Hopkins Homes

Greater Norwich Local Plan

Land at Beccles Road, Loddon

Representations to Stage C Regulation 18 Consultation

March 2020







Lanpro

Issue Sheet

Report Prepared for: Hopkins Homes

Greater Norwich Local Plan

Land at Beccles Road, Loddon

Representations to Stage C Regulation 18 Consultation

March 2020

Prepared by:
Signature:

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Title: Head of Planning
Date: March 2020

Contents

1 Introduction

1.1 Preamble

1.1.1 Lanpro Services is instructed by Hopkins Homes to continue to promote land at Beccles Road, Loddon within the emerging Greater Norwich Local Plan (GNLP) (see location plan **Figure 1**).

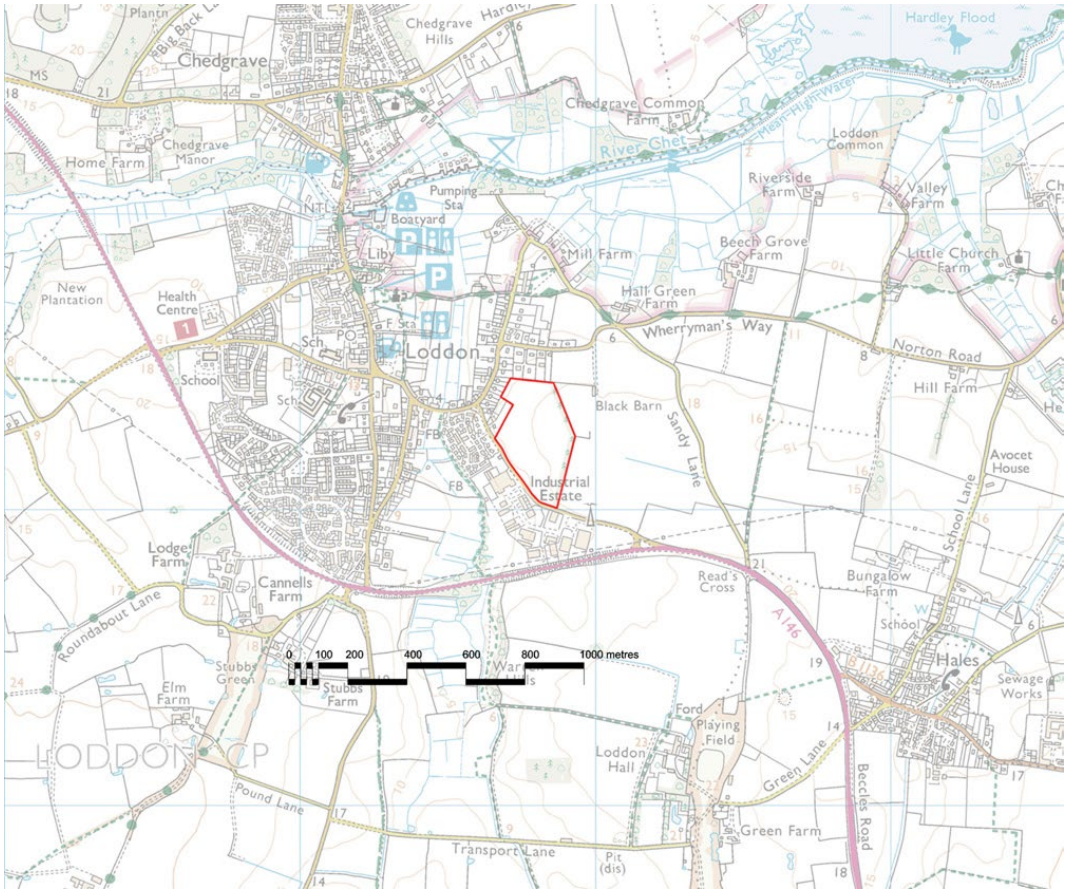

Figure 1. Site Location

1.1.2 The emerging GNLP provides for around 44, 500 new homes (with a 9% buffer) across the three authority areas.

1.1.3 Loddon and Chedgrave are identified as a combined 'key service centre' in the GNLP. The settlements accommodate a range of services including shops, infant, junior and high school, medical centre, library, public houses and industrial estate. The settlement is well served by buses linking to Norwich, Beccles and Lowestoft, and a development of 200 homes north of George Lane, Loddon is currently being progressed.

1.1.4 The town centre of Loddon accommodates a substantial Conservation Area (extending into Chedgrave), plus a separate Conservation Area around the Church of All Saints. The subject site achieves separation from the Conservation Area, while remaining sustainably located in close proximity to the town. The emerging plan notes in respect of the subject site:

> *"This site is preferred for allocation as it is well related to the form and character of the settlement and is less constrained than other sites promoted, which raise access or townscape and heritage concerns."*

1.1.5 The subject site is proposed in the latest version of the emerging local plan (January 2020) as an allocation:

POLICY GNLP0312 Land to the east of Beccles Road Loddon (approx. 7.70 ha) is allocated for residential development. This site is likely to accommodate at least 180 homes, 33% of which will be affordable.

More homes may be accommodated, subject to an acceptable design and layout being achieved and any infrastructure issues addressed.

The development will be expected to address the following specific matters:

- *Two points of vehicular access to be provided into the site.*
- *Areas of surface water flooding on the Beccles Road boundary to be addressed:*
- *Design and layout must address the topography of the site and potential impact on views.*
- *The trees/hedgerows surrounding the site will be protected, enhanced and incorporated into the scheme.*
- *The design and layout of the scheme must consider amenity impacts relating to the nearby business area.*

1.1.6 Hopkins Homes clearly endorse this policy, subject to some minor amendments relating to the access arrangements, as discussed in further detail below.

1.2 Hopkins Homes

1.2.1 Hopkins Homes is an established and well respected house builder with its roots based in East Anglia. The Company has grown significantly over the years to become the largest independent property developer in East Anglia. It takes great pride in the significant contribution that it has made to placemaking and the creation of sustainable communities, as well as contributing to local and regional economies through creating and supporting jobs.

1.2.2 The site is controlled by Hopkins, who are an experienced regional housebuilder that has developed sites elsewhere in South Norfolk. As such, the site is available for development and is deliverable.

1.3 Purpose of this Document

1.3.1 Hopkins Homes has made submissions to a number of stages of the emerging local plan in respect of this site. This document now further confirms the sites' suitability for development; its sustainability credentials; its deliverability; and provides a further iteration of the emerging landscape led concept masterplan for the potential development of the site. Specifically, we address:

- Public consultation undertaken to date.
- We provide an update on the constraints and opportunities that have now informed the emerging concept masterplan of the site including access; ecology; landscape; drainage; and neighbouring land uses.
- We provide and describe the emerging concept masterplan (see **Appendix 1**) including - how surface water drainage will be addressed; the relationship of the development with neighbouring uses; and the proposed landscape strategy.
- We provide an update on the proposed access strategy for the site.

1.3.2 This report should be read in conjunction with previous submissions (see **Appendix 2**).

2 Public Consultation

2.1 Local Community

2.1.1 Representatives of Hopkins Homes met with some of the residents of Norton Road on the 5th February 2020 to discuss the proposals and to listen to their thoughts and comments in respect of the emerging allocation of the site.

2.1.2 At the meeting, matters relating to overlooking, privacy and general impact on the amenity of their properties were discussed. These comments have been taken into account in the emerging concept masterplan.

2.1.3 Hopkins Homes is committed to maintaining dialogue with local residents as the Local Plan progresses.

2.2 Loddon Parish Council

2.2.1 Hopkins Homes contacted Loddon Parish Council to discuss the emerging allocation with them. On Wednesday 19th February 2020 a meeting took place between representatives of Hopkins Homes and their consultant team and Loddon Parish Council at The Library Annexe, Church Plain, Loddon. The Chair, Vice Chair, Clerk and three Parish Councillors were present.

2.2.2 Matters that were discussed between the parties included – growth of Loddon (and therefore some development will be directed to the settlement); the principle of development of the site; parking; highway safety; housing mix; energy efficiency; drainage; branding; streetlights and infrastructure capacity.

2.2.3 On-going consultation will take place with the Parish Council As the site progresses through the local plan process, engagement with the wider community will take place.

3 Constraints and Opportunities

3.1 Overview

3.1.1 As set out in Hopkins Homes submission to the GNLP process in October 2019 (see **Appendix 2**) substantive assessment work in respect of landscape, ecology, trees, drainage, highways, access and cultural heritage has been undertaken. This work has been on-going. In addition to this, further consideration has been given to adjoining land uses and impacts on amenity, including discussions with some local residents and the Parish Council.

3.1.2 These issues define the constraints (and the opportunities) to development of the site and particularly, when considering the site layout. The emerging concept masterplan included in the submission and described in the next chapter, has considered the constraints and opportunities with a view to progressing a high quality and deliverable development on the site.

3.2 Amenity and Neighbouring Land Uses

3.2.1 Highway infrastructure and commercial land uses are predominant on the southern / south-western boundary of the site (with some residential development opposite the south-western corner of the site). As such, key considerations here are boundary treatments and to effectively provide screening of the development both to the benefit of residents of the new development and the occupiers / users of the properties on the south-western side of Beccles Road. Notwithstanding, this boundary is not considered to be particularly sensitive.

3.2.2 The northern and western boundaries of the site abut back gardens of existing residential properties and therefore suitable separation distances are proposed to these existing properties.

3.3 Access

3.3.1 Visibility splays along the frontage of the site are achievable. Further consideration has been given to access in progressing the concept masterplan. A single point of access is sufficient for this site, alongside an emergency vehicular access.

3.4 Ecology

3.4.1 Substantive ecological assessment work has been carried out on the site. On-going species survey work is being undertaken in respect of:

- Bats – Foraging/Commuting
- Breeding Birds
- Wintering Birds
- Great Crested Newts (GCN)
- Reptiles

3.4.2 The majority of the land is in arable use and as such, the site is not ecologically sensitive (as supported by the findings of the Preliminary Ecological Appraisal carried out previously, and the other surveys). The field margins provide some habitat and offer the main opportunity for new habitat creation.

3.5 Landscape

3.5.1 Consideration has been given to site topography and wider potential landscape and visual constraints. The site is generally well screened with the existing urban area situated to the north, west and south (including highway infrastructure to the south); and a substantial existing tree belt situated along the western boundary (which will be retained).

3.6 Drainage

3.6.1 The draft GNLP has identified potential areas of surface water flooding on Beccles Road in the vicinity of the site. The development of the site will provide the opportunity to resolve this.

4 The Emerging Masterplan

4.1 Overview, Quantum and Mix

4.1.1 As referred to above, these representations are supported by a concept masterplan (see **Appendix 1**) which demonstrates how a scheme of approximately 180 dwellings (including 33% affordable dwellings) can be successfully accommodated on the site taking into account the issues relating to highways, ecology, landscape, amenity and flooding/drainage discussed above.

4.1.2 It is proposed that the scheme would include a range of one, two, three and four bedroom dwellings to help meet local housing needs, together with new publicly accessible informal open space, formal play areas, structural landscaping and sustainable urban drainage features (SuDS). One main vehicular access is proposed off Beccles Road to serve the development, with a secondary pedestrian/cycleway link off Beccles Road, which could also serve as an emergency access.

4.2 Amenity, Open Space, Landscaping and Drainage

4.2.1 Open space buffers are proposed to the site boundaries to provide areas for informal recreation and an attractive setting for the development. Existing hedgerows would be retained and enhanced, where possible.

4.2.2 In the northern part of the site, a substantive buffer has been proposed to respect the amenity of existing properties situated off Norton Road. In addition, single storey development has been shown here.

4.2.3 A further substantive buffer has been shown to the site boundary in the north western corner of the site.

4.2.4 The tree belt along the eastern boundary has been retained alongside further public open space. It is proposed that an attractive woodland walk is 'weaved' into this tree belt to provide recreational and dog walking opportunities within the site.

4.2.5 A large area of open space has been provided in the south eastern corner of the site to manage the transition between the urban fringe and the countryside.

4.2.6 Hedgerows along Beccles Road will be retained where possible, taking into account access considerations.

4.3 SuDS features are proposed in the southern corner and along the south western boundary of the site to create a semi-rural approach towards the town. This will also address any surface water drainage issues noted in the draft GNLP.

4.4 These areas of informal open space, together with the SuDS features would also provide an opportunity for landscape and ecological enhancements.

4.5 Access

4.5.1 It is noted that the emerging policy seeks two points of vehicular access to be provided into the site. Further transport work has been undertaken and the proposed primary point of access, plus emergency vehicular access point connecting to an internal proposed secondary road (as shown in the Concept Masterplan) is considered a safe and appropriate access solution for the site.

4.5.2 Norfolk County Council as local highway authority has two guidance documents relating to proposed residential developments: the Norfolk Residential Design Guide; and Safe, Sustainable Development: Aims and Guidance notes for Local Highway Authority requirements in development Management.

4.5.3 The Norfolk Residential Design Guide indicates that a single point of access is adequate for a development of less than 100 units, so considering the proposed allocation of 180 units, it would be prudent to provide two points of vehicular access. The principle of using one primary access for vehicles and a secondary emergency vehicular access (which would also act as a primary route for pedestrian and cyclists) would therefore be in line with this guidance.

4.5.4 Furthermore, the guidance contained in Safe, Sustainable Development, states in Section G2.7 that:

"Multiple points of vehicular access to classified roads ('A', 'B' or 'C' roads) from individual sites are not generally allowed.

More than one access point will only be considered if the scale of development is large enough to require an additional access point for the safe and efficient movement of traffic…

The Department for Transport (DfT) Design Note TD 41/95 deals with the accident potential at junctions and private access and states inter alia 'Access accidents were found to be about 12% of total accidents'. It is neither realistic nor practicable to form an estimate of the risk of accident at an individual access, but it is possible to say that an access will create a potential accident risk. The number of accesses on any stretch of road should therefore be kept to a minimum.

- *The occasions when more than one access point will be considered are:*
- *Where the site is so constrained so as not to be able to provide adequate on-site turning facilities.*
- *Where the development site is very large in scale requiring on-site traffic."*

4.5.5 This guidance also suggests that each proposal should be dealt with on its own merits and that standards should not be used inflexibly.

4.5.6 The Crashmap website has been reviewed, to identify collisions on the local highway network, as well as their severity, over the past five-year period. **Figure 2** indicates that there are have not been any collisions on Beccles Road in the vicinity of the site over the past five years.

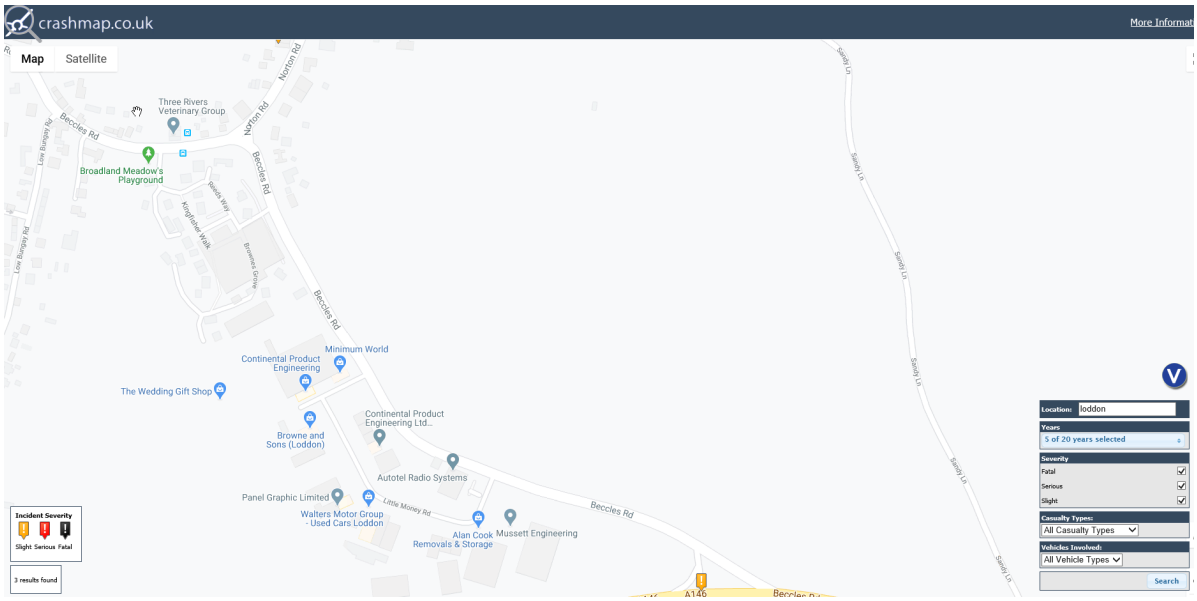

Figure 2. Collisions in the vicinity of the site over the past five years

(Source: https://www.crashmap.co.uk/Search)

4.5.7 Having one permanent vehicular access point, alongside a secondary emergency access point, is considered to align with the requirement to maintain this road safety record on Beccles Road and to ensure that "the number of accesses on any stretch of road should therefore be kept to a minimum". The provision of two, permanently available vehicular accesses would create further points of conflict on this road with no material benefit in day-to-day operational terms.

