the overall landscape of the Site to change with the introduction of new dwellings, however, the area is already developed and new dwellings will be kept to a maximum height of two storeys, therefore there will be no increase in the overall height of buildings on the Site. The NDO intends to provide for up to 300 dwellings, which will increase the current density of around 3.1 dwellings per ha to around 7.8 dwellings per ha, which remains low density.

3.9.9 Overall, no significant effects on landscape and visual amenity are considered likely.

[31] Natural England, National Character Area 111 Northern Thames Basin. Available at: https://nationalcharacterareas.co.uk/northern-thames-basin/#:~:text=The%20Northern%20Thames%20Basin%20National,Greater%20Thames%20Estuary%20(NCA81)

## 3.10 Waste and Resources

### Baseline

3.10.1 The Proposed Development would generate waste during construction and operation and would require resource use for construction materials. The Essex Waste Local Plan[32] does not identify any safeguarded mineral or waste sites in proximity to the Site.

### Construction

3.10.2 During construction, the Contractor(s) would be required to minimise construction waste in line with the Waste Hierarchy[33] and to maximise the use of site-won, locally sourced and low carbon materials, where possible. Due to the scale of the Proposed Development, the required materials for construction are unlikely to have significant effects on resource demand in the county. Similarly, construction is unlikely to result in quantities of waste that would have significant effects on existing waste infrastructure within the county.

### Operation

3.10.3 Arrangements for the management of waste generated by the complete and operational Proposed Development would be incorporated within the final design, in accordance with BBC requirements.

3.10.4 Whilst waste will be generated during operation of the Proposed Development, the scale of the proposed works will not result in significant effects on existing waste management infrastructure within the county and operational waste will be managed in accordance with BBC requirements. Overall, no likely significant adverse effects with regards to waste and resource use have been identified.

## 3.11 Greenhouse Gases and Climate Change

### Baseline

3.11.1 The Government has announced a target of net zero carbon emissions by 2050, which was legally adopted in June 2019. The climate projections for the UK (according to the UKCP18[34]) predict that summers will become hotter and drier; winters will become milder and wetter; soils will become drier on average; snowfall and the number of very cold days will decrease; and storms, heavy and extreme rainfall, and extreme winds will become more frequent. Therefore, the greenhouse gas (GHG) emissions, climate resilience and in-combination climate impacts of the Proposed Development have been considered.

3.11.2 The Defra MAGIC database[35] shows that the Site is within a Low Climate Change Vulnerability Buffer Zone and within 1 km of a Medium Climate Change Vulnerability Buffer Zone.

### Construction

3.11.3 Construction of the Proposed Development would inevitably result in GHG emissions. Primary emission sources over the life cycle of the Proposed Development include embodied carbon within building materials, energy consumption of plant and vehicles, fuel consumption for the transport of materials and site users or workers, and the disposal of waste.

[32] Essex County Council 2017 *Essex and Southend-on-Sea Waste Local Plan Adopted July 2017* Available from: https://assets.ctfassets.net/knkzaf64jx5x/5MMZ5nNFmOClpF56igb0Jc/e6f7ab4cba4ed1198c67b87be7b375e7/waste-local-plan-2017-compressed.pdf

[33] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69403/pb13530-waste-hierarchy-guidance.pdf

[34] Met Office, 2019. UK Climate Projections (UKCP). Accessed at: https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/index

[35] Defra. 2023. *MagicMap.* Available from: https://magic.defra.gov.uk/MagicMap.aspx

3.11.4 GHG emissions would be reduced during construction as far as practicable, through measures such as carefully timed deliveries, management of construction waste, and reusing fill material, where suitable.

### Operation

3.11.5 Once the Proposed Development is operational, GHG emissions would be reduced through the enhancement of pedestrian and cycling facilities through the Site, connecting to the wider network to help promote sustainable transport. Measures to minimise energy consumption, such as energy efficient fittings, will be implemented where practicable.

3.11.6 Whilst the Proposed Development would inevitably result in some GHG emissions, due to the overall scale of the Proposed Development GHG emissions will be minimal and are likely to contribute considerably less than 1% of the UK's carbon budget[36]. Therefore, GHG emissions from the Proposed Development are not likely to be so significant as to prevent the UK from meeting its current carbon budgets.

3.11.7 The Proposed Development will consider the impacts of climate change and seek to reduce any potential in-combination climate impacts. This could include the incorporation of SuDS for surface water drainage, where practicable. Landscaping would also be designed to improve the climate resilience of the Proposed Development. These measures will be identified in the Design Code to be produced in conjunction with BBC.

3.11.8 As a result, no likely significant adverse effects due to climate resilience and in-combination climate impacts have been identified.

## 3.12 Socio-economics

### Baseline

3.12.1 Existing community facilities within walking distance of the Site include a church and public houses. In addition, the nearby towns of Basildon and South Benfleet have a wide range of amenities such as shops and banks, including Eversley Primary School and Rectory Road Post Office, around 1.2 km to the south-west in Basildon. For secondary and further education, the nearest establishment is located 2.2 km to the south-west of the Site also in Basildon.

### Construction

3.12.2 There would be no demolition of residential properties required within the Site. It is anticipated that there would be some demolition of the industrial sheds within the Phase 1 area which includes a number of single storey shed structures totalling around 5,800m$^2$ of floorspace, and areas of hardstanding and shipping containers which are currently used as car breakers yards, car parts sales and boarding kennels. This could result in the loss of some local jobs. Employment opportunities will be provided through the development of the new local centre.

