



Consolidated Non-Technical Summary for  
AC Goatham & Sons

# CONSOLIDATED ENVIRONMENTAL STATEMENT NON-TECHNICAL SUMMARY LAND AT PUMP LANE LOWER RAINHAM

September 2020

Our Ref: SRS/18/01307

---

## CONTENTS

INFORMATIVE.....	2
1 INTRODUCTION .....	4
2 THE EIA PROCESS.....	6
3 BACKGROUND TO DEVELOPMENT.....	7
4 DEVELOPMENT DESCRIPTION.....	9
5 ALTERNATIVES .....	10
6 POLICIES AND CONTEXT .....	11
7 ENVIRONMENTAL EFFECTS .....	12
8 CONCLUSIONS.....	19

## FIGURE

NTS1 - Site Location Plan

This report has been prepared within the quality system operated at Rapleys LLP according to British Standard ISO 9001:2008.

Created by:	Sarah R smith BA (Hons) MRTPI Planning Partner
Signature:	 <small>SarahRSmith (Sep 22, 2020 13:13 GMT+1)</small>
Checked by:	Duncan Parr BA DUPI Dip TP FRGS MRTPI Cgeog MEWI Planning Partner
Signature:	 <small>Duncan Parr (Sep 22, 2020 13:21 GMT+1)</small>

---

## INFORMATIVE

1. In May 2019, an outline planning application for the development of land at Pump and Bloor Farms, Lower Rainham was submitted to Medway Council (MC) accompanied, amongst other documents, by an Environmental Statement (ES), prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ('The Regulations').
2. In March 2020, following extensive consultation with both statutory bodies and the Council, further technical environmental information on a number of topics was formally submitted in accordance with Regulation 25 of the aforementioned Regulations. This 'further information' was submitted by Rapleys LLP as a Supplementary Environmental Statement (SES) which incorporated Supplementary Technical Appendices covering drainage, transport, agricultural land and air quality matters. A Supplementary Non-Technical Summary (SNTS) was also submitted.
3. This 'further information' comprised a number of short responses to questions raised on a number of topics and where this related directly to the information contained within the May 2019 ES submission, it was reported within the March 2020 SES. In addition, some further investigative/survey work was undertaken, also included within that SES. This 'further information' did not result in any changes to the illustrative masterplan or the proposed development itself. The 'further information' was summarised as follows -
  - (i) Borehole and infiltration testing resulting in revisions and clarifications to drainage/flooding matters;
  - (ii) Review of MC strategic highway modelling resulting in clarifications to highway/transportation matters;
  - (iii) Clarifications in respect of air quality matters;
  - (iv) Clarifications in respect of agricultural matters.
4. In September 2020, to accompany a S78 appeal following the refusal of the outline planning application in April 2020, a further SES (dated September 2020) was prepared and submitted to the Secretary of State. That SES focussed on refinements to the impacts of the development on heritage assets and the landscape & visual assets on, and within the vicinity of, the Site - these matters were the subject of two of the reasons for refusal of the application. It also noted any changes in policy where appropriate, noted some further work in relation to transport and made some revisions relative to cumulative impact assessment.
5. Minor amendments to the illustrative masterplan and the parameter plans reflect the heritage and landscape buffer planting refinements in the north of the Site west of Pump Lane and in the south-western corner of the Site north of the railway. There was no change to the actual development description itself.
6. The Supplementary Technical Appendices relative to these topics and a SNTS were also submitted.
7. All of the supplementary documents are to be read alongside the May 2019 ES documents.
8. This document, the Consolidated Environmental Statement Non-Technical Summary (CENTS), represents the combining of both the Non-Technical Summary of May 2019, the SNTS of March 2020 and the SNTS of September 2020 (subject to the amendments and deletions as referenced in the two SNTS documents). It is a composite document put together for ease of reading and reference only.

---

9. The basic structure and format of this document (CENTS) remains unaltered from the ES/NTS May 2019, but where changes have been made and incorporated from the text of the two SNTSs they are shown in blue (SNTS March 2020) and purple (SNTS September 2020), the unaltered text remaining printed in grey with titling in green and blue. Where Figures were updated or modified from the NTS May 2019 the titles are in blue or purple and carry a suffix 'a'; those Figures new to the NTS are also titled in blue or purple.

10. The following examples indicate this:

**SNTS March 2020**

- Proposed Pump Lane Bridge Improvements (Plan ref. 20230-05-A) - which is revised to 20230-05-d.

**SNTS September 2020**

- Cumulative effects result from the combined impacts of multiple developments as well as multiple in-scheme impacts, for example, combined landscape and ecology impacts on the same sensitive receptor. The impacts from a single development or a single environmental impact may not be significant on their own but when combined with other developments or impacts these effects could become significant.

---

## 1 INTRODUCTION

- 1.1 This Non-Technical Summary ('NTS') of the Environmental Statement ('ES') has been prepared by Rapleys LLP in conjunction with the EIA Team and forms part of an outline planning application for residential development on Land at Pump Lane, Lower Rainham (the 'Site') submitted by AC Goatham and Son (the Applicant) to Medway District Council ('the Council').
- 1.2 Rapleys has been instructed by the Applicant to coordinate an Environmental Impact Assessment (EIA) for the Proposed Development. An ES, which sets out in detail the findings of the EIA, has been prepared to accompany the planning application. It provides the Council with detailed information on the potential significant environmental effects of the Proposed Development.
- 1.3 The ES consists of the following separately bound volumes:
- Volume 1: Main Text
  - Volume 2: Appendices
- 1.4 The purpose of this NTS is to summarise the main points of the ES, in particular the predicted effects of the Proposed Development on the local environment during construction and once the scheme is built and occupied, including cumulative effects. Those with particular technical interest should refer to Volumes 1 and 2 of the ES for more detailed information.
- 1.5 The ES has been prepared in accordance with the requirements of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ('the Regulations').
- 1.6 The application and associated documents, including the ES, NTS and associated SNTS's, are available (via a sharefile link or on a cd) from the following address:
- AC Goatham and Sons, c/o Rapleys LLP, 33 Jermyn Street, London, SW1Y 6DN  
Email: [info@rapleys.co.uk](mailto:info@rapleys.co.uk)
- 1.7 The ES and planning application documents are also available via the Council's website.
- 1.8 Comments on the planning application should be submitted to the Council's Development Management Department.
- Telephone: 01634 331700  
Email: [Planning.representations@medway.gov.uk](mailto:Planning.representations@medway.gov.uk)
- Medway District Council  
Gun Wharf,  
Dock Road,  
Chatham,  
Kent,  
ME4 4TR.
- 1.9 Comments on the ES/NTS and the appeal documentation should be submitted to the Secretary of State via the Planning Inspectorate, Temple Quay House, The Square, BRISTOL, BS1 6PN.