4.5.8 The design layout will make provision for sufficient on-site turning facilities for a 11.2m refuse vehicle in order to maintain road safety. Furthermore, the single point of vehicular access will be designed to be wide enough to provide unimpeded two-way vehicle movement, ensuring that a primary point of access is sufficient and compliant with the relevant standards. The secondary emergency access point will also be designed to accommodate two-way traffic flow should it be required and to provide pedestrian and cyclist access under normal operations.

4.5.9 To accommodate the access junctions and future development at the site, improvements may be needed to Beccles Road. It is foreseeable that these adjustments may include the relocation of the existing Toucan crossing, possible improvements to the existing footway/ cycleway along Beccles Road, and the extension of the 20 mph limit to the south of its existing extents.

5 Delivery and Sustainability

5.1 Deliverability

5.1.1 As a business, Hopkins Homes deliver circa 1000 homes per year with the capability and ambition to deliver more. As East Anglia's largest housebuilder, Hopkins will likely be integral to the delivery of the eventually adopted objectively assessed need over the life of the GNLP.

5.1.2 As noted above, the site is controlled by Hopkins Homes. Substantial assessment work has been undertaken by Hopkins Homes in respect of the site and which has informed the further version of the evolving Concept Masterplan. This demonstrates Hopkins Homes' commitment to the site and its ultimate delivery.

5.1.3 The further assessment work undertaken also continues to demonstrate that there are no environmental constraints to delivery and that there are unlikely to be any substantial abnormal development costs that would affect viability.

5.2 Sustainability Benefits

Locational Factors

5.2.1 The site provides a logical location for the provision of new housing at Loddon in a sustainable manner which will assist in accommodating growth requirements. The site is well connected to the existing settlement and is surrounded on three sides by built form.

Sustainable Development

5.2.2 Development of the site has the potential to make a substantive contribute to the three principles of sustainability, namely:

Economic

- Contribution to sustainable economic growth through direct construction employment and indirect employment.
- An increase in spending power arising from the additional population, available to local shops and services.
- Financial benefits to the local area through fiscal initiatives such as the New Homes Bonus, and greater levels of Council Tax.

Social

- The provision of high quality market and affordable housing.
- Enhanced environmental quality and accessible green space to the benefit of the existing and future community.
- Connectivity to surrounding areas and promotion of sustainable travel.
- CiL payment towards improving local community services, including education.

Environmental

- The adoption of high standards of design, sympathetic to the site's surroundings.
- The proposals will respect and assimilate development into the existing landscape.
- The introduction of sustainable drainage systems.
- Electric car charging points.
- The maintenance of existing habitats and protection of species and the delivery of biodiversity enhancements through providing new strategic landscaping.

Sustainable Construction, Design and Energy Efficiency

5.2.3 Hopkins Homes is proud of its green credentials and demands that its homes are energy efficient and constructed to a high standard of sustainability. Key measures relating to environmental sustainability include:

- Reducing energy demand and energy efficiency of buildings
- Water conservation and management
- Sustainable construction and materials
- Waste recycling
- On site management
- Ecological mitigation and enhancement measures

5.2.4 Hopkins Homes seeks to increase the thermal performance of the building fabric by utilising Low Carbon technology and building to enhanced robust details to achieve high level of air tightness and controlled ventilation. Measure include:

- Where specified, appliances will be A rated or above (refrigerators, freezers, dishwashers and washing machines).
- Dwellings will be provided with secure external drying spaces.
- 100% of internal light fittings will be energy efficient.
- External space/street lighting and security will be energy efficient (subject to economic and planning constraints).
- Most dwellings will have a room fitted with services, which allow the occupants to use it as a home office.
- Design Air permeability figures of below 5 will be targeted.

5.2.5 Home User Guides can be provided to enable the promotion of energy efficiency within the community of the new development and provide further resources to enable long term carbon and energy reduction by improved education on the use of the proposed Low Carbon Technologies and Local Renewable Energy Sources. They will enable the home users to understand and operate their home efficiently and make the best of what the local area has to offer.

5.2.6 By designing in features into all of their housing, Hopkins Homes promote a variety of features which improve quality of life within the dwellings and also on site. Designing homes with good natural day lighting, reducing the need to use artificial lighting and increasing the potential for solar gain while preparing for any over-heating risks by using natural ventilation all assist in this aim.

5.2.7 With regard on-site management, Hopkins Homes promote environmentally, socially considerate and accountable management of their construction sites, the construction programme will seek to achieve best practice site management principles.

5.2.8 It will optimise site activity so that the mitigation of environmental impacts are of the highest regard. Monitoring the site processes and setting targets so that reductions can be made on the use of water and energy, adopting best practice in respect of air pollution arising from site activities and over 80% of timber is recycled.

5.2.9 During the construction phase a site management plan will be produced. This will include measures for identifying, sorting and separating construction and demolition materials for re-use and recycling. The plan will also identify effective methods for minimizing construction waste.

6 Conclusions

6.1.1 The subject site is proposed in the latest version of the emerging GNLP as an allocation. Hopkins Homes endorse this approach and fully support the allocation of the site in the local plan in due course.

6.1.2 The emerging concept masterplan and further technical work undertaken, demonstrate that the site is sustainable and development would not give rise to any conflict with national planning policy.

6.1.3 The proposals would bring about substantial local benefits for both new residents, and the existing community, not least through the provision of new market and affordable dwellings across a broad mix to deliver an inclusive and balanced community.

6.1.4 Further work has been undertaken by Hopkins Homes in respect of access to the site and as such, a single access plus emergency access solution is considered appropriate. Hopkins Homes, therefore, respectfully, propose an amendment to the wording of the policy to as set out below, to allow flexibility at the planning application stage in respect of the final access solution:

POLICY GNLP0312 Land to the east of Beccles Road Loddon (approx. 7.70 ha) is allocated for residential development. This site is likely to accommodate at least 180 homes, 33% of which will be affordable.

More homes may be accommodated, subject to an acceptable design and layout being achieved and any infrastructure issues addressed.

The development will be expected to address the following specific matters:

- *~~Two points of vehicular access to be provided into the site~~ An appropriate and safe access solution must be provided to the site.*
- *Areas of surface water flooding on the Beccles Road boundary to be addressed:*
- *Design and layout must address the topography of the site and potential impact on views.*
- *The trees/hedgerows surrounding the site will be protected, enhanced and incorporated into the scheme.*
- *The design and layout of the scheme must consider amenity impacts relating to the nearby business area.*

Appendix 1 – Illustrative Masterplan

Existing boundary hedge to be retained and made good where necessary to ensure privacy for existing residents.

Existing woodland to be thinned out to allow for woodland walk.

Linear open space to enhance existing woodland.

Emergency access and cycleway / footpath link on to Beccles road.

BECCLES ROAD

Existing woodland to be thinned out to allow for woodland walk.

Existing roadside hedgerow to be retained and managed. Removal for site access and 2.4 x 43m visibility splays.

Open space and drainage feature to create semi-rural approach towards town.

APPROXIMATELY 180 DWELLINGS

SITE AREA = 76234sq.m
DEVELOPABLE AREA = 55974sq.m
TOTAL AREA OF P.O.S = 10800sq.m
TOTAL AREA OF 3no. ATTENUATION BASIN = 2000sq.m
AREA OF EXISTING WOODLAND = 7460sq.m

- Site Boundary
- Proposed Residential Area
- Proposed Public Open Space Including New Planting to Proposed Development.
- Proposed Vehicular Access Point
- Proposed Main Road Through Development
- Proposed Secondary Roads
- Proposed Area of Attenuation Basins
- Proposed Area of Single Storey Dwellings
- Proposed informal footpath route
- Existing Woodland / Trees / Hedgerow

N

0m 5m 10m 15m 20m 25m 30m

Scale Bar

Notes:

Do not scale from this drawing to ascertain dimensions.

Rev	Date	Details

HOPKINS HOMES

MELTON PARK HOUSE
MELTON, WOODBRIDGE
SUFFOLK IP12 1TJ
TEL: 01394 388811 FX: 01394 388822

Project: BECCLES ROAD, LODDON	Scale: 1/1000 @ A2
	Rev: 00
Drawing: CONCEPT MASTERPLAN	Drawn by: ST
	Date: 09.03.2020

Appendix 2 – Previous Submission to GNLP

Hopkins Homes

Greater Norwich Local Plan

Land at Beccles Road, Loddon - Vision and Delivery Document

October 2019







Issue Sheet

Report Prepared for: Hopkins Homes

Greater Norwich Local Plan

Land at Beccles Road, Loddon - Vision and Delivery Document

October 2019

Prepared by:
Signature:

Name: Ian Douglass

Title: Head of Planning
Date: October 2019

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Appendices

Appendix 1 – Illustrative Masterplan
Appendix 2 - Technical Reports:

1. **Landscape and Visual Appraisal**
2. **Tree Survey**
3. **Preliminary Ecological Appraisal**
4. **Archaeological Desk Based Assessment**
5. **Transport and Access**

1 Introduction

1.1 Preamble

1.1.1 Lanpro have been instructed by Hopkins Homes to assist in the promotion of land at Beccles Road, Loddon through the emerging Greater Norwich Local Plan (GNLP) (see location plan **Figure 1**).

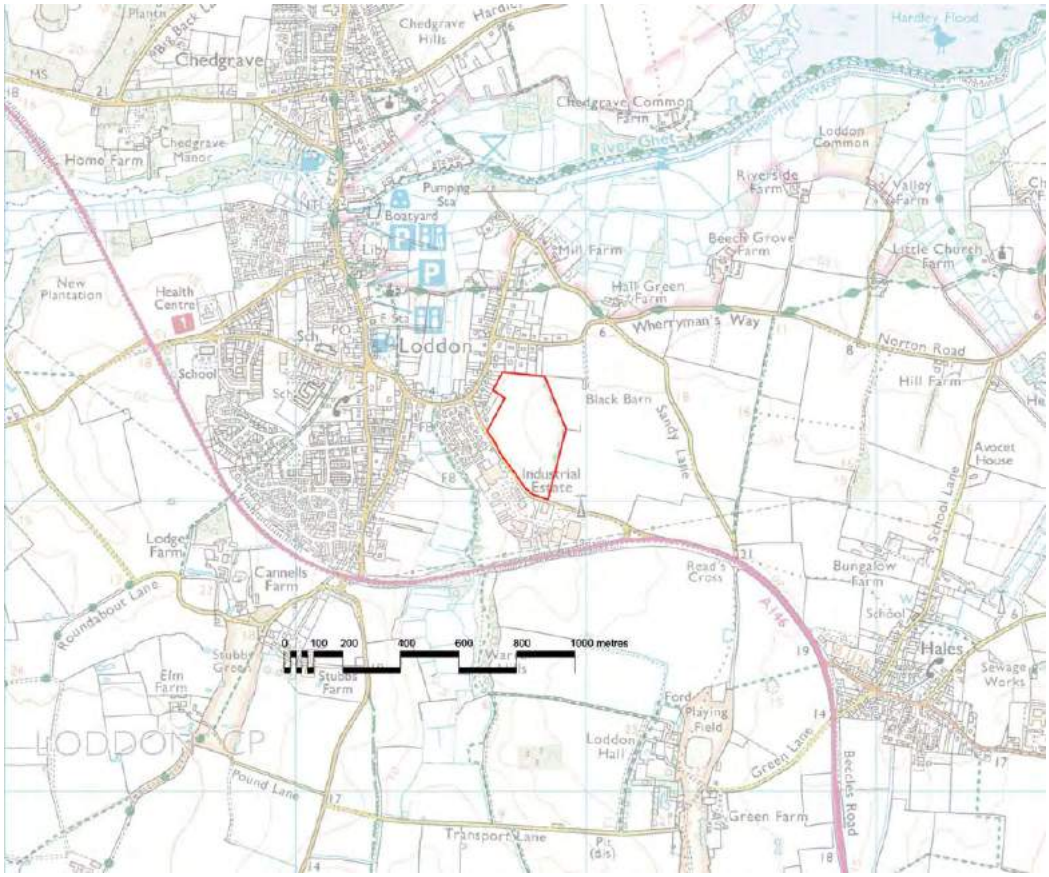


Figure 1. Site Location

1.1.2 The proposed development site consists of an existing agricultural field which is located on an elevated site to the east of Beccles Road, between the junctions of Norton Road and the A146. The site adjoins the southeast edge of the market town of Loddon and is effectively bordered by existing development to the north, south and west, being situated opposite an industrial site and housing development.

1.2 About Hopkins Homes

1.2.1 Hopkins Homes is an established and well respected house builder with its roots based in East Anglia. The Company has grown significantly over the years to become the largest independent property developer in East Anglia. It takes great pride in the significant contribution that it has made to placemaking and the creation of sustainable communities, as well as contributing to local and regional economies through creating and supporting jobs.

1.2.2 Hopkins Homes are renowned for building new homes with character and individual style and have an enviable track record in terms of delivery. They take an open-minded approach to each individual project and as a result, deliver high quality and consistently popular developments that respect local scale, vernacular and character. The Company approach is to work closely with local communities, local authorities, architects and designers to provide tailor-made developments that respect their setting.

1.2.3 Hopkins have won a number of awards both locally and nationally, recently receiving accolades at the National House Building Awards and the Norwich Society Design Awards.

1.2.4 The Company are also a significant contributor to the strengthening of communities across East Anglia. Hopkins Homes are a notable employer in the region, having appeared twice in the Sunday Times Fast Track 100 list of the UK's top 100 fastest growing companies.

1.3 Purpose of this Document

1.3.1 This Vision and Delivery Document provides information on the site and the proposed development opportunity, and supplements earlier representations that were made to the GNLP production process.

1.3.2 Notably, as a consequence of earlier submissions to the GNLP, the site is identified as GNLP0312 in the Greater Norwich Growth Board Housing and Economic Land Availability Assessment (HELAA), December 2017.

1.3.3 This report / document is now being submitted to GNLP Officers in advance of the next stage of formal Consultation on the plan. The report provides further information about the development opportunity on the site and demonstrates that it is suitable for inclusion as a preferred site / allocation in the Local Plan. In addition, this report will likely be submitted to South Norfolk Council as part of a pre-application enquiry in order to ensure a fully consultative approach has been undertaken with the relevant planning 'authorities'.

1.3.4 This document demonstrates that the site is an available, suitable and deliverable development opportunity. Whilst at an early stage in the design development process, the site has the potential to deliver in the region of 200 dwellings. Hopkins Homes have produced an Illustrative Masterplan for the site, included at **Appendix 1** of this report, which indicates a proposal of 180 dwellings and one way in which the site could come forward.

1.3.5 This submission is informed by a range of technical assessments including transport, ecology, landscape & visual, archaeology, and a tree survey (see **Appendix 2**) which demonstrates that there are no constraints to the development of the site and that it is suitable for allocation in the GNLP in due course (and / or the subject of a planning application).