3.12.3 The construction of the Proposed Development would result in some temporary local employment opportunities. However, the anticipated number of temporary jobs created would not generate a significant effect on the local economy.

### Operation

3.12.4 The provision of housing as a result of the Proposed Development would create additional demand for community infrastructure, including primary healthcare, primary and secondary school places and open space. The increased demand for community infrastructure would be offset through the provision of community

[36] Department for Business, Energy and Industrial Strategy (DBEIS) and the Carbon Trust allow emissions sources of less than 1% contribution to be excluded from emission inventories on the basis that an emissions source contribution of less than 1% would not be material to the overall impact. Inventories applying these cut off rules are still considered complete for verification purposes. It is suggested that a development with emissions of less than 1% of the UK inventory and relevant carbon budget would therefore be minimal in its contribution to national GHG emissions.

facilities and open space within the Site, and due to the limited number of new houses proposed (up to 300 dwellings), the demand for school places and healthcare is unlikely to result in a significant effect.

3.12.5 The NDO intends to provide for up to 300 dwellings, which will increase the current density of around 3.1 dwellings per ha to around 7.8 dwellings per ha. An increase of this scale is not expected to result in significant adverse socio-economic effects.

3.12.6 The local centre to be provided in the Proposed Development would result in some local employment opportunities. However, the anticipated number of jobs created would not generate a significant effect on the local economy.

## 3.13 Major Accidents and Disasters

3.13.1 Major Accidents and (natural) Disasters (MA&D) considers the effects arising from the 'vulnerability' of the Proposed Development to MA&D, and the potential of the Proposed Development to result in new sources of major accidents.

### Baseline

3.13.2 A MA&D has the potential to affect both the human and natural environments. Sensitive environmental receptors, including human population and designated ecological sites, in proximity to the Site are summarised within Section 2 of this report.

3.13.3 The UK National Risk Register[37] provides the basis for identifying existing hazards and threats (natural disaster hazards, existing major accident hazard sources and other hazards and threats) relevant to the Site and the Proposed Development.

### Natural Disaster Hazards

3.13.4 Natural disaster hazards can take the form of meteorological hazards (such as extreme weather events), geological hazards (such as seismic activity) and other natural events (such as wildfires and floods). It is considered that natural disaster hazards of relevance to the Proposed Development will be taken into account within the future planning application documents for each development site as relevant, namely a FRA and Drainage Strategy and the Design Code, and therefore do not need to be considered separately within a dedicated MA&D assessment.

### Major Accidents

3.13.5 Hazards of relevance to the Proposed Development include major fire, aviation crash, local accident on motorways and major trunk roads, building collapse and hostile threats.

3.13.6 There are no airports in proximity to the Site and the proposed buildings would be low level, and therefore at low risk of building collapse. The proposed buildings would be designed and constructed in compliance with relevant regulations (e.g. Building Regulations 2010[38] and Regulatory Reform (Fire Safety) Order 2005 (FSO)[39]).

3.13.7 The new loop road and all accesses to the Site would be designed to meet current highway safety standards. The layout of residential properties would also be set back from the A127 and access roads, with intervening verges and trees, and existing properties, which would help minimise the risk of damage in the event of an accident on the strategic highway network.

[37] UK Cabinet Office, (2020). National Risk Register 2020. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/952959/6.6920_CO_CCS_s_National_Risk_Register_2020_11-1-21-FINAL.pdf
[38] HMSO. The Building Regulations 2010, Schedule 1, Part B
[39] HMSO. Regulatory Reform (Fire Safety) Order 2005 (FSO)

### Summary

3.13.8 It is, therefore, considered that the Proposed Development is not likely to result in significant effects associated with MA&D.

## 3.14 Health and Wellbeing

3.14.1 The NPPF requires consideration of health and wellbeing in a range of different ways, and development proposals should consider ways to promote healthy communities, facilitate social interaction and create healthy, inclusive communities.

3.14.2 The impacts of development proposals on health can be measured through several health determinants[40] such as housing design and affordability; access to health and social care services and other infrastructure; access to open space and nature; air quality, noise and neighbourhood amenity; accessibility and active travel; crime reduction and community safety; access to healthy food; access to work and training; social cohesion and inclusive design; minimising the use of resources; and climate change.

### Baseline

3.14.3 The Index of Multiple Deprivation 2019 (IMD)[41] is an overall relative measure of deprivation constructed by combining seven domains of deprivation according to their respective weights. This includes but is not limited to:

- **Health Deprivation and Disability**: The risk of premature death and the impairment of quality of life through poor physical or mental health. Morbidity, disability and premature mortality are also considered, excluding the aspects of behaviour or environment that may be predictive of future health deprivation; and
- **Living Environment**: The quality of the local environment, with indicators falling categorised in two sub-domains.
  - ‘Indoors Living Environment’ measures the quality of housing.
  - ‘Outdoors Living Environment’ measures air quality and road traffic accidents.