### WHAT IS ENVIRONMENTAL IMPACT ASSESSMENT?

- 1.10 An Environmental Impact Assessment (EIA) is needed for projects that are of a certain size or located in a sensitive area such that significant environmental effects may result. An Environmental Statement (ES) summarises the findings of the EIA and provides the local planning authority with detailed and objective information on the environmental effects of a proposed development.

---

## WHY DOES THE PROPOSED DEVELOPMENT REQUIRE EIA?

1.11 The Proposed Development falls within Schedule 2, Class 10 (b) “Urban development projects” of the Regulations because:

- The Proposed Development includes more than 1 hectare of urban development which is not dwellinghouse development;
- The proposed development includes more than 150 dwellings; and
- The overall area of the Proposed Development exceeds 5 hectares.

1.12 In accordance with EIA regulations a Scoping Opinion request which set out the Applicants opinion on 15 February 2018 and a Scoping Opinion request also on 15 February 2018 were sent to the Council. The Council’s Scoping Opinion was issued on 21 September 2018 confirming that the following topics require formal assessment and inclusion within the ES:

- Agricultural Land
- Economy, Population and Society
- Water Resources/Flooding
- Ground Conditions & Contamination
- Transportation
- Ecology and Conservation
- Landscape and Visual Amenity
- Air Quality
- Archaeology and Cultural Heritage

---

## 2 THE EIA PROCESS

- 2.1 In accordance with Schedule 4(2) of the Regulations the environmental topics identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the Proposed Development.
- 2.2 An assessment of potential environmental impacts was carried out first using recognised industry standard methodologies. A team of specialist consultants was appointed to advise further on design development and to carry out detailed assessments on the identified range of potential environmental effects. The assessment of ‘significance’ of impacts has been undertaken for all potential environmental effects to determine their importance.
- 2.3 The technical assessments, which are reported in volume 1 of the ES, are based on a standard general methodology; however, the accepted good practice criteria within each topic have led, in some cases, to modifications to this general approach.
- 2.4 The likely significant effects of the Proposed Development are described as adverse, beneficial, negligible or nil.

### MITIGATION

- 2.5 The key objective of mitigation is to avoid, offset or reduce the significant adverse effects of the development.
- 2.6 Measures that avoid environmental impacts and effects and which form part of the assessed Proposed Development (as set out in the scheme description or shown on the parameter plans) are known as inherent mitigation that is included in the design of the Proposed Development. Inherent mitigation is taken into account in the assessments.
- 2.7 Additional Mitigation is defined as a proposed measure that is additional to the assessed Proposed Development in response to environmental impacts identified through the assessment.

### CUMULATIVE SITES

- 2.8 The EIA assesses the potential cumulative effects of the Proposed Development combined with existing and approved developments both during the construction phase and following completion. The assessments of cumulative effects are contained within the individual ES chapters where relevant [and an overarching chapter \(16\)](#). The following cumulative sites have been assessed principally in relation to implications with regard to traffic and air quality:
- Land at Station Road, Rainham, Kent ME8 7QZ - 90 Units. (Allowed)
  - Land North of Moor Street, Rainham - 190 Units. (Refused, but identified in the Council’s supply in SLAA)
  - Land At Otterham Quay Lane Rainham Kent - 300 Units. (Approved)
  - Berengrave Nursery, Berengrave Lane, Rainham, Gillingham ME8 7NL - 121 Units. (Approved) (MC/17/3687)
  - Land South Of Lower Rainham Road Rainham Gillingham Medway ME8 7UD - 202 Units. (Approved August 2020 and identified in the Council’s supply within SLAA)



---

### 3 BACKGROUND TO DEVELOPMENT

- 3.1 Full details of the site and its surroundings can be found within the accompany Planning Statement and Design and Access Statement. A summary is presented below.

#### PLANNING APPLICATION SITE LOCATION PLAN

- 3.2 The application red line boundary encompasses approximately 51ha of land located to the north-east of Rainham as shown on **Figure NTS 1**. The red line boundary for the planning application and the parameter plans include all land upon which planning permission is sought in outline and the proposed accesses to the Site from the public highway at Lower Rainham Road and Pump Lane.

#### THE SITE

- 3.3 For the purpose of this EIA the 'Site' comprises approximately 51 hectares of land to the north west of Rainham. The Site broadly forms two land areas. The first land area is situated to the west of Pump Lane and to the east of Lower Twydall lane, known as Pump Farm. The second land area lies to the east of Pump Lane and to the west of Lower Bloors Lane, known as Bloors Farm.
- 3.4 The Site is bounded to the north-west by agricultural fields; to the north and north-east partly by houses and the Lower Rainham Road and beyond this the Medway River Estuary; to the south by allotments and Lower Bloors Lane beyond which is Bloors Lane Community Woodland and to the west by a railway line and residential development.
- 3.5 It is currently in horticultural use as commercial orchards.

#### SURROUNDINGS

- 3.6 The surrounding area is characterised by a mixture of suburban residential development and agricultural/horticultural land. To the south of the Site on the other side of the rail line is the urban area of Rainham. Further to the north at the far side of Lower Rainham road are the Medway Estuary and Marshes Special Protection Area (SPA)/ Site of Special Scientific Interest (SSSI)/Ramsar (a European and internationally designated site), a County Park and Flood Zone 3.
- 3.7 There are two Conservation Areas bordering the Site: Lower Rainham Conservation Area (immediately north of Bloors Farm) and Twydall Conservation Area (west of Pump Farm). There are a number of Listed Buildings in close proximity to the Site, primarily located within the conservation areas.