1.3.6 The document addresses the following:

- The planning context within which this initial representation is submitted;
- The site and its physical and environmental context;
- The proposed development concept; and
- Deliverability and the case for allocation and planning approval.

1.3.7 The work will inform further representations to the Local Plan.

2 Planning Context

2.1 National Policy and Guidance

2.1.1 The National Planning Policy Framework ('the Framework') February 2019, sets out the Government's planning policies for England and provides a framework within which locally prepared plans can be produced.

2.1.2 At the heart of the Framework is *"a presumption in favour of sustainable development"* (paragraph 10). For Plan making this means that:

"...plans should positively seek opportunities to meet the development needs of their area and be sufficiently flexible to adapt to rapid change; strategic policies should, as a minimum, provide for objectively assessed needs for housing and other uses, as well as any needs that cannot be met within neighbouring areas..."

2.1.3 For planning decisions this means:

"*approving development proposals that accord with an up-to-date development plan without delay or ... Where there are no relevant development plan policies or the policies which are most important for determining the application are out of date granting planning permission unless:*

The application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or

Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole."

2.1.4 The main provisions of the NPPF are set out below:

- Paragraph 59 states that in order to support Government's objective of *"significantly boosting the supply of homes, it is important that a sufficient amount and variety of land can come forward where it is needed"*
- To determine the minimum number of homes needed, strategic policies should be informed by a local housing needs assessment conducted using the standard method in national planning guidance – unless exceptional circumstances justify an alternative approach which also reflects current and future demographic trends and market signals. (paragraph 60)
- Where major development involving the provision of housing is proposed, planning policies and decisions should expect at least 10% of the homes to be available for affordable home ownership.
- Paragraph 72 states *"The supply of large numbers of new homes can often be best achieved through planning for larger scale development, such as new settlements or significant extensions to existing villages and towns, provided they are well located and designed, and supported by the necessary infrastructure and facilities. Working with the support of their communities, and with other authorities if appropriate, strategic policy-making authorities should identify suitable locations for such development where this can help to meet identified needs in a sustainable way."*
- Paragraph 73 requires LPAs to identify and update annually a supply of specific deliverable sites sufficient to provide a minimum of five years' worth of housing against their housing requirement set out in adopted strategic policies or against their local need where the strategic polices are more than five years old.
- As set out in paragraph 74, a five year supply of housing can be demonstrated where it has been established in a recently adopted plan or in a subsequent annual position statement which has been produced through engagement with developers and others who have an impact on delivery and been considered by the Secretary of State (SoS) (and incorporates the recommendations of the SoS) where the position on specific sites could not be agreed during the engagement process.

- In building a strong, competitive economy, paragraph 80 identifies the need to support economic growth and productivity to build on an area's strengths, counter any weaknesses and address the challenges of the future.
- Paragraph 85 states that planning policies should recognise that residential development often plays an important role in ensuring the vitality of centres and encourage residential development on appropriate sites.
- Paragraph 109 confirms that development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety or the residual cumulative impacts on the road network would be severe.
- Paragraph 124 confirms that the creation of high-quality buildings and places is fundamental to what the planning and development process should achieve.

2.2 The Greater Norwich Local Plan and its Growth Strategy

2.2.1 The site has been put forward to earlier stages of the GNLP production process. The December 2017 HELAA identified the site as being suitable for further consideration as a contributor to housing land supply:

"This site is located on the edge of the built up area of Loddon, opposite the industrial estate with good accessibility to services. Initial highway evidence has highlighted concerns that there are potential access constraints which could be overcome by development. Subject to suitable footpath provision any potential impact on the functioning of local roads could reasonably be mitigated. The site is at low risk of flooding although the edge of the site facing Beccles Road has a small area at risk of surface water flooding. Enhancement to the Water Recycling Centre and sewerage infrastructure upgrades may be required. There are no significant landscape, historic environment, townscape or biodiversity concerns on the site, although it is adjacent to conservation area with listed buildings to the north. There are a number of constraints that have been identified, but based on the current evidence, the site is considered suitable for the land availability study." (P770, HELAA, December 2017).

2.2.2 This document addresses the 'technical' matters raised in the HELAA.

2.2.3 The Greater Norwich Development Partnership presented a paper to the Greater Norwich Growth Board (GNGB) on 26th September 2019 outlining their proposed planning strategy for growth for the Draft GNLP.

2.2.4 The paper confirms that the housing need for the Plan Period is 42, 000 new homes with Key Service Centres (KSC) such as Loddon to accommodate 8% of this growth. It is noted from earlier GNGB papers that high levels of commitment in Blofield/Brundall and Poringland/Framingham Earl and environmental and traffic constraints in Wroxham suggest limiting further growth in these locations, with the additional growth largely shared between Acle, Hingham, Loddon (our emphasis) and Reepham.

3 The Site in Context

3.1 Site Location and Context

3.1.1 The site situated off Beccles Road, Loddon, is located on sloping ground on the eastern side of a tributary of the River Chet, which runs directly south to north and joins the Chet approximately 400 metres north-east of the town centre. The site is currently a single arable field of approximately 7.6 hectares, bounded on the eastern and north-eastern sides by a 20 metre-wide tree plantation. The plantation is approximately 20 years old and of mixed deciduous and coniferous trees about 8 metres high. Along the eastern side of the plantation are a number of mature Oak trees.

3.1.2 The site fronts onto Beccles Road with an established hedgerow, primarily Hawthorn, and maintained at a height of approximately 2 metres. Between the hedgerow and the highway is a footpath/cycleway and a 2 metre-wide grass verge.

Figure 2. Aerial Image

3.1.3 Vehicular access to the site is currently provided by an agricultural track on the southern side of the site, perpendicular to Beccles Road. In the vicinity of the site, Beccles Road is a two lane, single carriageway access road, with a broadly north-west to south-east alignment. It is subject to a 30mph speed limit along the southern frontage of the site, and this speed limit changes to 20mph along the western frontage of the site close to the junction with Town Farm Drive.

3.1.4 Beccles Road has central line markings and a discontinuous cycleway/footway on the eastern edge, changing to the western edge in the vicinity of the western frontage of the proposed site.

3.1.5 Street lighting is present on Beccles Road as it bears north past the site towards the existing settlement of Loddon.

3.1.6 Beccles Road links to the A146 to the southeast of the site. The A146 is a primary route that bypasses the market town of Loddon, connecting Norwich in Norfolk to Lowestoft in Suffolk. Close to its junction with Beccles Road, the A146 is subject to the National Speed Limit (60mph).

3.1.7 To the north of the site, Beccles Road curves to the west, providing access to the market town of Loddon to the northwest, and residences along Norton Road to the northeast.

3.1.8 Walking represents the most sustainable mode of travel and the Chartered Institution of Highways and Transportation (CIHT) document Guidelines for Providing for Journeys on Foot (CIHT, 2000), notes that an average walking speed of three miles per hour can be assumed. By this measure, a pedestrian could walk approximately 1,200m in 15 minutes, and 2,000m in 25 minutes. Figure 3 below shows the approximate walking distance from the application site to various local amenities and services within Loddon, and it can be observed that all major services in Loddon are within this.

Services/Amenities	Location	Distance from the Site
Chet Valley Medical Practice	George Lane	1360m
Loddon Junior School	Kittens Lane	1350m
Loddon and Chedgrave Jubilee Hall (Community centre & Gym)	George Lane	1350m
Loddon Marina	Bridge Street	1250m
General shops, restaurants and facilities in town centre	High Street, Church Plain and Bridge Street	1200m
Loddon Parish Council	Library Annexe, Church Plain	1100m
Holy Trinity Church	Church Plain	1070m
Loddon Football Park	Crossway Terrace	990m
Loddon Library	Church Plain	980m
Hobart High School	Kittens Lane	965m
Loddon Nursery School	High Street	920m
Loddon Infant and Nursery School	Kittens Lane	865m
Loddon Post Office	High Street	765m
Broadlands Meadow Playground	Beccles Road	460m
3 Rivers Veterinary Group	Beccles Road	400m

Figure 3. Distance of local amenities and services from the site[1]

3.1.9 The site is clearly in a sustainable location.

3.2 Site Characteristics

3.2.1 Beccles is identified as a Key Service Centre in the adopted Greater Norwich Joint Core Strategy situated close to the Broads. The Landscape and Visual Appraisal (LVA) accompanying this report confirms that it is considered that the proposals will not have a detrimental effect on the landscape character or setting of the Broads.

3.2.2 The site is located within the Chet Tributary Farmland Landscape Character Area, effectively on the urban/rural fringe of the town of Loddon. The site is not affected by any landscape designations.

3.2.3 The Site slopes gently down, roughly from south east to north west, with levels of just over 19m AOD (above Ordnance Datum, or mean sea level) on the eastern side, falling to around 10m AOD

[1] Extract from '*Transport and Access Strategy, Ref: PB9290-RHD-ZZ-XX-RP-Z-0001, Date:14 June 2019'* prepared by Royal Haskoning.

along Beccles Road to the west. It is located on the eastern side of the valley of a stream which drains into the River Chet to the north.

3.2.4 As noted in the District Landscape Character Assessment this is an area with landform which slopes gradually upwards from the River Chet and low-lying Broads in the north east at Loddon and Chedgrave to higher ground towards the south and south west. The small tributary river has an obvious influence in the landscape, with associated features including pockets of pasture, road bridges, village ponds and willow trees.

3.2.5 The eastern and south-eastern boundary of the application site has a 20 metre-wide modern plantation comprising mixed deciduous and coniferous trees. Analysis of historic mapping shows that this plantation was not present in 1988 and includes some veteran Oak trees on the south-eastern limb. These veteran trees indicate a field boundary shown on the earliest maps and add to the rural character of the area. The new plantation has established well and is forming an important landscape feature on a gentle ridge, enclosing the application site. It is currently around 8 metres in height but should ultimately reach 15 metres or more. This plantation is visible for higher and more distant parts of the neighbourhood and makes an important contribution to the wooded skyline.

3.2.6 The LVA indicates that a combination of topography and vegetation results in the site being almost completely screened from views from an easterly direction, including the Broads area. The LVA shows that the most extensive views are potentially to the south-west and west, although these views are further limited by the extensive tree cover.

3.2.7 A desk top search shows no tree preservation orders on or adjacent to the site and that the site does not sit within a conservation area. The tree report contained at **Appendix 2** identifies the trees on site.

3.2.8 The most significant vegetation is the large tree belt that runs from the south east to north east boundary. This tree belt was likely planted as part of a Forestry Commission planting scheme.

3.2.9 Of the vegetation recorded within the site the percentage split between the following categories is as follows:

- Category B (retention highly desirable) 53% - 8 individuals or groups
- Category C (retention desirable) 40% - 6 individuals or groups
- Category U 7% (remove on arboricultural grounds) - 1 individual

3.2.10 From an ecological perspective, the site comprises an arable field with rough semi-improved grassland margins, with boundary hedgerows and a mixed plantation woodland shelterbelt along the eastern boundary. The site is not directly affected by any ecological designations. There are three (largely overlapping) European designated sites within 8km of the site boundary. Broadlands Special Protection Area (SPA), Broadland Ramsar, and The Broads Special Area of Conservation (SAC), are located 0.9km north-east of the site.

3.2.11 There are five national statutory designated sites within 5km of the site, these include four Sites of Special Scientific Interest (SSSI) and one National Nature Reserve (NNR). Details of all statutory designated sites within 5km of the site are provided in the Preliminary Ecological Appraisal (PEA) in **Appendix 2**.

3.2.12 The site falls within the Natural England SSSI Impact Risk Zone (IRZ) for Hardley Flood SSSI in relation to residential development.

3.2.13 There are four non-statutory designated sites within 2km of the site (three County Wildlife Sites (CWS) and one Roadside Nature Reserve (RNR)) (Table 2). RNR 96 is the closest at c.0.3km to the south-east of site.

3.2.14 Further surveys have been advised for bats (seasonal activity transects and static deployments), birds (breeding and wintering bird surveys), great crested newts (eDNA survey), and reptiles (presence/likely absence surveys).

3.2.15 Notwithstanding, given the fact that the site is an arable field typical of the area, and given the findings of the PEA, the site is not considered to be particularly sensitive from an ecological perspective.

3.2.16 In terms of relevant designated heritage assets, no nationally designated World Heritage Sites, Scheduled Monuments, Historic Battlefield sites or Historic Wreck sites lie within the one-kilometre radius study area around the site. There are a large number of Listed Buildings within the study area, principally within the Loddon Conservation Area immediately to the northwest of the site; the Built Heritage aspects of the proposed development will be addressed within a separate Heritage Assessment document. The study site has remained undeveloped agricultural land throughout the historic periods.

3.2.17 A review of available archaeological and historical sources indicates the site has a theoretically high archaeological potential for activity dating from the Roman period, due to the collection of quantities of Romano-British pottery during a fieldwalking survey in the 1980s and the presence of cropmarks of unknown date recorded on the site. A moderate potential has also been identified for evidence of later prehistoric and Anglo-Saxon activity, again due to the fieldwalking collection, available cropmarks and the site's location on an open, well-drained valley side.

3.3 The Development Proposal

Illustrative Masterplan

3.3.1 Whilst at an early stage in the design development process, Hopkins Homes have produced an Illustrative Masterplan, included at **Appendix 1,** which indicates a proposal of 180 dwellings consisting of the following mix of housing:

18 no: 1 beds

54 no: 2 beds

72 no: 3 beds

36 no: 4 beds

3.3.2 Hopkins Homes will work towards a policy compliant scheme (28%) in respect of affordables, subject to viability considerations.

3.3.3 Hopkins Homes will also take into account housing mix requirements as set out in the Strategic Housing Market Assessment and working with South Norfolk Council's Housing Enabling Officer as the site progresses through the planning process.

3.3.4 A range of densities could be delivered across the site as shown in the Illustrative Masterplan. The emerging layout seeks to create an appropriate development at settlement scale which is specific to the site and appropriate for the existing setting. The development will generally comprise 1.5 to 3 storey buildings.

3.3.5 Consideration has been given to creating a series of linked green spaces running though the development from north to south. Greenspace/ surface water drainage is proposed in the southern part of the site fronting Beccles Road. The substantial tree belt on the eastern boundary of the site will be retained.

Sustainable Transport

3.3.6 There is a continuous footway/ cycleway along the eastern side of Beccles Road, adjacent to the site and separated from the carriageway by a 1.5m wide grassed verge. This is part of a rural footway / cycleway that connects Loddon and the village of Hales to the east. To the south of the site this footway/ cycleway is continuous. However, at the point along Beccles Road where Loddon's residential edge begins, the footway/ cycleway changes to the western side of Beccles Road. At the point in Beccles Road at which the cycleway ends, a paved footway continues along both sides of Beccles Road, High Street and Bridge Street into Loddon town centre.

3.3.7 There is an existing dropped kerb crossing on Beccles Road adjacent to the site. This crossing has tactile paving, and associated lining on the footway/ cycleway approaches. Hazard warning

signs indicating the presence of cyclists to drivers are located on Beccles Road on the approach to the pedestrian crossing point.

3.3.8 Although there are no Public Rights of Way through or immediately adjacent to the site, there is a public footpath aligned north to south along the drain at the west of the industrial area opposite the site. This footpath winds through the woodland, crosses drains to the west of the industrial area, then passes through fields and provides gated access to Low Bungay Road. The development will be well connected to the existing town.

Access

3.3.9 Access proposals to the site are shown in the Transport Statement in **Appendix 2**. To ensure that a safe, sustainable and appropriate means of vehicular access can be achieved, the existing road properties including geometry and speed limits have been considered. Due to the scale of development that may be brought forward at the site, two points of vehicular access would likely be required, via Beccles Road. As Beccles Road is subject to a 30mph speed limit, the Manual for Streets (DfT, 2007) is applicable. In accordance with Table 7.1 of the Manual for Streets a minimum offset of 43m from all existing and consented accesses and junctions has been incorporated into the potential access locations points for the site.