3.14.4 These indices therefore help provide a baseline for health determinants of an area.

3.14.5 Lower Super Output Areas (LSOAs) are a geographic hierarchy designed to improve the reporting of small area statistics in England and Wales. They are standardised geographies designed to be as consistent in population as possible, with each LSOA containing approximately 1,000 to 1,500 people. In relation to the IMD 2019, LSOAs are ranked out of the 32,844 in England and Wales, with 1 being the most deprived. Ranks are normalised into deciles, with a value of 1 reflecting the top 10% most deprived LSOAs in England and Wales.

3.14.6 The Site is located within Basildon 011F LSOA within the Pitsea South East ward and Basildon local authority district. This LSOA was determined to be amongst the 20% most deprived neighbourhoods in the country in 2019[42]. In terms of the health deprivation and disability domain and living environment, Basildon 011F LSOA is amongst the 40% most deprived neighbourhoods in the country.

[40] NHS London Healthy Urban Development Unit, 2019. HUDU Planning for Health, Rapid Health Impact Assessment Tool. 4th Edition. Accessed at: https://www.healthyurbandevelopment.nhs.uk/wp-content/uploads/2019/10/HUDU-Rapid-HIA-Tool-October-2019.pdf
[41] Gov UK (2019): ‘Index of Multiple Deprivation (online viewer) accessible via: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019
[42] Department for Communities and Local Government (2019) Indices of Deprivation 2019 and 2015. Accessed at http://dclgapps.communities.gov.uk/imd/iod_index.html#

### Construction

3.14.7 The main health impacts during construction would arise from fugitive emissions of dust due to activities, such as demolition, earthworks and construction, and increases of $PM_{10}$ and $NO_2$ concentrations due to emissions from construction traffic. Although these pollutants are potentially harmful to humans, the impacts would be localised and temporary in nature, and the Contractor(s) would be required to implement best practice means through a CEMP to reduce the risk of dust impacts on nearby sensitive receptors.

### Operation

3.14.8 The layout of the Proposed Development will be designed to protect and promote the health and wellbeing of future residents. The Proposed Development will include community elements which would present opportunities to enhance social cohesion and accessibility through provision of open spaces and a local centre.

3.14.9 Furthermore, as set out in this document, the Proposed Development is not likely to result in significant effects relating to air quality, noise and vibration, ground contamination or visual amenity.

# 4. Cumulative Effects

4.1.1 Cumulative effects may occur when the environmental impacts and effects of a proposed development interact with effects associated with other planned developments to result in a greater or lesser effect on an environmental receptor, for example the cumulative effects of noise from several developments on the same noise sensitive receptor.

4.1.2 The consideration of cumulative effects does not include developments that are already constructed and complete as existing facilities are accounted for in the baseline conditions.

4.1.3 The EIA Regulations require that the potential for direct and indirect cumulative effects during construction and operation of a proposed development are considered. Best practice[43] dictates that cumulative assessments of this nature should have regard to those schemes which are reasonably foreseeable (i.e. usually those which under construction or have planning permission), with less consideration given to development proposals for which an EIA scoping report has been submitted or which are identified in the local development plans. Such a review can only be carried out based on publicly available information.

4.1.4 The common practice criteria for considering whether development schemes have the potential to result in cumulative effects are that they must:

- Be the subject of a submitted or consented planning application;
- Be located within an approximate 1km radius of the Site; AND
- Result in an increase of more than 10,000$m^2$ Gross External Area (GEA) in floor area or more than 150 residential units.

4.1.5 A search of planning applications for developments of a scale or nature that could result in a significant or combined effect together with the Proposed Development has been conducted (7th December 2023).

[43] PINS (August 2019) Cumulative Effects Assessment Advice Note https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-17/

4.1.6 The search identified the following:

- An outline planning application for development of a care home, assisted living and retirement bungalows (125 dwellings in total) on land east of Ilfracombe Avenue to the north of the A13, approximately 830m south-west of the Site – this application has been refused by BBC and an appeal is ongoing at this time;
- A pre-application presentation dated November 2023 regarding development of an employment park adjacent to the north of the Site, south of the A127 and east of the Burnt Mills Industrial Estate. The design for this scheme is under preparation, however the presentation includes several parameter plans and refers to a current masterplan based on 1.3 million square feet of employment floorspace, including warehousing, industrial space, research and development space, ancillary office floorspace and “grow-on units”, together with a new link road off Pound Lane.

4.1.7 No submitted planning applications for schemes within 1km radius of the Site that meet the above criteria were identified. The employment park proposals are not the subject of a live planning application and the timescale for submission of a planning application is not known at this time. In the event that a planning application is submitted for this scheme following submission of the NDO, the employment park proposals will need to take account of the Proposed Development and integrate mitigation measures into the employment park scheme design to avoid or minimise adverse environmental effects.

# 5. Comparison against criteria in Schedule 3 of the EIA Regulations

5.1.1 Schedule 3 of the EIA Regulations sets out the criteria to be considered during the EIA screening process to determine any potential significant environmental effects. A summary of the criteria listed under Schedule 3 and the findings associated with these criteria for the Proposed Development is presented in Table 5-1 below.