#### PLANNING HISTORY

- 3.8 At the time of the application submission in May 2019, there was no planning history of relevance. Subsequently, on 12<sup>th</sup> June 2020, MC refused the application for the following reasons:
1. Insufficient information has been provided in relation to mitigation measures, and no agreement has been reached to secure such measures, which are necessary to ensure that there will be no adverse impact on the integrity of the Medway Estuary & Marshes SSSI, SPA and Ramsar site as a result of the additional recreational pressures caused by the proposal. In the absence of imperative reasons of overriding public interest, Regulations 63 and 70 of the Habitats Regulations require permission to be refused. In addition, the lack of information and mechanism to secure the mitigation also results in non-compliance with policies S6 and BNE35 of the Local Plan and NPPF paragraphs 175 &176.

2. The proposed development would have a harmful impact on the local historic landscape, as well as the setting and significance of an number of designated heritage assets, including: listed buildings (York Farmhouse (Grade II); Pump Farmhouse (Grade II); Chapel House (Grade II); 497-501 Lower Rainham Road (Grade II); The Old House (Grade II); Bloors Place (Grade II\*); a range of outbuildings including cart lodge and granary west of Bloors Place (Grade II); and, the garden walls to south and east of Bloors Place (Grade II)); and, two Conservation Areas (Lower Twydall; and, Lower Rainham). Applying the great weight which has to be given to the conservation of the designated heritage assets (by virtue of NPPF paragraph 193 and Section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990), the proposal is contrary to Local Plan policies BNE 12 and BNE18. In addition, as the public benefits of the scheme would not outweigh the harm to the designated heritage assets, the proposed development is also contrary to the NPPF paragraph 196.
3. The proposed development would lead to significant long-term adverse landscape and visual effects to the local valued Gillingham Riverside Area of Local Landscape Importance (ALLI), which would not be outweighed by the economic and social benefits of the scheme, in conflict with Local Plan policy BNE34 and NPPF paragraph 170.
4. The applicant has failed to satisfy Highways England that the development will not materially affect the safety, reliability and / or operation of the Strategic Road Network (SRN). This is contrary the tests set out in department for Transport Circular 2/13 paragraphs 9 & 10 and the NPPF at paragraph 109.
5. The cumulative impact from the increased additional traffic cannot be accommodated on the highway in terms of overall network capacity without a severe impact. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109.
6. The cumulative impact from the increased additional traffic from the development is unlikely to be able to create a safe highway environment. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109.
7. No assessment nor technical details have been provided regarding the two new access points along Pump Lane to serve the proposed development, therefore it has not been possible to appropriately assess the adequacy of these access points. This is contrary to Policy T1 of the Medway Local Plan 2003 and paragraph 109 of the NPPF.
8. The proposed development would result in the irreversible loss of 'best and most versatile' (BMV) agricultural land, contrary to Local Plan policy BNE48 and the NPPF at paragraph 170 and footnote 53.
9. In the absence of a completed S106 legal agreement, the proposal fails to secure infrastructure necessary to meet the needs of the development. This is contrary to Local Plan policy S6 and the NPPF at paragraph 54.

3.9 An appeal has been lodged in respect of the application refusal.

## 4 DEVELOPMENT DESCRIPTION

4.1 The application is submitted for outline permission (with all matters reserved except access) for residential led mixed use development. The description of development (herein the Proposed Development) is:

*Outline planning permission is sought for the “Redevelopment of land off Pump Lane to include residential development comprising upto 1,250 residential units, a local centre (with final uses to be determined at a later stage), a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle); (Outline application with access for consideration (matters reserved scale, appearance, landscaping and layout)-Environmental Impact Assessment Development)”.*

Table NTS1 below sets out the proposed land uses and site area/floorspace. This table should be read alongside the parameter plans.

Table NTS1: Land Use Budget

Use	Area (Hectares)	Amount
Residential (Class C3)	29.78	Up to 1,250 dwellings
Village Green	1.12	
Local Centre	0.64	Up to 1,000sqm floor space
Primary School	2.6	
Care Home and Extra Care Facility	1.23	Up to 140 bed spaces
Green and blue infrastructure	15.69	

## EIA PARAMETERS

4.2 The EIA assesses the following parameter plans:

- Land Use Parameter Plan (ref. 11047 PL 006B) (ES Figure 2.1a)
- Building Heights Parameter Plan (ref. 11047 PL 004B) (ES Figure 2.2a)
- Movement Parameter Plan (ref. 11047 PL 007B) (ES Figure 2.3a)
- Green/Blue Infrastructure Parameter Plan (ref. 11047 PL 005B) (ES Figure 2.4a)

4.3 The EIA assesses the following detailed highway and access drawings:

- Detailed Access Drawing (Plan Ref. 20230-05-3)
- Proposed Pump Lane Bridge Improvements (Plan ref. 20230-05-d)

---

## 5 ALTERNATIVES

5.1 The ES must consider and identify 'alternatives' to the proposal.

5.2 The alternatives considered within the ES are summarised are:

- Do nothing;
- Alternative site location;
- Alternative uses; and
- Alternative design and site layouts for the Proposed Development.

5.3 The do nothing scenario is not a reasonable alternative. This would comprise the land remaining under horticultural use, with very limited public access. However, a top fruit orchard will reach the end of its productive life after around 14 years; thereafter the yield diminishes as the trees effectively become 'exhausted'. The orchard on Pump Farm is at maximum maturity and is no longer a benefit-yielding Site. Furthermore, the farm is surrounded by residential development from whence a number of complaints about farming operations have been made. Access is difficult given its location resulting in farm machinery and HGV's travelling through highly populated, urban areas potentially increasing traffic, pollution and noise - as such, movement and growth is restricted at the farm which prevents modernisation and investment.

5.4 Other land in other locations around the wider locality of the Peninsula that is controlled by AC Goatham and Son is also already used for fruit farming. Together, the farms make up the AC Goatham and Son business entity. There is no reasonable alternative Site for the provision of the orchards currently farmed at Pump Farm.

5.5 Diversification into arable, dairying, or other pastoral farming is not practicable due to the capital outlay of specialist machinery, reduced labour, new buildings to store grain/milk cattle, location of the land within an urban environment potentially resulting in continued complaints from residents, conflict with dog walkers, etc. Consequently, alternative farming uses are not considered to be a viable alternative.

5.6 Alternative designs have been explored as part of the masterplanning process. This iterative process has been informed by environmental constraints and opportunities within the Site and feedback received during the pre- application process and discussions with the Council.

---

## **6 POLICIES AND CONTEXT**

- 6.1** A detailed review of the Proposed Development against the background of the planning policy context is set out in the Planning Statement accompanying the application. The ES summarises those policies that are most relevant to the Site and the Proposed Development.
- 6.2** Specific policies relating to individual issues are referred to in the relevant topic chapters.