3.3.10 The two potential access points for the proposed allocation are feasible as they demonstrate good visibility and are compliant with the applicable standards and guidance. A safe and appropriate means of vehicular access can be achieved at this site (as shown in Appendix B of the Transport Statement).

3.3.11 The indicative geometry associated with the vehicular access junctions is based on the Norfolk Residential Design Guide and has been tested using swept path analysis for a large refuse vehicle, as the largest sized vehicle that is likely to require regular access to the site.

3.3.12 The indicative junction layouts also allow for footway/ cycleways to be provided to the desire lines

4 Technical Matters

4.1 Landscape and Visual

4.1.1 The LVA concludes the following:

Landscape

4.1.2 The Site comprises a single arable field, bounded by a plantation woodland belt which is to be retained and as such there are no landscape features within it. The proposals would require the removal of some sections of established hedgerow to provide for access, but other than that, it is considered that there would be no losses of visually significant vegetation.

4.1.3 The '*magnitude of change'* to the landscape brought about by the proposed development is considered to be medium - the parts of the Site proposed for built development would obviously undergo a significant change (from open land to new housing), but the overall development would have a limited impact on the countryside around it, or on the settlement of Loddon to its north. The new houses would mainly be visible from close to the Site only, and in the context of a local edge of settlement area where such views are characteristic. No significant landscape features would be lost and the new development would occupy an area enclosed by the main part of the settlement to the north, plantation woodland to the east and south-east, and by the Beccles Road to the west

4.1.4 The '*effects'* of the proposed development on the local landscape character would be moderate adverse. This would be in the winter on completion of the development, and effects in the summer would be at a lower level. There would be some sense of development and the edge of the town extending out into the presently partly open land to the south of the settlement, but this would be limited by the fact that built development would not extend beyond the enclosing effect of the plantation, and by the presence of the existing commercial development on the opposite side of Beccles Road.

4.1.5 These effects would be expected to decrease over time, as landscape measures begin to mature, and as the new development becomes integrated more fully with the surrounding area. Whilst the above effects have been categorised as slight or moderate adverse, given there would be some inevitable and in principle harm as a result of the introduction of new buildings into what is presently an undeveloped site, it should be noted that the new houses would not in themselves necessarily be unsightly, intrusive or discordant (any harm occurs as a result of the introduction of development into what is presently a greenfield site), and the proposals have the opportunity to establish the parameters for an attractive and high quality form of development.

Visual Effects

4.1.6 The LVA confirms that a combination of topography and vegetation results in the site being almost completely screened from view from an easterly direction, including the Broads area. The most extensive views are potentially to the south-west and west, although on-site examination demonstrates that these views are further limited by the extensive tree cover.

4.1.7 There would be some short distance but filtered views of the new development on the Site for people passing along Beccles Road, whether by car or cycle, or on foot. The views would be over (or in the winter, through) the retained roadside hedge, and there would be clear views of the dwellings as they rise up the sloping land.

4.1.8 There would on average be a moderate magnitude of change in the view (the change would be locally higher where new houses are closer to the Site boundary, and lower where built development is set further back), and effects would be moderate adverse for pedestrians and cyclists (owing to their greater sensitivity) and slight adverse for motorists, though all of these effects would be experienced for a short duration only in an overall journey. There would also be some other more distant and limited views from further to the south west, mainly in the winter, but any such effects would be slight adverse at worst.

4.1.9 Intervening topography and vegetation, and in particular the boundary plantation, limit views toward the site.

4.1.10 In addition to the above, there would also be some effects on private views from nearby residential properties. From the north and north-west there would be some filtered views of new dwellings in the north western part of the Site from houses and the rear gardens along the eastern side of Norton Road, mainly from first floor windows. There would be a medium degree of change for receptors of medium sensitivity, and moderate adverse visual effects. However, the degree of impact will depend on the proximity of the new dwellings, their height and any mitigation boundary treatment.

4.1.11 As would be the case for landscape effects, the above visual effects would be in the winter, and effects in the summer would be at a lower level. The effects would also be expected to decrease slowly with time.

4.1.12 In summary, there would be some adverse effects on the character of the local landscape, but those effects would be on a limited area, and would decline over time. The limited adverse landscape effects which have been identified are no more than would be expected from development of any edge of settlement greenfield site and result in the main from the in-principle loss of open land. The Site is therefore considered suitable in principle for development of the type proposed.

4.1.13 The visual effects identified would be at a similar level, but again are a largely inevitable consequences of development on the edge of a settlement, though in this case the Site is generally well screened and relatively few existing properties would be affected.

4.2 Trees

4.2.1 The development layout is not currently fixed and the following observations can be made in respect of trees:

- The site characteristics and location of the vegetation to site boundaries will allow for most of the vegetation to be retained. It is assumed that the only vegetation at risk is G5 and T8 located to Beccles Road (see Tree Report **Appendix 2**) that may be within any visibility splay for a new access.
- Trees located within the private gardens of the dwellings on all boundaries must be retained regardless of any proposal. Any tree works required must first notify the owners of said works and be limited to the boundary line.
- Shading constraints are considered very low
- Construction constraints are considered low

4.2.2 Overall it would be considered that the tree constraints are very low, with the exception of any proposed access point and the planted tree belt to the eastern boundary which is accommodated in the current Illustrative Masterplan.

4.3 Ecology

4.3.1 The site consists of an arable field with areas of semi-improved grassland and mixed woodland plantation, with hedgerows along the site boundaries. The site is dominated by arable habitat, which is of inherently limited ecological importance, with major ecological interest limited to the semi-improved grassland and boundary habitats. The woodland plantation and boundary hedgerows (which are currently in sub-optimal condition) are due to be retained and the development provides an opportunity to enhance the value of the site for wildlife.

4.3.2 There are five SSSI sites within 5km of the site, with three CWS and one RNR within 2km. Broadlands SPA/SAC/Ramsar is located approximately 900m from the site, as is Hardley Flood SSSI, which is contained within the SPA/SAC/Ramsar boundary.

4.3.3 Given the proximity to the SPA/SAC/Ramsar site further assessment may be required in the form of an HRA, however, this is no different to most development sites / land around Loddon and the site is considered to represent a good opportunity for required expansion due to its location and its limited ecological value. Mitigation measures are likely to include the provision of green space

for residents to relieve recreational pressure on local designated sites and the implementation of pollution control methods during the construction and operational phases of the development.

4.3.4 Further survey effort has been advised for bats (seasonal activity transects and static deployments), birds (breeding and wintering bird surveys), great crested newts (eDNA survey), and reptiles (presence/likely absence surveys).

4.3.5 Precautionary measures are set out to mitigate negative effects on badger, invertebrates, nesting birds, and other notable species.

4.3.6 Notwithstanding, it is considered that all significant impacts on biodiversity, including potential adverse impacts upon specific protected species, habitats and designated sites can be wholly mitigated and there is scope within the proposal to enhance the ecological value of the site.

4.4 Archaeology and Heritage

4.4.1 There is one Grade II Listed Building in close proximity to the site at 5 Norton Rd (see below).

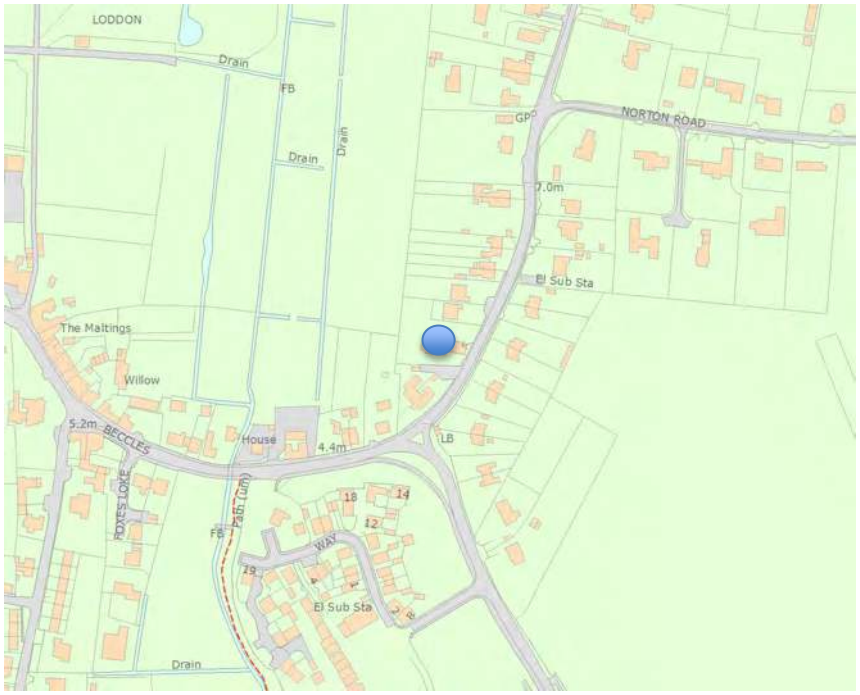


Figure 4. Listed building at 5 Norton Road.

4.4.2 In terms of relevant designated heritage assets, no nationally designated World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck sites lie within the vicinity of the study site. The study site has remained undeveloped agricultural land throughout the historic periods.

4.4.3 The study site is considered to have a theoretically high archaeological potential for activity dating from the Roman period and moderate potential for the later Prehistoric and Early-Middle Anglo-Saxon periods. This assessment is arrived at with reference to the fieldwalking data, potential cropmark features and the site's topographical and geological location. All other periods (Early Prehistory, Late Saxon, Medieval and post-Medieval) are assessed as having a low archaeological potential.

4.4.4 Overall it would appear that the proposed development of this site could have an archaeological impact, although nationally significant archaeological assets are not anticipated on the site.

4.4.5 Therefore, it is anticipated that the Norfolk County Council archaeological advisor will require further archaeological assessment. On the basis of the available evidence, it is recommended that a programme of archaeological investigation comprising geophysical survey and targeted archaeological trenching, would form an appropriate archaeological assessment strategy in this particular instance.

4.5 Transport and Access

4.5.1 A review of the existing transport infrastructure reveals that the proposed site is well served by existing public transport, pedestrian and cycling infrastructure which provides links to the A146 and other settlements to the south and the town of Loddon to the north.

4.5.2 Potential vehicular access points have been identified for the site, which take account of the existing points of access on Beccles Road. Given the level of visibility achievable at the potential access points, it is evident that the proposed sites can be accessed safely without hindering the integrity of the existing highway network.

4.5.3 In addition, it has been demonstrated that it is feasible to provide a limited package of off-site works (potential footpath widening and bus stop improvements if required) which would accommodate the proposed level of development and enhance the provision of sustainable travel within the local community.

4.5.4 On this basis, it is considered that there is no reason relating to highways access and infrastructure provision which should hinder the progression of the allocation of the site or the granting of planning permission.

4.6 Drainage

4.6.1 The site is identified on the Environment Agency (EA) web based flood map as lying in the low probability flood area (Flood Zone 1). A Flood Risk Assessment (FRA) to consider the site surface water drainage strategy and other potential sources of flooding is currently being prepared and will inform the emerging development proposals, as will a surface water and foul water drainage strategy.

4.6.2 The 2017 HELAA assessment of the site states:

"The site is at low risk of flooding although the edge of the site facing Beccles Road has a small area at risk of surface water flooding."

4.6.3 Hopkins Homes have carried out intrusive site investigation (SI) work, including soakage testing across the site with preliminary results indicating that infiltration may be viable, and whilst the surface water drainage solution and layout for the development will continue to evolve through the next stages of the planning process, the SI work indicates that surface water drainage / flooding are not a constraint to development.

4.6.4 It is assumed that foul water will discharge to adopted sewers adjacent to the site.

5 Delivery and the Case for Allocation

5.1 Deliverability

5.1.1 The site is controlled by Hopkins Homes, who are an experienced regional housebuilder that has developed sites elsewhere in South Norfolk. As such, the site is available for development and is deliverable. The site could accommodate approximately 180 – 200 dwellings.

5.1.2 This document establishes that there are no technical and environmental constraints to delivery and that there are unlikely to be any substantial abnormal development costs that would affect viability.

5.1.3 As a business, Hopkins deliver circa 600 homes per year with the capability and ambition to deliver more. As East Anglia's largest housebuilder, Hopkins will likely be integral to the delivery of the eventually adopted objectively assessed need over the life of the GNLP.

5.2 The Benefits of the Development

5.2.1 Delivery of the development gives rise to the provision of a mix of homes contributing to housing supply where there has historically been (and still appears to be, given recent planning appeal decisions) a consistent under provision of dwellings.

5.2.2 There is the opportunity now, through the production of the GNLP to significantly boost housing supply in accordance with the NPPF and an appropriately established objectively assessed need.

5.2.3 The proposals give rise to the opportunity for significant social and economic community gains, namely:

- A potential policy compliant amount of affordable housing.
- The provision of child's play space and other public open space within the site.
- The potential provision of bus stop improvements to ensure access for all.
- Additional footfall to be created by the new residential population and the ability of the development to increase local spending to the benefit of the vitality and viability of local services.
- Payment of Community Infrastructure Levy for use towards infrastructure projects on the Council's Regulation 123 list.
- Central Government's New Homes Bonus Scheme which will be a source of additional revenue.
- The provision of a number of new jobs during the construction phase which is of additional economic benefit.
- Contributions to Council Tax from residents of the new development.

5.3 Design, Built Form and Local Character

5.3.1 The precise nature of the development will be determined through a planning application and detailed design stage, however, the illustrative masterplan included in this report demonstrates how the quantum of proposed development can be appropriately and sustainably achieved on the site whilst respecting its environmental context. It also demonstrates how the development can respect the residential and visual amenities of the immediately adjoining residents and the wider area and deliver a mixed and balanced residential community.

5.3.2 The current illustrative masterplan provides for new areas of landscaping within the site and along its boundaries, to assist in assimilating the proposed housing within its surroundings and limit instances of privacy loss.

5.3.3 The proposed site is well connected to the existing settlement being surrounded on three sides by built form.

5.3.4 The provision of child play space and open space that can be provided within the site, will bring about public benefit.

5.3.5 From an ecological perspective, it has been established through the PEA that there is scope within the proposal to enhance the ecological value of the site. This may be delivered via a variety of measures which may be confirmed and delivered through the provision of an Ecological Management Plan (EMP) at the detailed design stage.

5.3.6 In a broader context, the form of development identified in the illustrative masterplan would constitute an extension to the existing character of the area and wholly accord with the prevailing nature of the built environment to the west, north and south.

5.3.7 The proposed development can, through the application of appropriate design at the reserved matters stage, achieve high quality design and enhance the environment and existing locally distinctive character.

5.4 Sustainability

5.4.1 It is evident from this document that the site (and its development) will bring about substantive sustainability benefits, namely:

Economic

- Contribution to sustainable economic growth through direct construction employment and indirect employment.
- An increase in spending power arising from the additional population, available to local shops and services.
- Financial benefits to the local area through fiscal initiatives such as the New Homes Bonus, and greater levels of Council Tax.

Social

- The provision of high quality market and affordable housing.
- Enhanced environmental quality and accessible green space to the benefit of the existing and future community.
- Connectivity to surrounding areas and promotion of sustainable travel.
- CiL payment towards improving local community services, including education.

Environmental

- The adoption of high standards of design, sympathetic to the site's surroundings.
- The proposals will respect and assimilate development into the existing landscape.
- The introduction of sustainable drainage systems.
- The maintenance of existing habitats and protection of species and the delivery of biodiversity enhancements through providing new strategic landscaping.

5.4.2 Further evidence in respect of these matters will be addressed in later stages of the GNLP process.

6 Conclusions

6.1.1 Loddon is identified in the emerging GNLP as a growth location. Promoting the site actively supports the Council and Growth Board's growth stratgey.

6.1.2 The site has been identified in the HELAA as suitable for housing development. Any identified issues in the HELAA assessment of the site, are classified as 'Amber' (using a RAG assessment approach). These are limited to access / transport / roads; surface water issues (associated with part of the site); and compatibility with neighbouring uses. This report confirms that none of these matters are a constraint to development.