## Table 5-1: North Benfleet NDO Review of Schedule 3 Criteria

| SCHEDULE 3 SELECTION CRITERIA FOR SCREENING SCHEDULE 2 DEVELOPMENT | |
|---|---|
| **Criteria** | **Response** |
| **Characteristics of development** | |
| **1. The characteristics of development must be considered with particular regard to:** | |
| a.) The size and design of the whole development | The Proposed Development will encompass a total area of 79.8 Ha, including a maximum of 300 residential units and non-residential floorspace. |
| b.) Cumulation with other existing development and/or approved development | A search of planning applications for schemes of a scale or nature that would provide a significant or combined effect with the Proposed Development has been conducted and no such schemes were found. Therefore no significant cumulative effects are anticipated. |
| c.) The use of natural resources, in particular land, soil, water and biodiversity | The Proposed Development will make use of previously developed land. Priority habitats (woodlands, trees hedgerows and waterbodies) will be retained where possible. During construction, measures will be implemented to prevent indirect impacts to designated sites for nature conservation nearby. The Design Code for the development brought forward by the NDO will include biodiversity provisions in the Mini-Masterplans for each of the plots. New tree planting, native hedgerows, enhanced wildlife ponds, bat and bird boxes will all be used to deliver gains for biodiversity |
| d.) The production of waste | During construction, there is the potential for impacts on-site generated materials (e.g. soils) and waste arisings have on the existing capacity of landfill however this will not be significant: Construction waste arising from the Proposed Development will be managed in accordance with best practice guidance. As a result, no likely significant adverse effects with regards to waste and resource use have been identified. |
| e.) Pollution and nuisances | Noise and air emissions during construction will be temporary and managed by way of a Construction Environmental Management Plan (CEMP).Therefore, no residual effects are anticipated. |
| f.) The risk of major accidents and/or disasters relevant to the development concerned, including those caused by climate change, in accordance with scientific knowledge; | All residential development will be in Flood Risk Zone 1 areas, the local centre, if in a Flood Zone 2 area, will be subject to an FRA to ensure that correct measures are set out to reduce the risk of flooding. Any development which is constructed in Flood Zone 2 will be two storeys high with non-residential uses situated on the ground floor. Flood risk management plans will be prepared prior to the commencement of occupation. Development in areas at a high risk of surface water flooding will also be avoided where possible, and a drainage strategy will be produced to manage and mitigate any potential risks from surface water flooding. By adhering strictly to the FRA and implementation of an appropriate drainage strategy, it is anticipated that there will be no significant residual effects associated with the Proposed Development. |
| g.) The risks to human health (for example, due to water contamination or air pollution) | No significant residual effects from any emissions (during both construction and operation) are expected, therefore no long term risks to human health are anticipated. |
| **Location of development** | |
| **2. The environmental sensitivity of geographical areas likely to be affected by development must be considered, with particular regard, to:** | |
| a.) The existing and approved land use | Primarily residential use with some industrial units and warehouses. |

| | |
|---|---|
| b.) The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground | The Site comprises low density residential development with intervening vegetation comprising gardens, fields, hedges and trees, and scattered commercial premises in the north-east of the Site. There are also ponds located within the Site which are predominantly in the north-east of the Site. The land surrounding the settlement of North Benfleet is mainly in agricultural use while land to the south of Bowers Gifford and the A13 is predominantly marshland. The Site is not located in a NVZ or a groundwater source protection zone. The Site is underlain by London Clay with superficial head deposits of clay, silt, sand and gravel. The superficial deposits are classified as a secondary (undifferentiated) aquifer and the London Clay is classified as an unproductive Aquifer. The closest designated ecological site is Pitsea Marsh SSSI which is located approximately 2km south west of the Site.<br><br>The desk study concluded that the Site has value for biodiversity. The habitat on Site includes priority habitat – deciduous woodland, traditional orchards, hedgerows and open water (ponds and ditches). The Site has suitability for badger, bats, water vole, brown hare, harvest mouse, nesting birds, reptiles, great crested newt. An initial scoping survey or surveys are recommended to further investigate the likely presence of these species on the Site. Appropriate mitigation will be implemented. The development brought forward by the NDO will include mitigation measures and design principles to achieve gains for biodiversity by installing species-specific habitat features, appropriate native planting, management regimes that encourage biodiversity and establishing a dark corridor or low lighting scheme design. The net outcome would be a gain in biodiversity. |
| c.) the absorption capacity of the natural environment, paying particular attention to the following areas | |
| (i) wetlands, riparian areas, river mouths | Not Applicable |
| (ii) coastal zones and the marine environment | Not Applicable |
| (iii) mountain and forest areas | Not Applicable |
| (iv) nature reserves and parks | The nearest designated ecological site, Pitsea Marsh Site of Special Scientific Interest (SSSI), is located approximately 2 km south west of the Proposed Development boundary. There are no known receptor pathways between the Site and the SSSI.<br><br>No Local Nature Reserves or National Nature Reserves are located within 2 km of the Site. |
| (v) International sites and other areas classified or protected under national legislation | There are seven international statutory designated sites within 10km of the Site:<br><br>• Benfleet and Southend Marshes Ramsar and Special Protection Area (SPA) is located approximately 4km south east of the Site;<br>• Essex Estuaries Special Area of Conservation (SAC) is located approximately 5.4 km north east of the Site. The SAC is designated for its undeveloped, coastal plain estuarine system with associated open coast mudflats and sandbanks<br>• Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) Ramsar and SPA is located approximately 5.4 km north east of the Site;<br>• Thames Estuary and Marshes Ramsar and SPA is located approximately 9 km south west of the Site. |