---

## 7 ENVIRONMENTAL EFFECTS

7.1 This section summarises the potential significant effects against each topic in the ES. Table NTS2 provide an overall summary of the impacts of the Development, the mitigation and the impacts remaining after mitigation.

### AGRICULTURAL LAND

7.2 Potentially significant effects of the Proposed Development on soils and agricultural land were assessed and it was concluded that these would only be evident during the construction phase. As there would be no agricultural land present within the Site during operation there would be no further impact to the agricultural land and farm business. Similarly, it was concluded that the likely levels of soil disturbance during operation due to gardening, allotments and landscape maintenance would not be sufficient to result in damage to the restored soils.

7.3 To establish the soil and agricultural land baseline across the Site, a desk study and soil survey and Agricultural Land Classification assessment was completed. This identified that the Site is characterised by silty clay loam soils on the Site are a receptor of medium sensitivity. Damage to these soils would be mitigated through the application of appropriate soil handling, storage and restoration methods in accordance with relevant good practice guidance. Therefore, the residual effects on soils would be short-term and considered as minor adverse (not significant).

7.4 The most extensive soil type found across the Site is of Grade 2 quality, comprising approximately 40.6ha of land. The next most prevalent soil type is excellent quality Grade 1 land which comprises 8.6ha of the Site. The least prevalent soil type is good quality, Subgrade 3a land which comprises 2.3ha of the site. The effect of the Proposed Development on agricultural land would be significant.

7.5 The effects of permanent loss of agricultural land on the farm business considered to be fully mitigated through the consolidation of the overall Business Plan by the Applicant. The effect of the Proposed Development on the overall farm business would be not significant.

7.6 As effects on soils are location specific, and as the boundaries of the identified cumulative schemes would not overlap spatially, there would be no cumulative effects on soils.

### ECONOMY, POPULATION AND SOCIETY

7.7 The development will create a range of new jobs during the construction comprising direct jobs during the construction phase on site and indirect jobs off site through associated materials, service and trade supplies. Both the direct and indirect jobs generated are likely to deliver a **minor** beneficial impact at the local level. This remains the case when considering cumulative impacts arising from construction of nearby developments.

7.8 Construction workers associated with each site will bring indirect beneficial impacts as a result of an increase of money within the local economy and an increase in the demand and use of local services, and retail facilities. This remains the case when considering cumulative impacts arising from construction of nearby developments.

7.9 The development will have beneficial effects in terms of its contribution towards meeting the District's housing needs and will help create balanced and mixed communities in accordance with national planning policy principles.

7.10 The effect on health services would be **minor adverse as a result of existing capacity issues in the local area**. The Proposed Development would deliver **a number of** health benefits by encouraging community inclusion, healthy neighbourhoods, active lifestyles and through new housing provision. The Proposed Development makes provision for a local centre to include

---

scope for **Class E uses (formally D1 uses)**. Proposed on-site facilities would have a beneficial effect resulting from improved facilities for both existing and future residents.

- 7.11 The Proposed Development would also benefit those residents the live near to the Site providing greater choice for day to day, small scale, convenience retail needs.
- 7.12 The proposed areas of green space will be made available for public open space accessible to both existing and future residents. Provision of new off-site open space or enhancement of existing off-site open space will be funded through S106 contributions if considered necessary. The Proposed Development would, therefore, have a beneficial effect on public open space provision.
- 7.13 While the cumulative development sites will result increased demand in primary and secondary school provision that exceeds existing capacity, these impacts are mitigated by contributions towards education secured via S106.
- 7.14 The cumulative impacts **as a result of the committed developments identified in the cumulative assessment (table 2.6 of the ES May 2019 refers)** would lead to increased demand on health services and community facilities. **These impacts are mitigated by contributions via S106 Agreements.** Moreover, the Proposed Development includes provision for onsite facilities that could include health or community services.
- 7.15 Each cumulative site will deliver public open space on-site, with contributions towards off-site public open space improvements secured either by S106 agreement.
- 7.16 No significant adverse effects have been identified in relation to socio-economic receptors. A number of beneficial effects have been identified as summarised above.

#### **WATER RESOURCES**

- 7.17 The Proposed Development will be designed and constructed in-line with industry best practice and will, therefore, include embedded mitigation measures to manage site drainage and prevent pollution.
- 7.18 The EIA establishes that there are no potential significant effects on the relevant receptors at the construction or operational stage with embedded mitigation in place.
- 7.19 The potential impacts of the Proposed Development on the identified sensitive water resource receptors, with embedded mitigation in place, are considered to be Not Significant.
- 7.20 A separate Flood Risk Assessment (FRA) has been prepared in accordance with the NPPF. The FRA demonstrates that future occupants of the Proposed Development will be safe from flooding and that the proposals will not increase flood risk elsewhere.

#### **GROUND CONDITIONS AND CONTAMINATION**

- 7.21 The assessment constitutes a Tier 1 Contaminated Land Risk Assessment comprising, desk study, walkover, intrusive investigation and laboratory testing was undertaken to identify the baseline conditions existing on the site and allow a conceptual site model to be derived for the future land-use. A risk assessment based on the sensitivity of receptors and the potential magnitude of effects has been created. Potential impacts have been assigned significance criteria based on the risk assessment.
- 7.22 The Site consists of approximately 51hectares of agricultural land. It has been used for this purpose for many years. The geochemical results of the site investigation suggest that potential for on-site contamination sources is very low. However, the possibility of hot-spots of contamination not identified by the site investigation associated with agricultural use or adjacent chalk pit landfill cannot be completely discounted.

---

7.23 The Site is underlain by the Thanet Sand Formation or Superficial Head Deposits which in turn overlie the Seaford Chalk Formation. Whilst the Site is located in close proximity to Lower Twydall Chalk Pit landfill, the environmental monitoring of that site to date, does not indicate that there are significant risks associated with offsite sources of land gas or contaminated land/groundwater.

7.24 The potential significant effects identified and possible mitigation measures are summarised below. It should be noted that many of the classifications of potential effects are precautionary, as there is a relatively low probability that significant contamination sources exist at the site.