6.1.3 The Illustrative Masterplan demonstrates that the site has the capability of delivering in the order of 200 new homes to assist the Council / Growth Board in meeting identified housing needs.

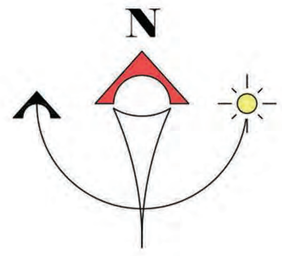
6.1.4 The site has been shown within this report to provide a logical location for the provision of new housing at Loddon in a sustainable manner which will assist in accommodating growth requirements. The site, given its location; the quantum of proposed development that it can accommodate; and the lack of adverse impacts associated with such a development; make it the most appropriate site for new development at Loddon.

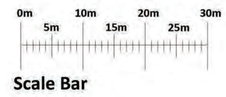
6.1.5 The proposals will bring about substantial local benefits for both new residents, and the existing community, not least through the provision of new market and affordable dwellings across a broad mix to deliver an inclusive and balanced community.

6.1.6 This site is available immediately and there are no impacts of this development, at this location that would significantly outweigh its benefits, and Hopkins Homes consider that there is no sound planning reason why the site cannot be allocated for the proposed use or approved for such a development.

Appendix 1 – Illustrative Masterplan

Loddon, Beccles Road





Site Area - 76279.3m²
Developable Area = 68338m²
Quantum of P.O.S = 7941.3m²

Housing Mix

18no : 1 Beds
54no : 2 Beds
72no : 3 Beds
36no : 4 Beds

Beccles Road

Illustrative Masterplan - Dec 2018 - 1/500 @ A0

HOPKINS
HOMES
MELTON PARK HOUSE
MELTON, WOODBRIDGE
SUFFOLK IP12 1TJ
TEL: 01394 446800. FX: 01394 389605.

Appendix 2 – Technical Reports

1. Landscape and Visual Appraisal

Beccles Road, Loddon

Proposed residential development

Landscape and Visual Appraisal

27th May 2019

DRAFT

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Beccles Road, Loddon

Proposed residential development

Landscape and Visual Appraisal

25th May 2019

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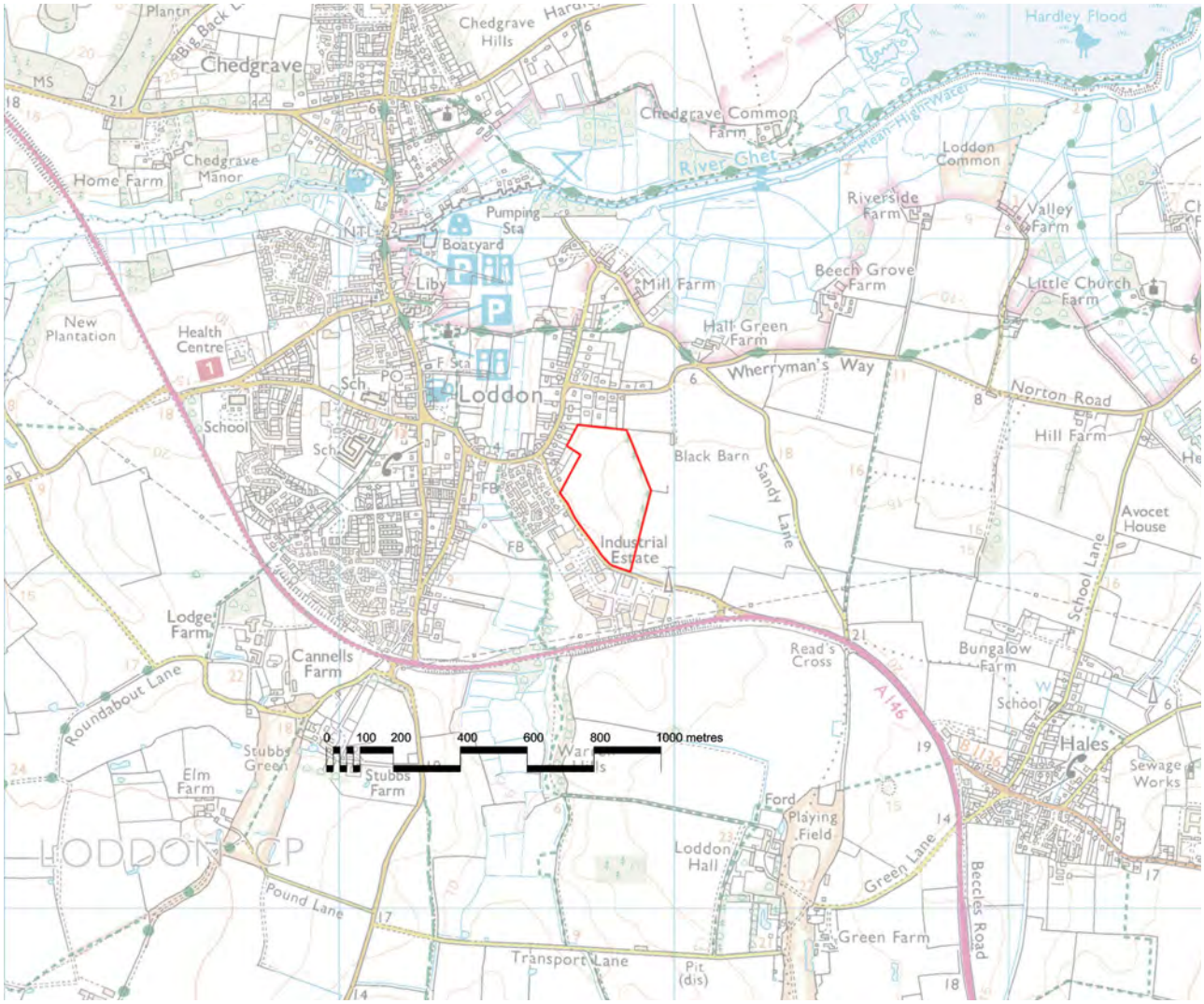
1. INTRODUCTION

1.1 This Landscape and Visual Impact Appraisal has been prepared to accompany proposals for new residential development at Beccles Road, Loddon.

Purposes of the Document

1.2 The purpose of this document is to assess the landscape, visual and cultural impacts of the potential development on the site. The document evaluates the contribution of the site to the landscape character, visual amenity and cultural and heritage features of the local area before assessing the potential impacts of the development on that character and amenity.



Site location - Beccles Road, Loddon

1.3 This report is structured as follows:

Context

1.4 This section assesses, firstly the wider regional landscape context of the site, and, secondly, the local baseline landscape context which has a bearing on the capacity of the site to accommodate the development. These baseline factors include such elements as the local topography, hydrology, land use, field boundaries, settlement pattern , and historic landscape features. These baseline features were analysed on the basis of a combination of desktop research and field walking and visual survey.

Site assessment

1.5 In landscape and visual impact assessments, a distinction is drawn between landscape effects (i.e. effects on the character or quality of the landscape irrespective of whether there are any views of the landscape, or viewers to see them) and visual effects (i.e. effects on people's views of the landscape from public vantage points, including public rights of way and other areas with general public access, as well as effects from any residential properties).

1.6 Photographs contained within this document were taken using a digital camera with a lens focal length approximating to 50mm, to give a similar depth of vision to the human eye.

Conclusions

1.7 This section summarises the broader landscape context and assesses the impacts of the proposed development and associated activity on the site.

1.8 This landscape and visual assessment was undertaken only from public rights of way or from land under the control of the site owner. Direct views from private property were not possible, although potential views from neighbouring properties were assessed as far as was possible from nearby public rights of way. The assessment was undertaken during May 2019.

This report has been prepared by Luke Broom-Lynne CMLI MRTPI, Chartered Member of the Landscape Institute and the Royal Town Planning Institute.

Site description

1.9 The site off Beccles Road Loddon is located on sloping ground on the eastern side of a tributary of the River Chet, which runs directly South to North and joins the Chet approximately 400 metres north-east of the town centre. The site is currently a single arable field of approximately 7.6 hectares, bounded on the Eastern and North-eastern sides by a 20 metre-wide tree plantation. The plantation is approximately 20 years old and of mixed deciduous and coniferous trees about 8 metres high. Along the eastern side of the plantation area number of mature Oak trees, marking the former

1.10 The site fronts onto Beccles Road with an established hedgerow, primarily Hawthorn, and maintained at a height of approximately 2 metres. Between the hedgerow and the highway is a footpath/cycleway and a 2 metre-wide grass verge.

Aerial view of the application site

2. Personal Statement

2.1 This report has been prepared by Luke Broom-Lynne CMLI MRTPI.

2.2 I am an independent Chartered Landscape Architect and Chartered Town Planner with over 30 years in professional practice. I was awarded a BA Degree in Landscape Architecture from Leeds Metropolitan University in 1983, followed by a Post-graduate Diploma (with commendation) in 1985. I have been a Chartered member of the Landscape Institute since 1989 and of the Royal Town Planning Institute since 2004.

2.3 I worked in initially in the public sector, including senior posts in the planning teams of the Broads Authority and Norwich City Council. I have worked in the private sector for the past 18 years, including a period as Partner in a major regional planning and property consultancy. I now work as an independent landscape planning consultant, involved in Landscape and Visual Impact Assessment, Urban Design and Masterplanning for a wide range of commercial and residential projects throughout the UK.

2.4 Major recent projects have included

- University of East Anglia – Landscape Strategy
- Bewilderwood, Tatton Park and Hoveton – LVIAs and Landscape Strategy
- North Weald AONB and Essex Coast - LVIAs for new solar farms
- Future Biogas – LVIAs and landscape strategy for various power plants in Lincolnshire, Staffordshire, and Cambridgeshire.
- Coltishall airfield – LVIA and landscape strategy.

2.5 I believe that my submission complies with the requirements of the Codes of Professional Conduct of the Royal Town Planning Institute and the Landscape Institute.

3. Executive Summary

3.1 This Landscape and Visual Appraisal has been undertaken in respect of proposals for housing development comprising 180 dwellings on land to the east of Beccles Road, Loddon.

3.2 The magnitude of change to the local landscape brought about by the proposed development would be medium - the parts of the Site proposed for built development would obviously undergo a significant change (from open land to new housing), but the overall development would have a limited impact on the countryside around it, or on the settlement to its north.

3.3 The effects of the proposed development on local landscape character are considered to be moderate adverse. This would be in the winter, and effects in the summer would be at a slightly lower level. These effects would be expected to decrease slowly with time, as the proposed planting begins to mature, and as the new development becomes integrated more fully with the surrounding area.

3.4 The above effects have been categorised as adverse, as there would be some inevitable and in-principle harm as a result of the introduction of new buildings into what is presently an undeveloped site, but it should be noted that the new houses would not necessarily in themselves be unsightly, intrusive or discordant - any harm would occur as a result of the development of what is presently a greenfield site.

3.5 The visual effects identified would be at a similar level, but again are a largely inevitable consequence of development on the edge of a settlement, though in this case the Site is contained, generally well screened and relatively few existing properties would be affected.

3.6 The limited adverse landscape effects which have been identified are no more than would be expected from development of any edge of settlement greenfield site, and result chiefly from the in-principle loss of open land.

3.7 The existing trees and hedges around the Site would be retained and protected during construction work in accordance with BS5837, apart from any sections of roadside hedge where new access points would need to be created.

3.8 In relation to the Greater Norwich Development Partnership Joint Core Strategy, as an identified Key

Service centre close to the Broads, it is considered that the proposals will have no detrimental effect on the landscape character or setting of the Broads. It is noted that environmental constraints will be a considerable factor at the site specific stage, but on this site it is considered that there are limited environmental constraints

3.9 The Site is therefore considered in principle suitable for development of the type proposed.

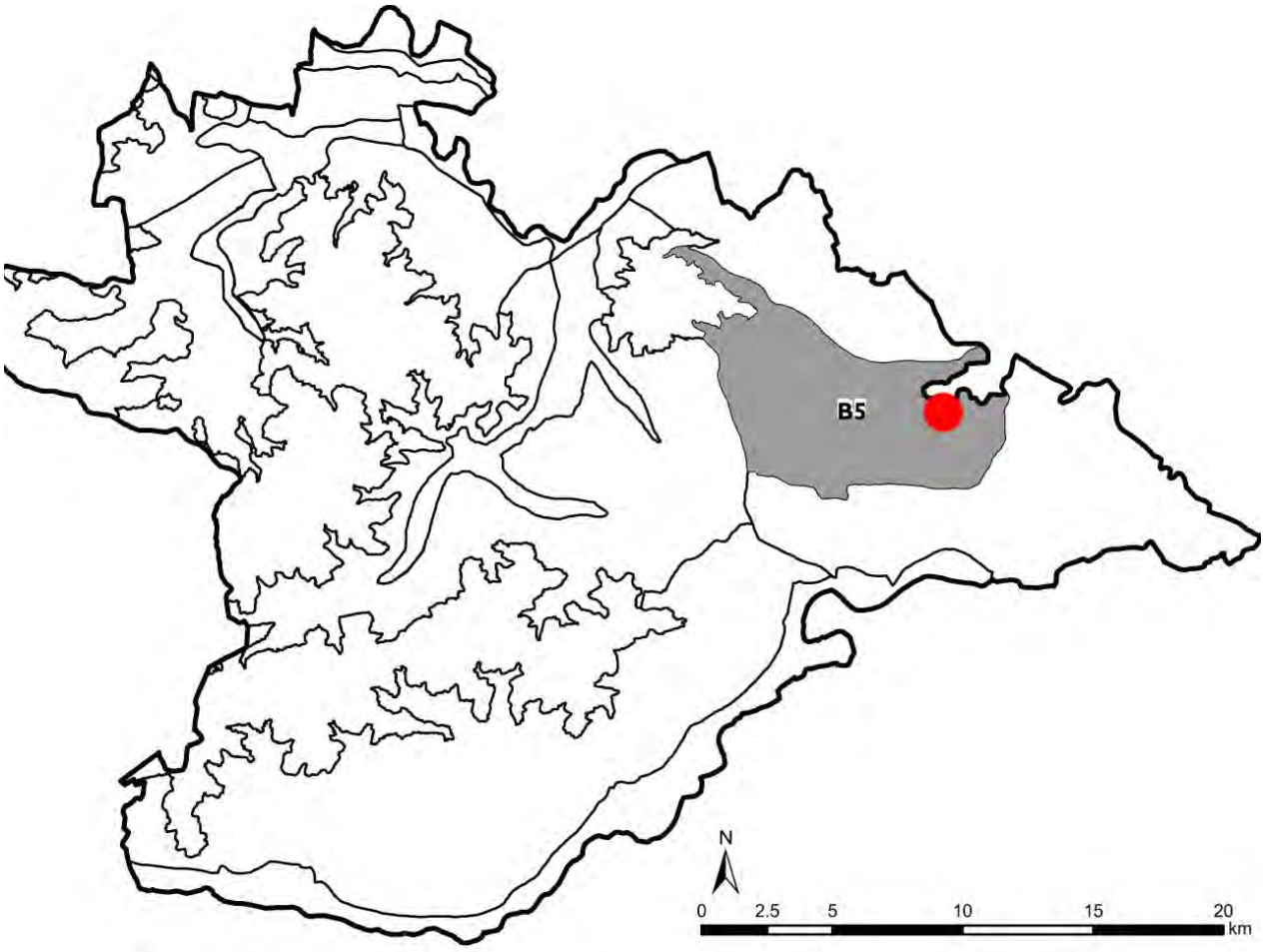
4. Landscape Planning Issues

4.1 An understanding of the landscape context of the site is crucial and specific reference is made to the policies and guidance published by South Norfolk District Council, in particular the South Norfolk Landscape Character Assessment.

4.2 The site is located within the Chet Tributary Farmland Landscape Character Area, effectively on the urban/rural fringe of the town of Loddon.

KEY CHARACTERISTICS - Chet Tributary Farmland

- A flat to gently undulating landscape cut by tributary valleys of the River Chet.