| | |
|---|---|
| | There are no known receptor pathways between the Site and the above designated sites. With appropriate control measures in place, the effects of the Proposed Development on international or national sites designated for their conservation value are not likely to be significant.<br><br>The Site falls within the zone of influence of the Benfleet and Southend Marshes SPA/Ramsar site and therefore has the potential to operate negatively in combination with other growth in Basildon. It is anticipated that a financial contribution towards implementing the RAMS is required to mitigate the adverse effects of the Proposed Development on nearby European sites. This is likely to take the form of a section 106 contribution. |
| (vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure | Not applicable. |
| (vii) densely populated areas | The Site is located within a low density rural area. |
| (viii) landscapes and sites of historical, cultural or archaeological significance | 1 Grade II listed building within the Site boundary<br>2 Grade II listed buildings within 500m of the Site boundary<br>1 Grade II* listed building within 500m of the Site boundary |
| **Types and characteristics of the potential impact** | |
| **3. The likely significant effects of the development on the environment must be considered in relation to criteria set out in paragraphs 1 and 2 above, with regard to the impact of the development on the factors specified in regulation 4(2), taking into account** | |
| a.) The magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected) | There will be no significant residual environmental effects and any short-term impacts during construction will be localised and limited to the immediate area of the Proposed Development. |
| b.) The nature of the impact | The nature of the impacts has been considered in relation to each of the criteria set out in sections 1 and 2 above. It is not expected the Proposed Development will result in any effects of a nature requiring EIA. |
| c.) The transboundary nature of the impact | All impacts identified apply only to the identified area and does not impact outside of this area (Basildon/North Benfleet) and therefore have no transboundary impacts with other European Economic Area Member States ('EEA States'). |
| d.) The intensity and complexity of the impact | It is not anticipated that the Proposed Development will result in any effects with an intensity or complexity that will require EIA. |
| e.) The probability of the impact; | No significant residual effects are anticipated, and it is not expected that any potential impacts are likely to require EIA. |
| f.) The expected onset, duration, frequency and reversibility of the impact | There will be no significant residual environmental effects associated with the Proposed Development but any adverse impacts during construction such as air and noise emissions will be short-term, localised and reversible. |
| g.) The cumulation of the impact with the impact of other existing and/or approved development | At the time of preparing this report there are no committed developments in the vicinity of the Site that could lead to a cumulative or combined impact together with the Proposed Development. However it is noted that recent pre-application discussions with BBC were held (November 2023) regarding an employment park adjacent to the north of the Site. The design of this scheme is being worked up and no planning application has been submitted to date. In the event that a planning application is submitted for this scheme |

| | |
|---|---|
| | following submission of the NDO, the employment park proposals will need to take account of the Proposed Development and integrate mitigation measures into the employment park scheme design to avoid or minimise adverse environmental effects. |
| h.) The possibility of effectively reducing the impact | Mitigation measures will be implemented to avoid and reduce potential effects as far as possible Therefore no significant residual environmental effects are expected as a result of the Proposed Development. |

# 6. Conclusions

6.1.1 This report provides a description of the Proposed Development to be included within the NDO and a summary of the likely effects on the environment in line with the requirements of Regulation 6(2) and Schedule 3 of the EIA Regulations. The Proposed Development is not located within, partly within or immediately adjacent to a sensitive area as defined by the EIA Regulations, however by virtue of its scale and the size of the Site it meets the criteria for a Schedule 2 development in the EIA Regulations.

6.1.2 A review of the potential effects of the Proposed Development concludes that the Proposed Development is not likely to result in significant adverse effects on the environment by virtue of factors such as its nature, size or location, with appropriate mitigation in place. As such, it is considered that the Proposed Development does not constitute EIA development.

6.1.3 The following technical reports will be submitted with the NDO, which will confirm the measures to be embedded within the design of the Proposed Development to avoid significant environmental effects on existing receptors surrounding the Site, and future receptors on the Site:

- Green Belt Study;
- Transport Technical Note;
- Ecology Technical Note; and
- Heritage and Archaeology Assessment as part of the NDO.

6.1.4 We trust that this request includes all necessary information, and we would be grateful to receive your EIA Screening Opinion in line with Regulation 6 of the EIA Regulations within the requisite three-week timescale.