- (i) At the construction stage the EIA identifies potential adverse effects (slight or negligible) associated within human health, controlled waters, ground stability, and construction activities. Following mitigation, which comprises a suitable CEMP, detailed ground investigation, and good practice principles, the residual effects would remain negligible or slight.
- (ii) No significant effects have been identified at the operational stage.

7.25 Potential cumulative effects are not significant as all of the developments will be subject to the same planning guidance and legislation as the Proposed Development, and will include any appropriate mitigation measures required.

#### TRANSPORTATION

7.26 Potential environmental impacts resulting from the traffic that are likely to be generated by the Proposed Development have been identified. The major direct potential impacts are increases in traffic congestion and delay.

7.27 The impact assessment was based on an analysis of the traffic likely to be generated by the Proposed Development. When considered in the context of the existing traffic flows on the surrounding road network, the number of construction vehicles would not be expected to have a significant impact on the operation or safety of the surrounding road network. Construction movements are anticipated to occur over a circa 10 year period.

7.28 In terms of adverse impacts, the main issue would be increased overall flows on the local road network. In general terms, the traffic can be adequately accommodated on the network, although some localised improvements have been identified to mitigate specific impacts.

7.29 In conclusion, the Proposed Development meets the key transport tests set out by the Local Highway Authorities in that would allow for efficient maintenance and management of transport infrastructure, it will improve accessibility and provide healthier travel choices. In addition, it would provide for safer roads and communities and would reduce congestion which might otherwise occur through less sustainable development growth.

#### ECOLOGY AND CONSERVATION

7.30 The Site lies within the 5km buffer zone of the Medway Estuary and Marshes SPA/SSSI/Ramsar site. The Site lies within 2km of a number of other statutory LNRs and SSSIs and LWs.

7.31 The separate IHRA considers all of the potential significant effects that could arise from the Proposed Development in respect to European and internationally designated sites. Through avoidance and mitigation measures, Ecology Solutions conclude that the Development would not result in any adverse effects on the integrity on any European/international designated sites (in view of their conservation objectives), when the Development is considered alone or in combination with other plans or projects.

7.32 The Site is currently dominated by commercial orchard, semi-improved grassland and hedgerows with scattered trees. The habitats were considered to be of low-ecological value



---

and species-poor whilst under the high-level management of the commercial operation. The loss of these habitats is therefore not considered to be significant in terms of ecology.

- 7.33 The Proposed Development will result in loss of the entire commercial orchard on the Site, along with large areas of the semi-improved grassland and some internal hedgerows and scattered trees. The loss of the habitats on-site is not considered to result in impacts above site level and is considered to be of negligible significance.
- 7.34 The Site has been subjected to numerous protected species surveys including bats, badgers, reptiles, breeding birds and great crested newts.
- 7.35 The Site contains a reptile population of site level importance, with the suitable habitat on the Site being predominantly at the edges, along the bases of the hedgerows adjacent to the railway line. Impacts of minor significance are identified to the reptile population on the Site, which are to be mitigated through translocation and habitat removal in stages, and retention of suitable habitat along the edges. No significant residual impacts are considered likely to reptiles as a result.
- 7.36 The Site is in use by badgers as foraging habitat. The mammal holes on the Site are not currently considered to host a sett, however monitoring will be on-going. The loss of the foraging habitat is considered to be indiscernible as the badgers only use it at certain times of year.
- 7.37 A number of bird species are situated within the Site boundary, including some birds of conservation concern. Birds are only found within the Site boundary hedgerows and scattered trees due to the commercial nature of the orchards. These habitats are largely to be retained supplemented by additional planting. Timing of works, post development planting and habitat management and provision of new nest boxes will result in a positive impact.
- 7.38 Low numbers of bats have been found to use the Site boundaries and treeline along the footpath. The proposals have potential to result in negative impacts to foraging and commuting bats on-site, mainly as a result of loss of small areas of habitat and through indirect light pollution. These impacts will be mitigated by new habitat creation and the implementation of a sensitive lighting scheme. No residual impacts are predicted to foraging and commuting bats as a result.
- 7.39 Some minor operational impacts are likely as a result of the increased local population and provision of public access to the retained habitats on-site. It is considered these would largely be off-set by the implementation of habitat management on the Site and provision of educational leaflets to new home owners.
- 7.40 New habitat creation, such as wildflower grassland, new tree planting and SUDs features will provide further enhancements within the Site post-development benefiting a wide range of species and potentially attracting some species not currently present.
- 7.41 The design of the scheme and the mitigation measures that will be implemented during both the construction and operational phases will also ensure that no impacts occur to any on-site receptors.
- 7.42 In terms of off-site ecological interests, it is considered that there are potential disturbance effects to qualifying bird species arising from an increase in informal recreation at Medway Estuary and Marshes SPA/SSSI/Ramsar site (and other coastal sites) located to the north of the Site.
- 7.43 To address these effects, a package of avoidance and mitigation measures are proposed. This comprises three key elements: firstly, provision of an appropriate financial contribution towards management and monitoring at the SPA/SSSI/Ramsar sites, in accordance with the

---

North Kent Coast SAMM; secondly, the provision of enhancements to on-site public open space to maximise opportunities for informal recreation including dog walking; and thirdly engagement with Medway Council to provide further contributions towards off-site recreational opportunities in the local area.

- 7.44 The most significant cumulative impact is predicted to be the indirect recreation pressure increase on the Medway Estuary and Marshes SPA/SSSI/Ramsar site. SAMMS is used to negate this pressure and help conserve the designated site and its wildlife.

#### LANDSCAPE AND VISUAL AMENITY

- 7.45 The landscape and visual assessment has been carried out in accordance with industry standard guidance including the Guidelines for Landscape and Visual Impact Assessment (GLVIA3), Third Edition (2013).

- 7.46 Landscape and visual effects are interrelated but assessed separately. The following definitions help to differentiate between what constitutes landscape and visual effects.

- (i) Landscape effects relate to changes to the fabric, character and quality of the landscape and how it is experienced; and
- (ii) Visual effects relate closely to landscape effects, but also concern the changes in views as visual assessment is also concerned with people's perception and response to changes in visual amenity.

- 7.47 The assessment has followed an iterative process which has fed into the emerging design and development of the parameter plans to ensure that any significant landscape and visual effects are identified and mitigated.

- 7.48 The LVIA confirms compliance with the relevant policies in the Local Plan in principle given the outline aspect to the planning application. This will be followed by a Reserved Matters submissions that will include those matters relating to detailed landscape design to ensure the landscape assimilation and highest quality landscape treatment.