Extract from the South Norfolk District Landscape Character Assessment

- Landform sloping gradually upwards from the River Chet and low-lying Broads in the north east at Loddon and Chedgrave to higher ground towards the south and south west.
- A varied sense of enclosure ranging from medium scale and open across areas of flatter ground to intimate and enclosed along tributary valleys and winding rural roads lined with trees and hedgerows.
- Dissected by the Chet and series of Becks running eastwards to the Broads. River courses are defined by vegetation and are otherwise often imperceptible and inaccessible.
- Tributary rivers have an obvious influence in the landscape. Associated features include pockets of pasture, road bridges, village ponds and willow trees.
- Predominantly arable farmland with geometric field pattern. Fields are smaller within the valleys and medium to large on the flatter, open areas.
- Gappy hawthorn/ash/beech hedges divide fields in places. Hedgerow trees are frequent especially large mature oaks.
- Woodland is most concentrated along the River Chet corridor, running east to west through the centre of the character area.
- Diversity of ecological assemblages including grassland, common land, wet habitats and woodland.
- Large common grazing lands or greens are a particular local feature.
- Round tower and isolated churches occur. Moats are also a feature.
- Settlement occurs sporadically throughout the character area. Villages either occur sheltered in valleys or on the gently sloping valley sides.
- Market town of Loddon lies on the River Chet with an imposing and beautiful church, 17 and 18” century houses and a pretty staithe.
- Outside the main settlements are larger modern farm units plus more traditional red brick barns.
- Presence of the Al 46 - Otherwise a network of winding rural roads and lanes dissect this very rural area.
- A peaceful and rural landscape.

LANDFORM, TOPOGRAPHY, SCALE AND ENCLOSURE - Chet Tributary Farmland

4.3 A flat to gently undulating, low-lying landscape, varying between |0-40m AOD. The lowest land is associated with the River Chet tributary streams that have cut into the higher, flatter land resulting in subtle undulations. It forms a transitional landscape as it rises gently from the neighbouring Broads in the north east towards higher ground in the south and south west of the character area at the

boundaries with Thurlton Tributary Farmland with Parkland and Tas Tributary Farmland.

4.4 Across the character area there is a contrasting sense of enclosure. The narrow tributary valleys are an important local feature providing pockets of intimacy and enclosure. In these areas channelled, corridor views are defined by hedgerows, waterside vegetation and the rising topography of the valley sides — all contributing to the enclosed character. In stark contrast views become more open and distant across the larger fields on the flatter, higher land. These views are occasionally framed by woodland but more frequently extend across to the wooded tributary corridors and include remnant hedgerow lines with prominent hedgerow trees. Important views within this character area are to the neighbouring Broads at Loddon and Chedgrave and to round and square village church towers that are distinctive features within the rural landscape.

SENSITIVITIES AND VULNERABILITIES - Chet Tributary Farmland

4.5 The principal sensitivities and vulnerabilities of the Chet Tributary Farmland are:

- the visual and physical relationship to The Broads — and sensitivity to any change in views to and from The Broads;
- the hedgerow and woodland structure as further loss could create a more open monotonous landscape;
- the diversity of habitats especially those sensitive to development, fragmentation and change in water level/quality;
- the characteristic water features in this landscape and the threat of loss through drainage;
- the overall peaceful, rural character;
- the distinctive and extensive areas of common land and smaller village greens;
- the views to and setting of the prominent churches;
- the network of rural roads and their associated verges;
- the character of the rural settlement which are frequently clustered around a village green.

LANDSCAPE STRATEGY - Tas Valley Rural River Valley

4.6 The overall strategy is to conserve the rural, peaceful quality of the Chet Tributary Farmland with its links to The Broads, strong farmland character, presence of watercourses, varied enclosure and field pattern and diversity of ecological assemblages. This will include:

- maintain and manage moats and village/field ponds;
- conserve and manage commons and village greens/grass verges and seek to ensure that grazing management is sustained;
- conserve the contrast between the open arable landscapes and the more intimate tributary valleys;
- conserve areas of pasture and in particular seek to conserve and extend pasture along the tributary valleys;
- maintain the stock of hedgerow trees, particularly along roadsides and encourage new generations of hedgerow trees to replace existing stock;
- consider opportunities to reinstate hedgerows, where they have been lost and especially along roadsides;
- manage woodland to conserve character and enhance biodiversity. Consider opportunities to extend and link woodland including the creation of new woodland around villages.

Development Considerations

4.7 Any development in the area must respect the character of Chet Tributary Farmland.

- conserve the essentially rural, peaceful character with settlements primarily relating to the tributary valleys. Conserve locally distinctive vegetation that characterise the valley settlement such as willows;
- conserve the character and identity of the market towns (Loddon/Chedgrave) and the villages with their compact form clustered around a historic core;
- seek to avoid further linear development along roads and suburban development along edges which can create the perception of a much larger developed area, and result in merging of settlements and loss of individual identity;
- conserve visual links to The Broads and consider the effect of any change on views to and from The Broads and their setting;
- conserve the local vernacular features that contribute to the rural character including the distinctive roads sides and lane names. Conserve the rural, quiet character of the roads and lanes that cross the landscape and prevent upgrading that could create a more (sub) urban character;
- protect the views to and setting of churches, which form distinctive landmark features within the landscape;
- conserve and enhance the rural setting of the Al46 and avoid linear development associated with the road corridor that would impinge on the rural setting.

5. Local landscape character

5.1 As noted in the Loddon & Chedgrave Conservation Area Character Appraisal and Management Guidelines 2016, the town is *situated within the attractive valley landscape of the River Chet, which marks the boundary between Loddon and Chedgrave. In the valley east of the settlement there is grazing marsh, typical of the Norfolk and Suffolk Broads, with a number of wooded stretches. To the west, the valley is more enclosed with notable wooded areas especially towards the north leading to Langley Park. There is a small tributary valley which runs southwards out of the settlement and is largely open in character. The view from Hales Hall north along this tributary towards Loddon is very attractive. The bypass cradling the town to the south provides a hard edge.*

Top: View south-eastwards from Beccles Road, close to the Western corner of the site.
Bottom: View eastwards from the Industrial Estate on Little Money Road

5.2 The two parish churches occupy prominent positions each side of the river, and from these vantage points, impressive views can be enjoyed.

5.3 The centre of Loddon is closely related to the surrounding countryside and river from which it owes its development. The principle streets are urban in character, yet they link a series of open spaces - The Staithe, The Plain and Farthing Green - which further emphasises the essentially rural nature of the town. These are themselves linked by footpaths and access ways to the meadows to the east.

5.4 Outside the Conservation Area boundary, along Beccles Road, the grain becomes much looser and of a less defined character. The southern side of Beccles Road comprises a mix of offices warehouses and parking areas associated with the industrial estate here. The road, however,

Top: View Northwards from the Beccles Road/ Little Money Road junction towards the tree belt around the site
Bottom: View South-eastwards along the edge of the site on Beccles Road, with the hedgerow boundary on the left-hand side

retains remnant stretches of hedgerow which help to break and soften up the hard appearance of the buildings, protecting the generally rural or semi-rural character. The northern side of the road, including the application site comprises medium to large arable fields on the sloping land which rises up from the tributary of the Chet.

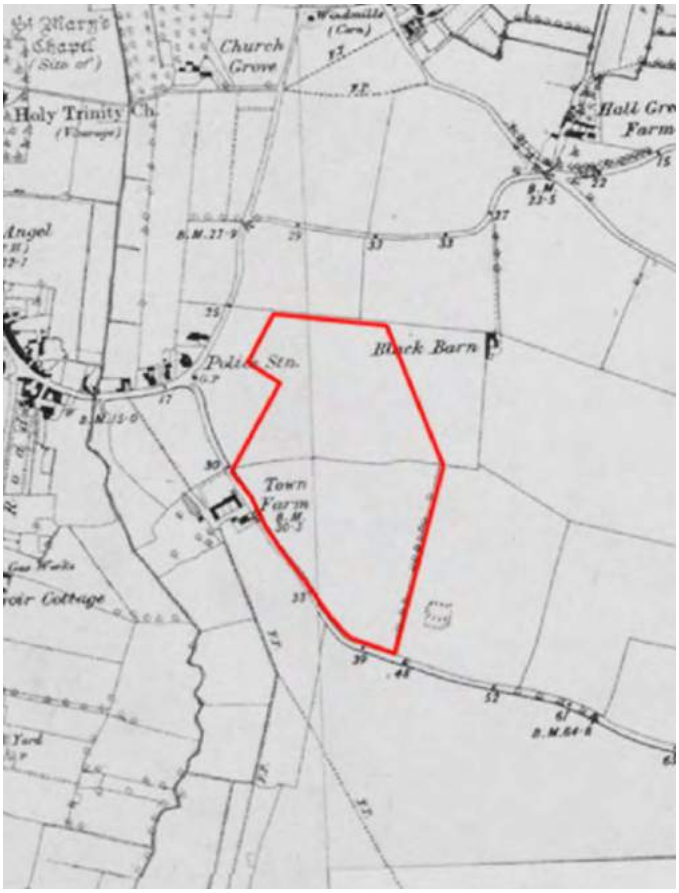
5.5 The eastern and south-eastern boundary of the application site has a 20 metre-wide modern plantation comprising mixed deciduous and coniferous trees. Analysis of historic mapping shows that this plantation was not present in 1988, and includes some veteran Oak trees on the south-eastern limb. These veteran trees indicate field boundary shown on the earliest maps and add to the rural character of the area. The new plantation has established well and is forming an important landscape feature on a gentle ridge, enclosing the application site. It is currently around 8 metres in height but should ultimately reach 15 metres or more. This plantation is visible for higher and more distant parts of the neighbourhood, and makes an important contribution to the wooded skyline.

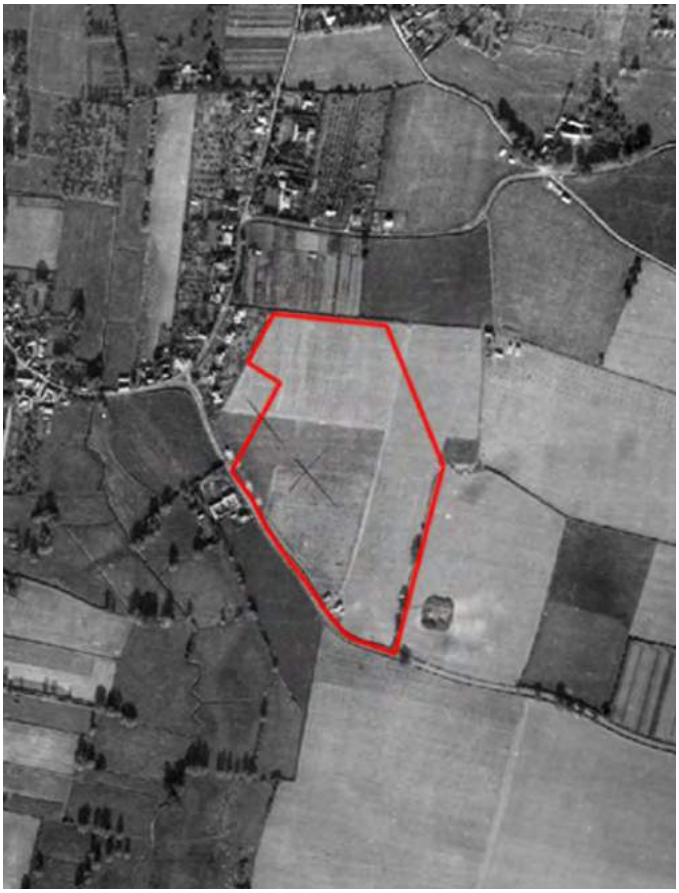
5.6 The northern side of the Beccles Road is bounded by a mature hedgerow maintained at a height of 2 - 3 metres. Although possibly of recent origin, it contains a number of shrubby species and is of a dense habit and important as a landscape and wildlife feature.

5.7 The District Landscape Character Assessment notes the important views within this character area are to the neighbouring Broads at Loddon and Chedgrave and to round and square village church towers that are distinctive features within the rural landscape.

Statutory and Non-Statutory Designations

5.8 The Multi Agency Geographic Information for the Countryside Map ('MAGIC') and the Local Plan Proposals Map indicate that the Site is not covered by any statutory or local designations for landscape character or quality





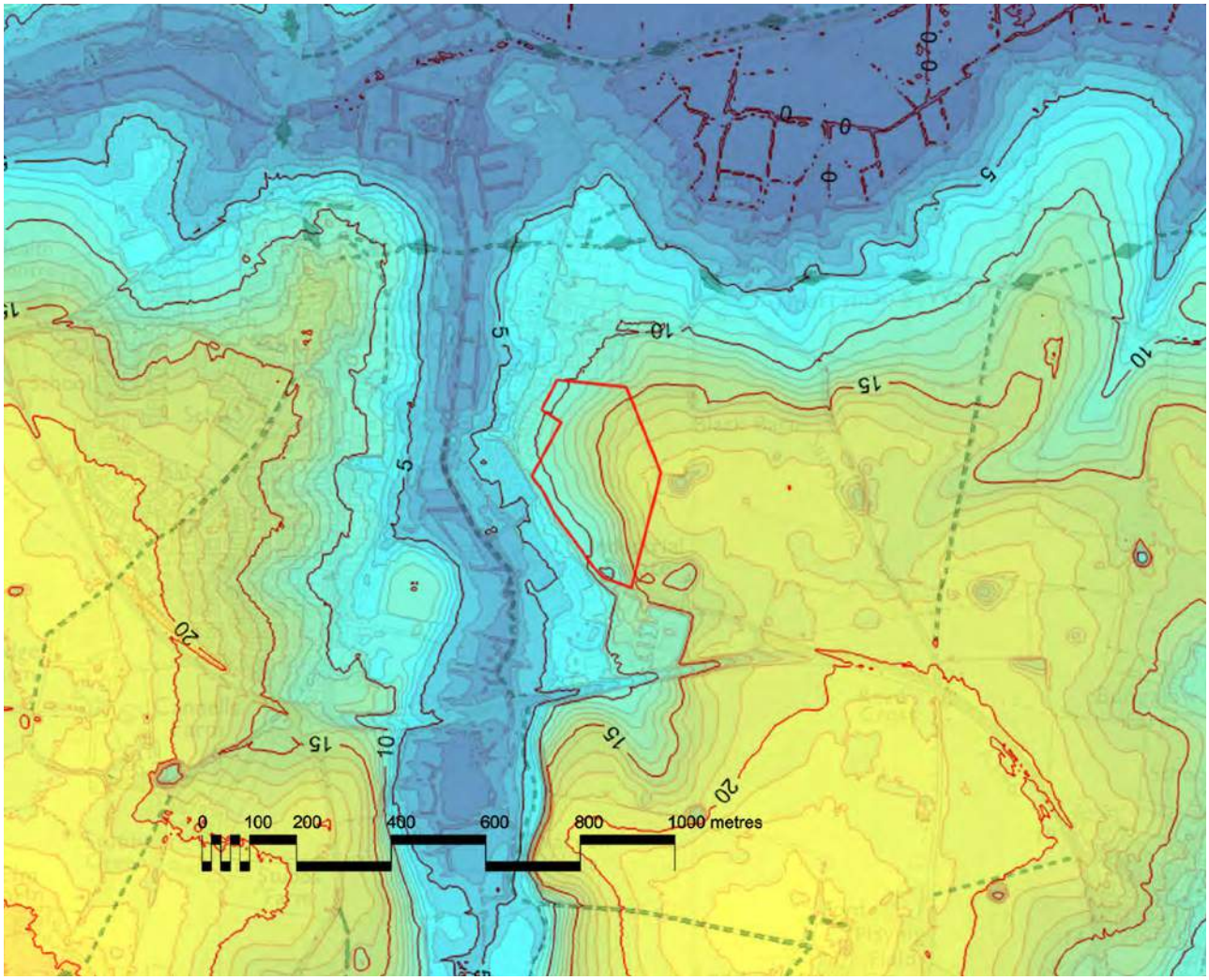
Historic mapping. Top left: Ordnance Survey c. 1890. Top right: Aerial 1946
Bottom left: Aerial 1988. Bottom right: Aerial 2010

6. Topography

6.1 An analysis of the topography demonstrates the district topography of the area.

6.2 The Site slopes gently down roughly from south east to north west, with levels of just over 19m AOD (above Ordnance Datum, or mean sea level) on the eastern side, falling to around 10m AOD along Beccles Road to the west. It is located on the eastern side of the valley of a stream which drains into the River Chet to the north.