# Appendix 1 Figures

Revision: 0 Drawn: NK Checked: VC Approved: NG Date: 2023-04-12

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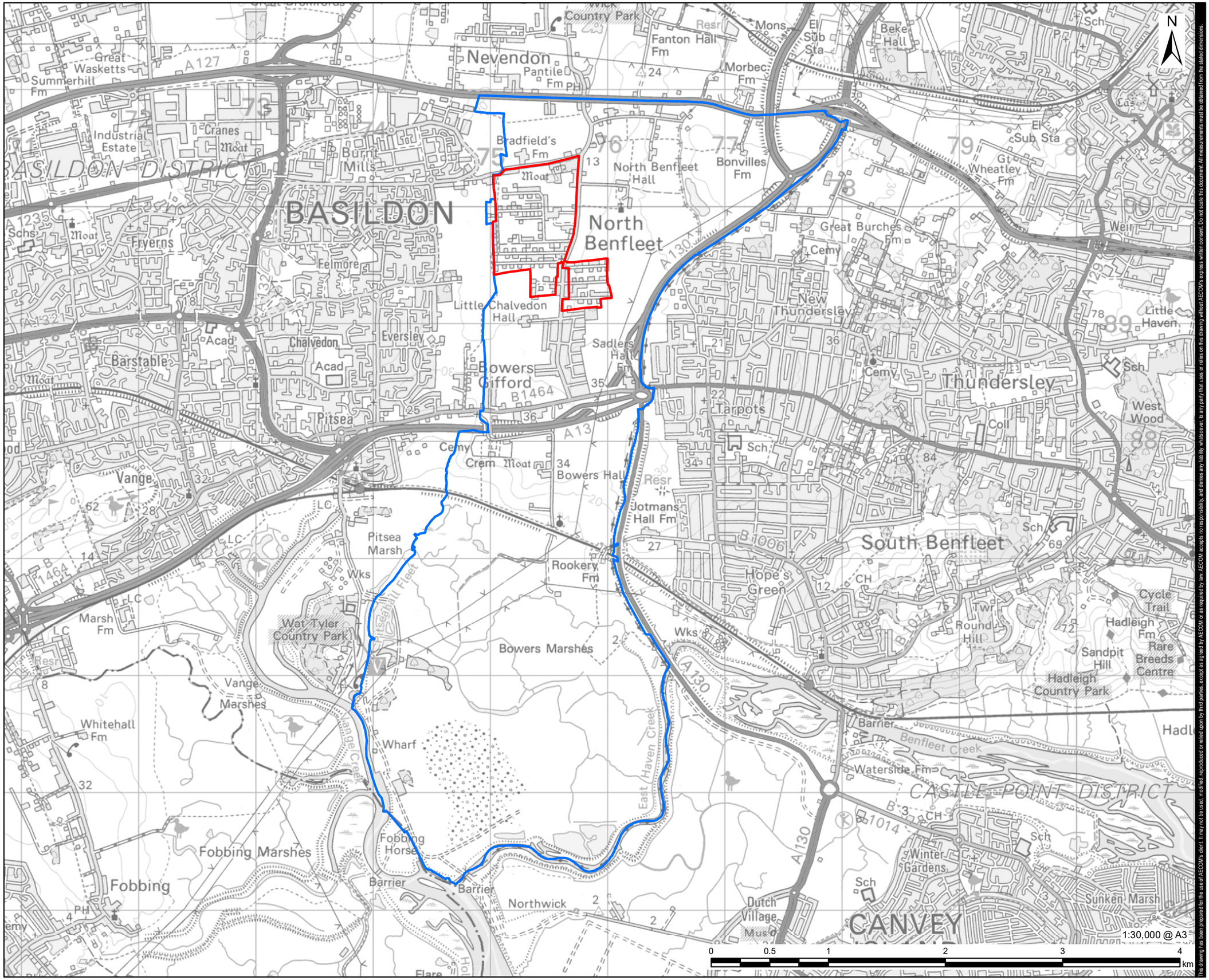


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**LEGEND**

- NDO Site Boundary
- Neighbourhood Area

**NOTES**


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**PROJECT NUMBER**

60571087

**FIGURE TITLE**

Site Location

**FIGURE NUMBER**

Figure 1


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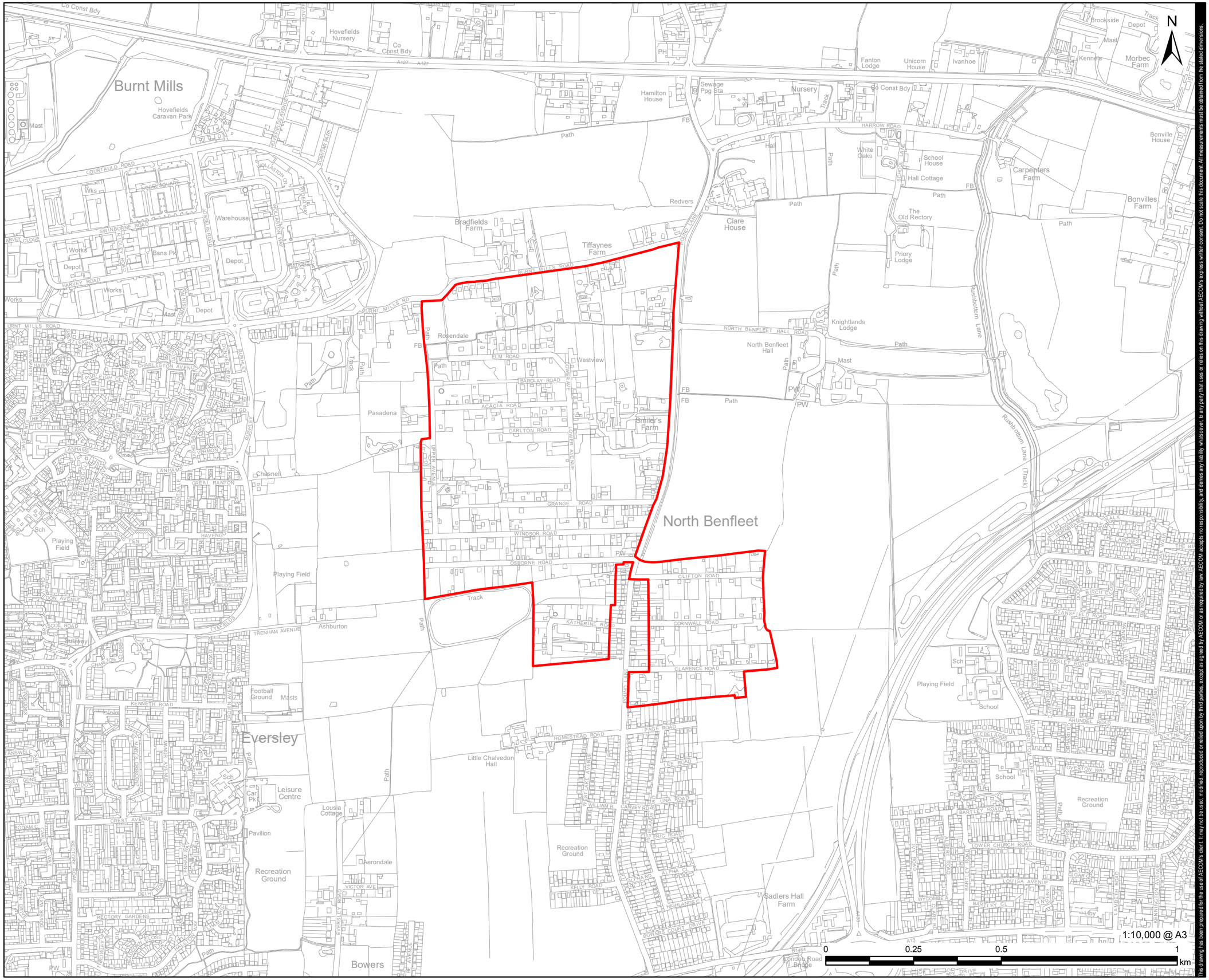