- 7.49 The likely impacts and effects that may arise from the proposed development are reasonably limited and relate almost exclusively to the resulting effect of a change in land use and a change in the shape of the settlement envelope of Twydall and Rainham. Although the development would fundamentally change the appearance and nature of the [Site and the Lower Rainham & Lower Twydall Fruit Belt LLCA \(moderate adverse\) after 15 years growth of the planting](#), this would not cause a significant adverse change in the [overall](#) prevailing landscape and visual character of the wider area.

#### AIR QUALITY

- 7.50 A qualitative assessment of the potential impacts on local air quality from construction activities has been completed for this phase of the Proposed Development using the IAQM methodology. This identified that there is a High Risk of dust soiling impacts and a Low Risk of increases to particulate matter concentrations due to construction activities.

- 7.51 However, through good site practice and the implementation of suitable mitigation measures, the effect of dust and PM10 releases would be significantly reduced. The residual effects of dust and PM10 generated by construction activities on air quality are therefore considered to be negligible. The residual effects of emissions to air from construction vehicles and plant on local air quality are considered to be negligible and would not constitute a significant environmental effect.

- 7.52 A quantitative assessment of the potential impacts during the operational phase of the Proposed Development was undertaken using ADMS-Roads to predict the changes in NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> concentrations that would occur due to traffic generated by the Proposed

---

Development. The assessment has accounted for the additional vehicle movements on the assessed road network generated by other committed development within proximity to the Proposed Development.

- 7.53 The assessment demonstrated that the Proposed Development would result in a negligible increase in pollutant concentrations and would not cause any exceedances of the statutory UK air quality objectives. The results also show that future residents of the Proposed Development would not be subject to pollutant concentrations that would exceed the statutory objectives, thus the Application Site is considered suitable for the proposed land uses.
- 7.54 Assessments of impacts on the identified European designated sites are less than 1% of the relevant 24-hour critical level for NO<sub>x</sub> and critical load for nitrogen deposition and acid (nitrogen) deposition. Therefore, the impact of the development can be classed as not significant in relation to these pollutants. However, impacts exceed 1% of the annual mean NO<sub>x</sub> critical level. On this basis, the change in NO<sub>x</sub> levels arising as a result of the proposed development cannot be classed as not significant. Impacts in relation to the critical level for annual mean NO<sub>x</sub> within the Medway Estuary and Marshes SSSI/SPA/RAMSAR site have been considered further within the separate Habitat Regulations Assessment submitted with the application.
- 7.55 In accordance with the Medway Air Quality Planning Guidance an emissions mitigation calculation was carried out which calculated a damage cost of £1,091,724. A package of mitigation measures equivalent to this cost will be determined in agreement with MC to reduce emissions from the Development.
- 7.56 Based on the assessment significance criteria, the residual effects of the Proposed Development on local air quality are considered to be negligible in terms of human receptors and would not constitute a significant environmental effect.
- 7.57 The implementation of strategies such as these will ensure that compliance is maintained with NPPF and LAQM legislation (including the Air Quality Objectives).

#### ARCHAEOLOGY AND CULTURAL HERITAGE

- 7.58 The Proposed Development has the potential to cause both direct and indirect effects to heritage assets. Direct effects would be caused by ground disturbance notably on any potential buried assets. Indirect effects would be caused by changes in the setting of a given heritage asset (listed building, conservation area), which may affect the overall significance of the given heritage asset. It should be noted that change within the setting of a heritage asset does not necessarily affect its overall significance.
- 7.59 At the construction stage ground disturbance would have the potential to disturb buried archaeological remains. The significance of effect on these heritage assets would be slight adverse to moderate adverse. The loss of buried archaeological remains due to the Proposed Development would be fully mitigated through the implementation of a programme of archaeological fieldwork as a condition to outline planning permission. Whilst the residual impact to the buried resource would still be adverse, the preservation by record of the archaeology would contribute to the archaeological understanding of the area.
- 7.60 At the operational stage change within the setting of the listed buildings and conservation areas may cause indirect harm to their overall significance. In this instance, taking into account embedded mitigation (retention of existing boundary planting, the EIA determines that there is a minor adverse effect on the setting of Grade II listed Chapel House which directly borders the site on Pump Lane. This would be mitigated further through the operational mitigation (additional planting to strengthen the existing boundary vegetation). The impact on the Lower Rainham conservation area is considered to be moderate adverse

and on the Lower Twydall conservation area, minor adverse, once all of the planting matures over time.

#### CUMULATIVE EFFECTS

7.61 Cumulative effects result from the combined impacts of multiple developments as well as multiple in-scheme impacts, for example, combined landscape and ecology impacts on the same sensitive receptor. The impacts from a single development or a single environmental impact may not be significant on their own but when combined with other developments or impacts these effects could become significant.

7.62 The sites identified as cumulative sites in the assessment are set out in Table NTS3 below:

Table NTS3: Cumulative Development Sites

Site Name	Description of Development	Status
Land at Station Road, Rainham MC/14/0285	Development of 90 dwellings	Allowed on appeal
Land North of Moor Street, Rainham MC/14/3784	Development of 190 dwellings	Refused, but identified on the MC housing supply in the SHLAA
Land at Otterham, Quay Lane, Rainham MC/16/2051	Development of 300 Dwellings	Permitted Feb 2017
Berengrave Nursery, Rainham MC/17/3687	Development of 121 dwellings	Permitted Mar 2018
Land south of Lower Rainham Road, Rainham MC/17/1896	Development of 202 dwellings	Permitted August 2020, but also within MC housing supply in SHLAA

7.63 The cumulative impacts assessment focuses on effects that were significant, therefore only receptors experiencing moderate or large adverse effects were included in the assessment.

7.64 There are considered to be cumulative inter-related effects during construction between agricultural land (loss of existing horticultural land-use), landscape (loss of existing site character/features) and heritage (setting of Lower Rainham Conservation Area). These are of minor adverse significance.

7.65 There are considered to be cumulative inter-related operational residual effects between landscape (effect of existing site character/features) and heritage (setting of Lower Rainham Conservation Area). This is of minor adverse significance.