6.3 As noted in the District Landscape Character Assessment this is an area with landform which slopes gradually upwards from the River Chet and low-lying Broads in the north east at Loddon and Chedgrave to higher ground towards the south and south west. The small tributary river has an obvious influence in the landscape, with associated features include pockets of pasture, road bridges, village ponds and willow trees.



Local topography

7. Site proposals

7.1 The proposal comprises residential development, open space, gardens and associated road and path infrastructure for approximately 180 dwellings. The indicative layout is shown on the following page.

7.2 The total site area is approximately 7.63 hectares, of which 0.79 ha is proposed public open space

7.3 The proposed housing mix comprises the following:

- 18 no. 1 Bedroom
- 54 no. 2 Bedrooms
- 72 no. 3 bedrooms
- 36 no. 4 bedrooms

Existing site

Site proposals

8. Zone of Theoretical Visibility

Introduction

8.1 ZTV (Zone of Theoretical Visibility) or ZVI (Zone of Visual Influence) analysis is the process of determining the visibility of an object in the surrounding landscape. The process is objective in which areas of visibility or non-visibility are determined by computer software using a digital elevation dataset. The output from the analysis is used to create a map of visibility.

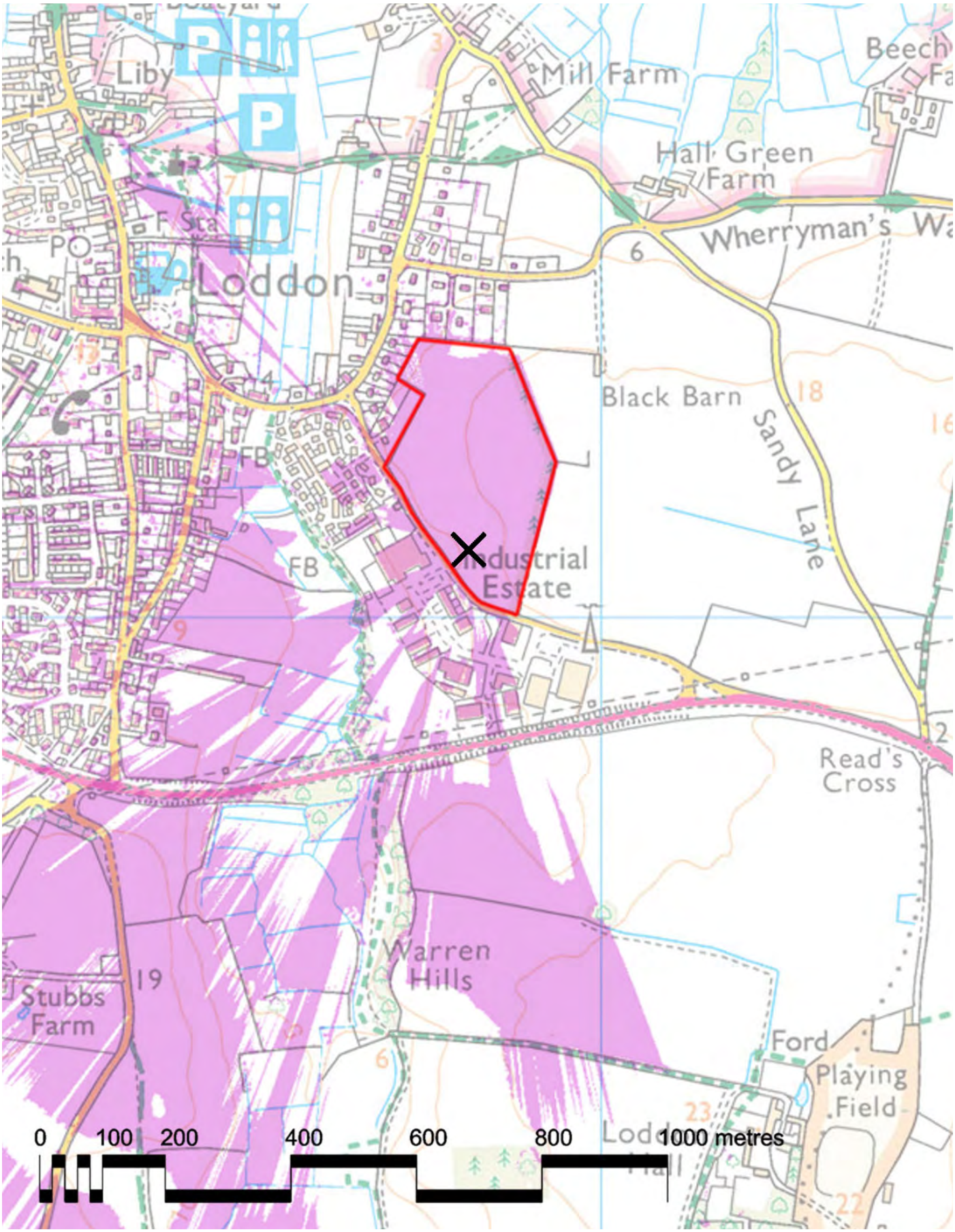
Interpretation

8.2 A ZTV/ZVI map illustrates the potential (or theoretical) visibility of an object in the landscape. The phrase “potential visibility” is used to describe the result because the analysis does not fully take into account landscape artefacts such as trees, woodland or buildings etc. For the purposes of this assessment, data from the LIDAR 2m DSM dataset was used, prepared by the Environment Agency. DSM’s measure the height values of the first surface on the ground. This includes terrain features, buildings, vegetation and power lines etc.

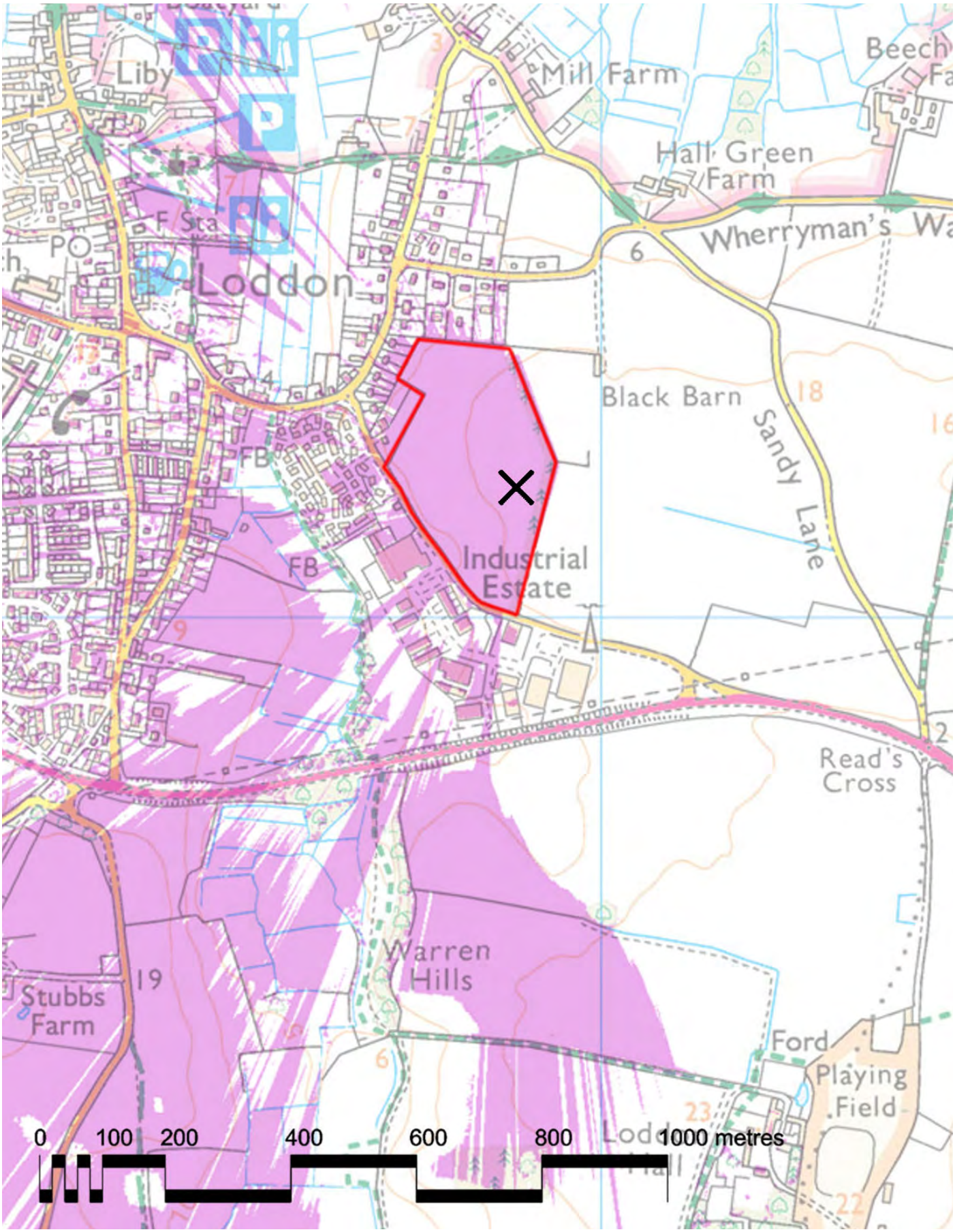
8.3 The results are not intended to show the actual visibility of an object, they are intended to indicate where the object may be visible from. Actual visibility can only accurately be determined by site survey since there are a multitude of local variables that may affect lines of sight. On the other hand, a ZTV/ZVI does show where an object definitely cannot be seen. This is of great help when planning fieldwork because the surveyor knows where there is no need for a “ground truth” check and can focus efforts where there may be views. Simple ZTVs can be used at early stages in the study to make site visits more efficient.

8.4 For the purposes of this appraisal and analysis, it has been assumed that the tree belt along the north-eastern and eastern boundary is 8 metres high. A roof height of 7.5 metres has been selected as the ‘transmitter’, and three locations across the site were selected for analysis. These are illustrated on the following three pages.

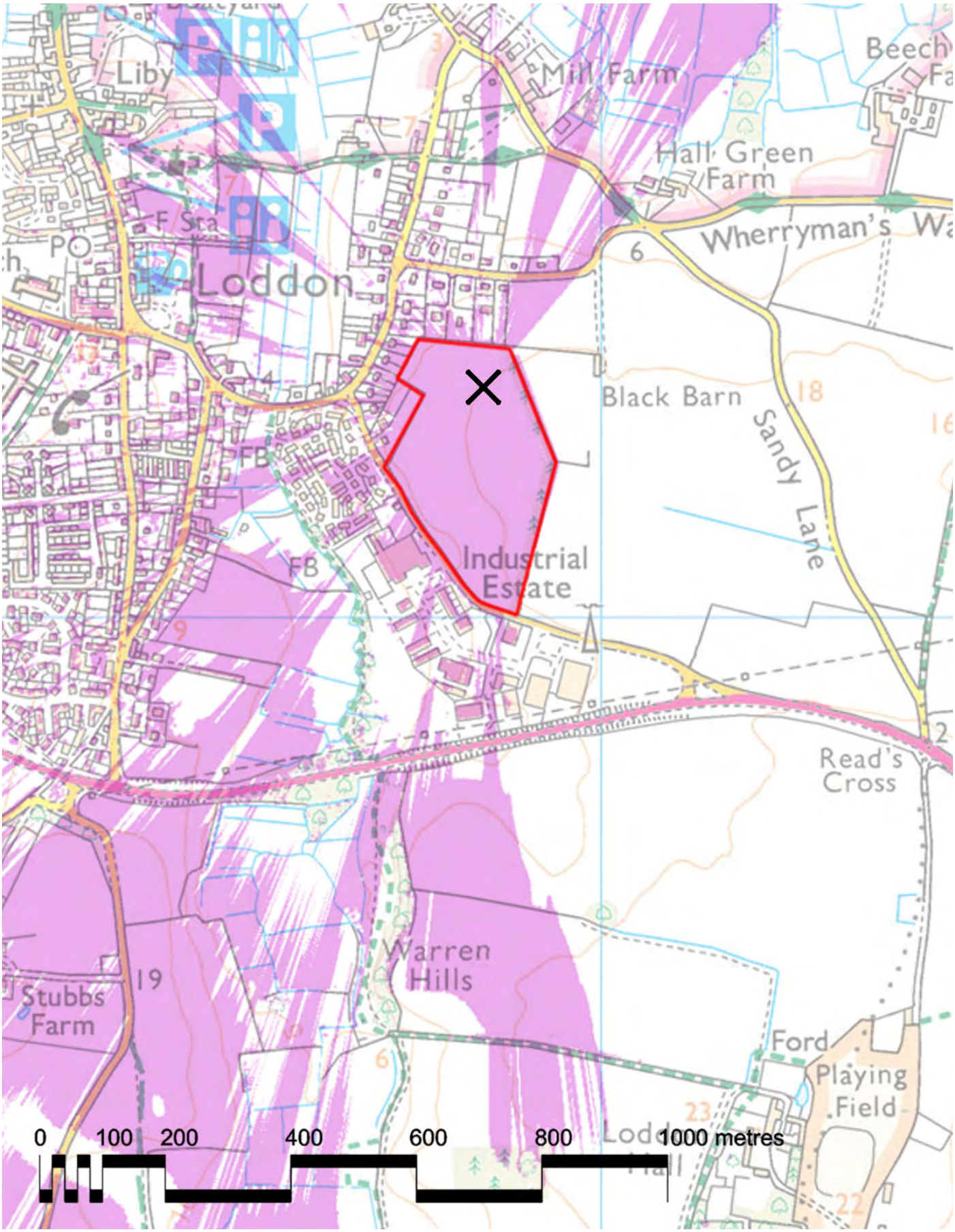
8.5 The ZTV suggests that the 8 metre-high woodland belt will almost completely screen the site for all viewers to the east. There is a cone of visibility directed toward the south and south-west, where the development is potentially visible. This was more thoroughly assessed on site.