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**LEGEND**

NDO Site Boundary

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**PROJECT NUMBER**

60571087

**FIGURE TITLE**

NDO Site Boundary

**FIGURE NUMBER**

Figure 2

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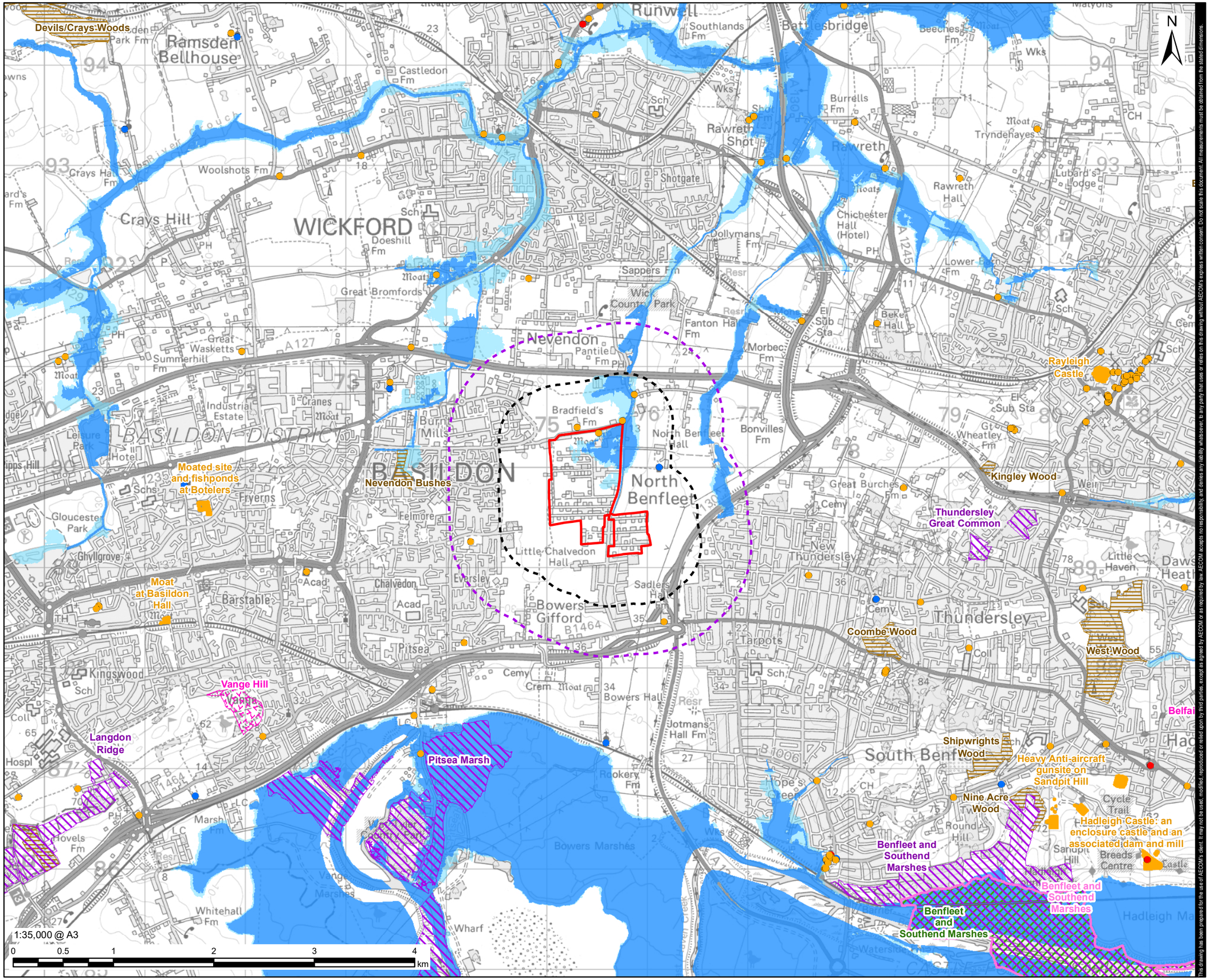