7.66 The potential for the other planned or committed developments within the study area to affect the sensitive receptors has been considered. There are considered to be no significant cumulative construction or residual operational effects, beyond the moderate positive effect of increase in housing supply. It is assumed for the cumulative assessment that any mitigation proposed by the developers of these committed sites is fully executed and is successful.

## 8 CONCLUSIONS

8.1 This Non-Technical Summary sets out the main environmental effects of the proposals, but should not be regarded as comprehensive. Please refer to the main volumes of the ES, which contain the main text and the Technical Appendices for further detail.

8.2 The ES, which comprises this Non-Technical Summary and the separate volumes referred to above, has been prepared to comply with European and national legislation. The ES therefore enables a decision to be made on the accompanying planning application with adequate provision to be made for environmental mitigation, (both specific and through the overall master plan design) where appropriate. **Tables NTS2** below summarises these impacts.

**Table NTS2: Summary of Effects**

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
<b>CONSTRUCTION</b>					
<b>Agricultural Land</b>	Loss of agricultural land	Major Adverse (significant)	N/A	Significant	Major adverse (significant)
	Effect on Soil Resource	Moderate adverse	Site Waste Management Plan; a Soil Management Plan or similar	Slight	Slight adverse
	Impact on Agricultural Business	Major/ Moderate adverse (significant)	Consolidation of business plan		Moderate adverse
<b>Economy, Population and Society</b>	Demographics: population count and demographic structure	Nil	N/A	N/A	Nil
	Economy and Employment	Minor Beneficial	N/A	N/A	Minor Beneficial
	Wealth and Deprivation	Negligible	N/A	N/A	Negligible
	Housing (house prices, tenure, composition)	Nil	N/A	N/A	Nil
	Education and Training	Negligible	N/A	N/A	Negligible
	Health, Community and Leisure	Nil	N/A	N/A	Nil
	Shopping	Minor Beneficial	N/A	N/A	Minor Beneficial

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
Water Resources	Fluvial Flood Risk	Negligible (not significant)		N/A	N/A
	Water Quality - surface water	Slight adverse (not significant)	CEMP (embedded)	N/A	N/A
	Ground Water	Negligible (not significant)	CEMP (embedded)	N/A	N/A
	Foul Drainage	Negligible (not significant)	CEMP (embedded)	N/A	N/A
	Water Supply	Negligible (not significant)	CEMP and NMP (embedded)	N/A	N/A
Ground Conditions and Contamination	Human Health (Construction Workers)	Negligible	Standard operational health & safety. Embedded mitigation assumed site remediated if necessary prior to construction	N/A	Negligible
	Controlled Waters/ground water	Negligible	As above.	N/A	Negligible
	Ecological systems	Negligible. Slight adverse - RAMSAR	As above	N/A	Negligible
	Ground Stability Landslide	Slight adverse	As above	N/A	Negligible
Transport	Community Severance	Negligible	Construction Traffic Management Plan/CEMP	N/A	Negligible
	Driver and Pedestrian Delay	Negligible	Construction Traffic Management Plan/CEMP	N/A	Negligible
	Accidents and Safety	Negligible	Construction Traffic Management Plan/CEMP	N/A	Negligible
	Fear and Intimidation	Negligible	Construction Traffic Management Plan/CEMP	N/A	Negligible
Ecology and Conservation	Medway Estuary and Marshes SPA/SSSI/Ramsar -Contaminated run-off -Dust -Air quality -Water abstraction	Negligible	CEMP and refer to paras 15.115-117 of ES		Negligible

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
Landscape	Non-statutory sites - LNR, LWS -Dust -Contaminated run-off -Noise	Minor adverse	CEMP and refer to para 15.115-117 of ES		Negligible
	Commercial orchard -Loss of habitat, but it is of little ecological value	Negligible	Replanting smaller area of orchard of quality better habitat	Permanent net loss of this habitat	Negligible
	Hedgerows/scattered trees -Loss of habitat -Damage to retained habitat -Dust	Negligible	Majority of hedgerows retained, for losses existing gaps or least sensitive location chosen, retained habitats protected, new hedge planting and sensitive management implemented. CEMP will prevent dust impacts.		Negligible
	Semi-improved grassland -Loss of habitat -Damage to retained habitat	Minor adverse	Replacement grassland with species rich mix	Permanent loss of this habitat	Minor adverse
	Foraging and commuting bats	Minor adverse	Refer to ES paras 15.101-104		Negligible
	Reptiles	Minor adverse	Refer to ES paras 15.115-118		Negligible
	Breeding Birds	Minor adverse	Refer to ES Technical Appendix 15.4		Negligible
	Badgers	Minor adverse	Refer to ES Technical Appendix 15.3		Negligible
	Lower Rainham/Lower Twydall Fruit Belt LCA	Moderate/ Major Adverse			

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
	(Lower Rainham farmland LCA)	Minor adverse			
	Medway Shoreline & Marshes, Riverside Country Park LLCA	Minor adverse			
	Site Features	Major adverse (Localised)			
	Users of Northern Shore	Minor adverse			
	Users south Motney Hill	Moderate adverse			
	Users north of Lower Rainham	Minor adverse			
	Users of Lower Rainham Road	Moderate/ Minor adverse			
	Users Horrid Hill	Moderate adverse			
	Users Lower Bloor Lane	Moderate adverse			
	Users Lower Twydall Lane	Moderate adverse			
	Users of Bridleway	Moderate Adverse			
	Users of Pump Lane	Major Adverse (localised)			
	Users of trains passing Site	Minor/ Moderate adverse			
	Residents of Twydall south of railway	Moderate/ Major adverse (localised)			
	Residents on Pump Lane	Major adverse (localised)			



TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
	Residents on Lower Bloor Lane	Minor / Moderate adverse			
	Residents Lower Rainham	Moderate adverse			
	Residents Lower Twydall	Minor adverse			
Air Quality	From dust soiling	Major (substantial) (high according to IAQM guidance)	Refer to chapter 12 para 12.166 of ES		Negligible
	Human Health	Slight (low according to IAQM guidance)			Negligible
Archaeology and Heritage	Physical impact to the potential buried Site archaeology	Major adverse (significant)	Preservation by record (strip, map and sample)	The loss of the asset would be offset by knowledge gained	Moderate adverse
	Setting on designated assets - listed buildings	Minor adverse	CEMP, embedded mitigation (retention of existing planting)	As assessed	Minor adverse
	Setting of designated assets - conservation areas	Moderate adverse (Lower Rainham)	As above	As above	Moderate adverse (Lower Rainham)
		Minor adverse (Lower Twydall)			Minor adverse (Lower Twydall)
<b>OPERATION</b>					
Society, Population and Society	Demographics: population count and demographic structure	Minor beneficial	N/A	N/A	Minor beneficial
	Economy and Employment	Minor Beneficial	N/A	N/A	Minor Beneficial

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
	Wealth and Deprivation	Nil	N/A	N/A	Nil
	Housing (house prices, tenure, composition)	Moderate Beneficial	N/A	N/A	Moderate Beneficial
	Education and Training	Negligible	Onsite primary, secondary financial contribution	N/A	Negligible
	Health/Community Facilities	Minor adverse	Financial contribution	N/A	Negligible
	Shopping Facilities/town centre health	Minor Beneficial	N/A	N/A	Minor Beneficial
Water Resources	Fluvial Flood Risk	Negligible (not significant)	N/A	N/A	N/A
	Surface water	Negligible (not significant)	CEMP	N/A	N/A
	Waste water drainage /Foul drainage	Negligible (not significant)	N/A	N/A	N/A
	Water Supply	Negligible (not significant)	N/A	N/A	N/A
	Groundwater	Negligible (not significant)	N/A	N/A	N/A
Ground Conditions	Human Health - site users	Slight adverse	Embedded through decontamination if necessary prior to construction.	N/A	Negligible
	Ground water - contamination	Negligible	As above	N/A	Negligible
	Ecological systems	Slight adverse	As above	N/A	Negligible
	Damage to built environment - contamination	Negligible	As Above	N/A	Negligible
	Site Users - land stability	Moderate adverse	As above	N/A	Slight adverse

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
Transportation	Community Severance	Negligible	Framework Travel Plan as standard	N/A	Negligible
	Driver and Pedestrian Delay	Negligible	Framework Travel Plan as standard	N/A	Negligible
	Accidents and Safety	Negligible	Framework Travel Plan as standard	N/A	Negligible
	Fear and Intimidation	Negligible	Framework Travel Plan as standard	N/A	Negligible
Ecology & Conservation	Statutory Sites - Medway Estuary and Marshes SPA/SSSI/Ramsar -recreational pressures	Major adverse (significant)	SAMMS, on-site recreation and off site provision		Negligible
	Other statutory sites -recreational pressure	Minor adverse	Refer to paras 15.116 of ES		Indiscernible
	Orchard (non commercial, i.e. new planting as part of scheme of higher ecological value)	Minor adverse	Replanting to create betterment of habitat		Minor beneficial
	Hedgerows, scattered trees	Negligible	Refer to ES paras 15.122	Replacement and additional planting	Minor beneficial
	Semi-improved grassland	Negligible	Areas replanted and managed to enhance habitat, with more detail provided in a LEMP.		Minor beneficial
	Newly created Ponds and Suds	Negligible	Creation of new habitat as part of Development. More detail provided in a LEMP.	Overall habitat enhancement post-development.	Minor beneficial
	Foraging and commuting bats	Minor adverse	Refer to ES para 15.119-122. Management implemented to enhance habitat, with more detail provided in a LEMP.	Overall habitat enhancement post-development.	Indiscernible

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
	Reptiles	Minor adverse	Refer to ES Technical Appendix 15.5. Sensitive management implemented to enhance habitat, with more detail provided in a LEMP.	Overall habitat enhancement post-development.	Indiscernible
	Badgers - net loss of foraging habitat	Minor adverse	Refer to ES Technical Appendix 15.3.		Indiscernible
	Breeding Birds - increase in nesting habitat	Minor adverse	Refer to ES Technical Appendix 15.4		Minor beneficial
Landscape	Lower Rainham/Lower Twydall Fruit Belt LCA	Moderate adverse	Range of embedded landscape mitigation measures, including landscape buffers, tree planting and implementation of new areas of community orchards and village green.		Moderate adverse
	(Lower Rainham farmland LCA)	Minor adverse	Embedded landscape mitigation measures.		Minor adverse
	Medway Shoreline & Marshes, Riverside Country Park LLCA	Minor adverse	As above		Minor adverse
	Site Features	Major adverse (localised)	As above		Moderate adverse
	Users of Northern Shore	Minor adverse	Landscape buffer planting and trees throughout the development		Neutral
	Users south Motney Hill	Moderate /Minor adverse	As above		Minor adverse
	Users north of Lower Rainham	Minor adverse	As above		Neutral

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
	Users of Lower Rainham Road	Minor adverse	As above		Minor adverse
	Users Horrid Hill	Moderate adverse	As above		Minor adverse
	Users Lower Bloor Lane	Minor / Moderate adverse	As above		Minor adverse
	Users Lower Twydall Lane	Minor adverse	As above		Minor adverse
	Users of Bridleway	Minor beneficial	As above		Minor / Moderate Beneficial
	Users of Pump Lane	Moderate adverse	As above		Minor / Moderate adverse
	Users of trains passing Site	Minor / Moderate adverse	As above		Minor adverse
	Residents of Twydall south of railway	Moderate adverse	As above		Minor / Moderate adverse
	Residents on Pump Lane	Moderate / Major adverse (localised)	As above		Moderate adverse
	Residents on Lower Bloor Lane	Minor / Moderate adverse	As above		Minor adverse
	Residents Lower Rainham	Minor / Moderate adverse	As above		Minor adverse
	Residents Lower Twydall	Minor adverse	As above		Negligible

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
Air Quality	Existing sensitive receptors	Negligible	Refer to chapter 12 para 12.176 in ES	N/A	Negligible
	On Proposed residential receptors	Negligible	As above	N/A	Negligible
	On Ecological receptors	Unknown	Refer to para 12.176 of ES and the separate IHRA (albeit not specifically required in respect of international/European designated sites)		Negligible
Archaeology and Heritage	Indirect impact on setting of Listed buildings and conservation areas	Minor for the listed buildings.	Considerable strengthening and additional boundary planting and on site planting.	Indirect impact on setting listed buildings and conservation areas reducing over time as planting matures	Minor for listed buildings.
		Moderate adverse Lower Rainham CA			Moderate adverse Lower Rainham CA
		Minor adverse Lower Twydall CA.			Minor adverse Lower Twydall CA

---

**FIGURE NTS1 - SITE LOCATION PLAN**