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**LEGEND**

- NDO Site Boundary
- 500m Buffer from NDO Site Boundary
- 1000m Buffer from NDO Site Boundary
- Ancient Woodland
- Scheduled Monument
- Local Nature Reserve (LNR)
- Ramsar
- Site of Special Scientific Interest (SSSI)
- Special Protection Area
- Flood Zone 3
- Flood Zone 2

**Listed Buildings**

- Grade I
- Grade II*
- Grade II

**NOTES**


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**ISSUE PURPOSE**

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**PROJECT NUMBER**

60571087

**FIGURE TITLE**

Environmental Constraints

**FIGURE NUMBER**

Figure 3


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Figure 4: Demolition Plan

# North Benfleet NDO EIA Screening: Demolition Plan

## December 2023

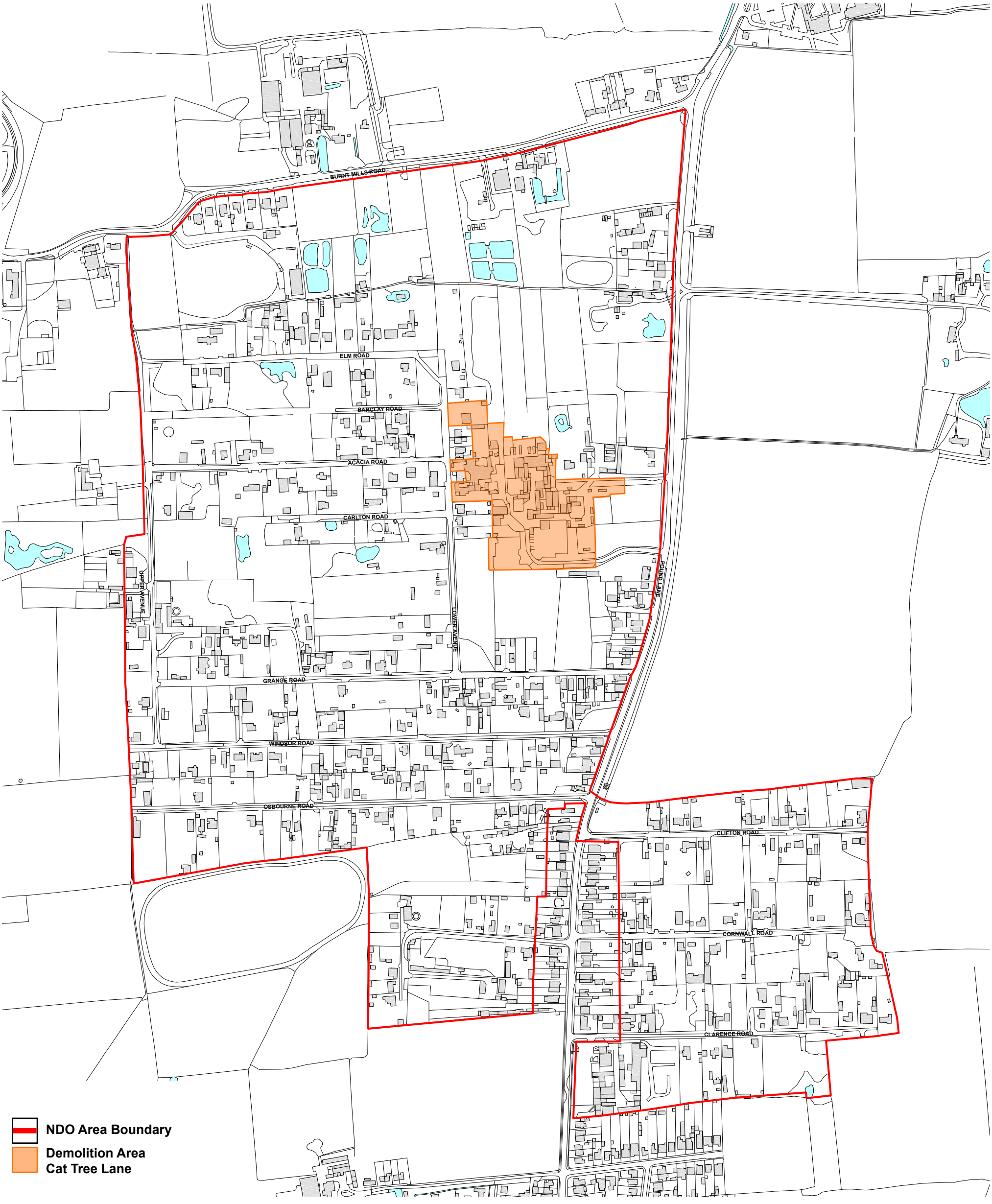

Figure 5: Development Parameters

# North Benfleet NDO EIA Screening: Development Parameters

## December 2023