Zone of Theoretical Visibility 1



Zone of Theoretical Visibility 2

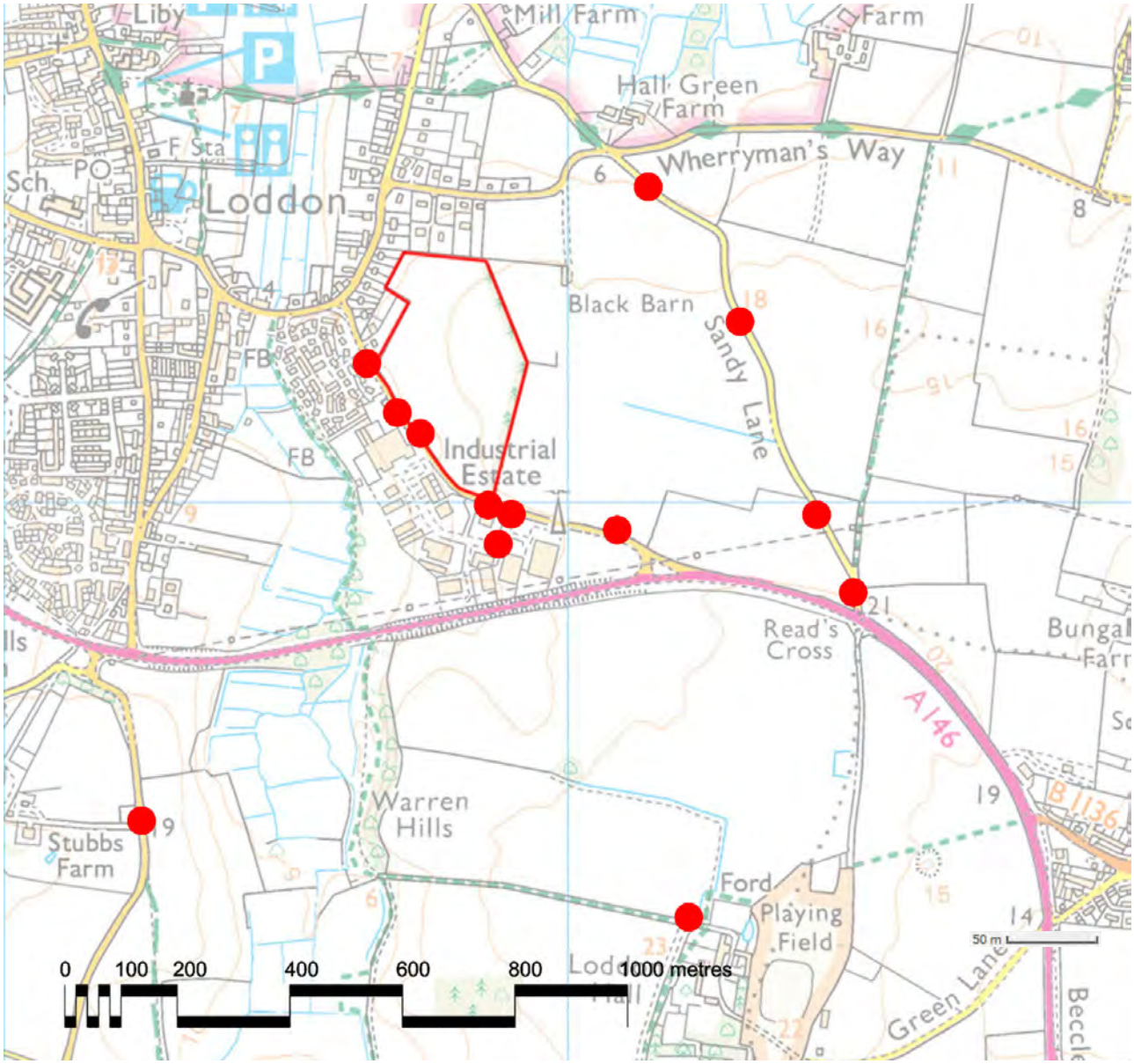


Zone of Theoretical Visibility 3

9. Visual Assessment

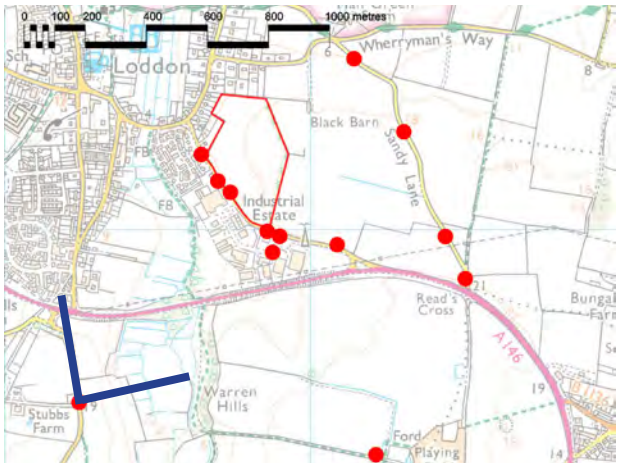
9.1 The application site and its environs were walked and driven over one day to determine potential views of the proposed development, and identify key locations (receptors) where the visual impact may be considered significant and where the landscape character might be affected.

9.2 Photographs have been used to demonstrate the key views and vistas, and to indicate potential visibility to and from the proposed development site. The location of the viewpoints was logged using a handheld GPS unit, to provide co-ordinated with 4 metre accuracy and this data was used to prepare the panoramic visualisations which were used in the preparation of the proposals. The following section summarises the key visual impacts.



Site plan showing the location of the viewpoints for the visual analysis

Viewpoint 1



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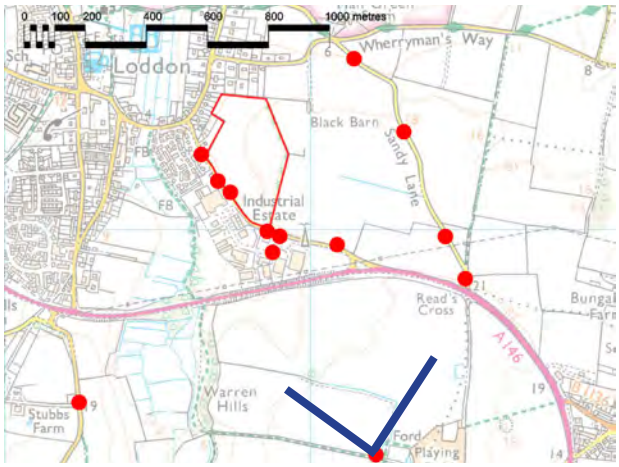
Viewpoint 1	Sensitivity	Description of effects	Magnitude of visual effect	Significance
View north-eastwards from Dull's Road, approximately 820 metres from the application site	Medium/High This is the view from a public road with open views of a valued valley landscape	The site is largely screened, although the roofs of buildings on the upper part of the site will be visible just below the distant wooded ridge, particularly during winter	Minor due to the effects of distance	Minor

Viewpoint 2



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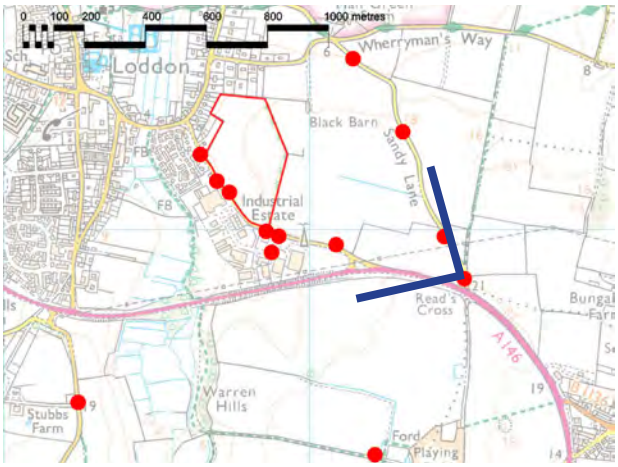
Viewpoint 2	Sensitivity	Description of effects	Magnitude of visual effect	Significance
View northwards from the public right of way running westwards from Hales Green near Loddon Hall, approximately 870 metres from the application site	High This is the view from a public footpath within an area of high landscape value	The proposed development is screened by topography and intervening trees and woodland. Further west, the footpath is completely enclosed by dense hedgerow, screening all views outward	None - the proposals will not affect the view	None

Viewpoint 3



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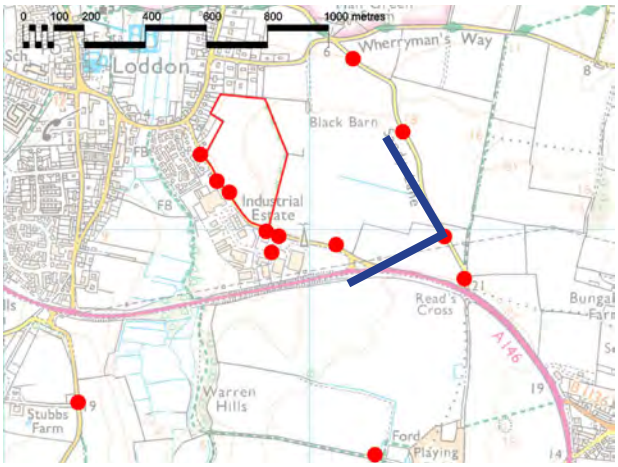
Viewpoint 3	Sensitivity	Description of effects	Magnitude of visual effect	Significance
View westwards from Sandy Lane, approximately 685 metres from the application site	Medium This is a view over a rural landscape of good quality from a public road,	The site is enclosed by field boundaries and tree belts, separating it from the agricultural landscape beyond and screened from this direction.	None - the proposals will not affect the view	None

Viewpoint 4



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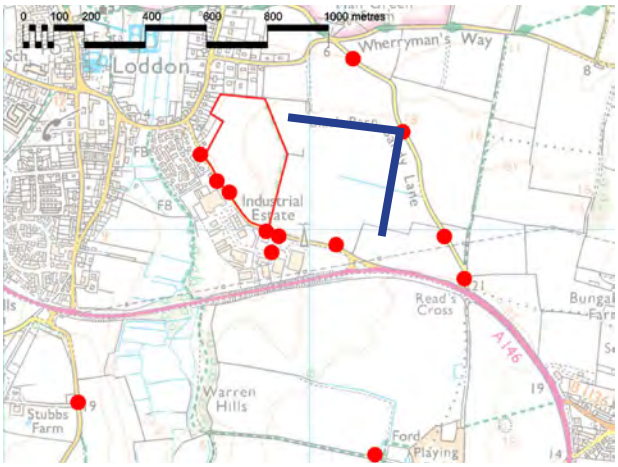
Viewpoint 4	Sensitivity	Description of effects	Magnitude of visual effect	Significance
View westwards from Sandy Lane, approximately 580 metres from the application site	Medium This is a view over a rural landscape of good quality from a public road,	The site is enclosed by field boundaries and tree belts, separating it from the agricultural landscape beyond and screened from this direction.	None - the proposals will not affect the view	None

Viewpoint 5



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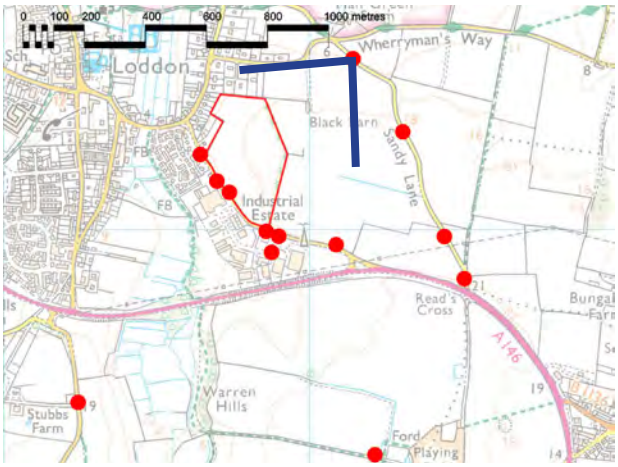
Viewpoint 5	Sensitivity	Description of effects	Magnitude of visual effect	Significance
View westwards from Sandy Lane, approximately 395 metres from the application site	Medium This is a view over a rural landscape of good quality from a public road,	The site is enclosed by field boundaries and tree belts, separating it from the agricultural landscape beyond and screened from this direction.	None - the proposals will not affect the view	None

Viewpoint 6



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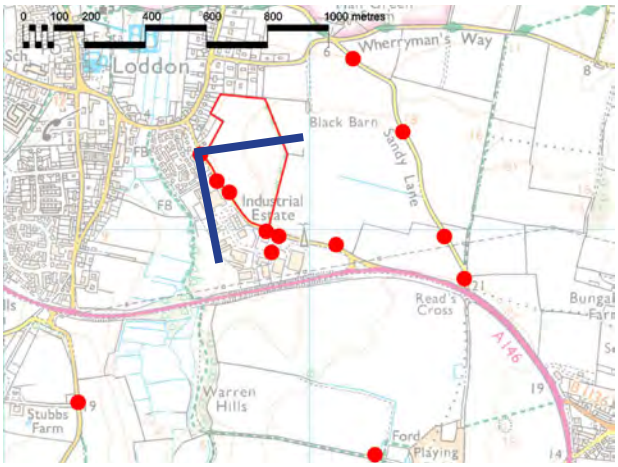
Viewpoint 6	Sensitivity	Description of effects	Magnitude of visual effect	Significance
View South-westwards from Sandy Lane, approximately 335 metres from the application site	Medium This is a view over a rural landscape of good quality from a public road,	The site is enclosed by field boundaries and tree belts, separating it from the agricultural landscape beyond and screened from this direction by topography and vegetation.	None - the proposals will not affect the view	None

Viewpoint 7



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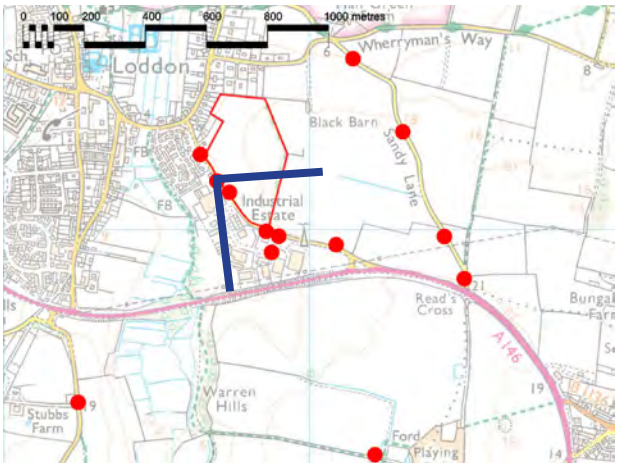
Viewpoint 7	Sensitivity	Description of effects	Magnitude of visual effect	Significance
View south-eastwards from Beccles Road, approximately 60 metres from the western corner of the application site	Medium/High This is a view from a public road in a residential area close to the edge of the Conservation Area	This is a transitional area, between the historic core of the town and the more urban fringe area, with the commercial estate and recent housing development on the right-hand side. The new development will be visible beyond garden boundaries, although the impact and the quality of that impact will depend on building heights, density and design	Moderate	Moderate

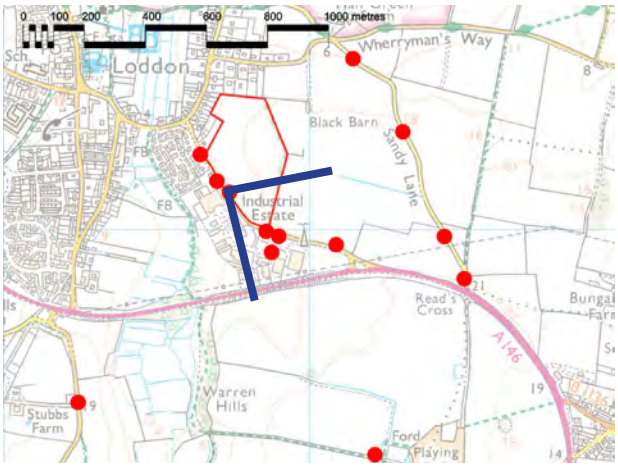
Viewpoint 8



Grid ref: TG2334402143

Viewpoint 8	Sensitivity	Description of effects	Magnitude of visual effect	Significance
View south-eastwards from Beccles Road, with the hedgerow on the application site boundary visible on the left hand side	Medium	There are views here over the arable field up toward the plantation surrounding the site. New development here will change the character of the site, although the nature of that change will depend on the quality of the design. Retention of existing landscape features, such as the existing hedgerow (with allowances for visibility splays and entrances), will ensure a robust landscape structure to contain the new development	Major	Major

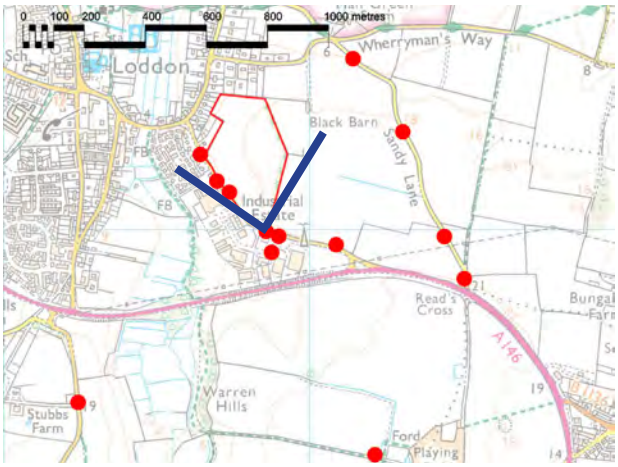
Viewpoint 9



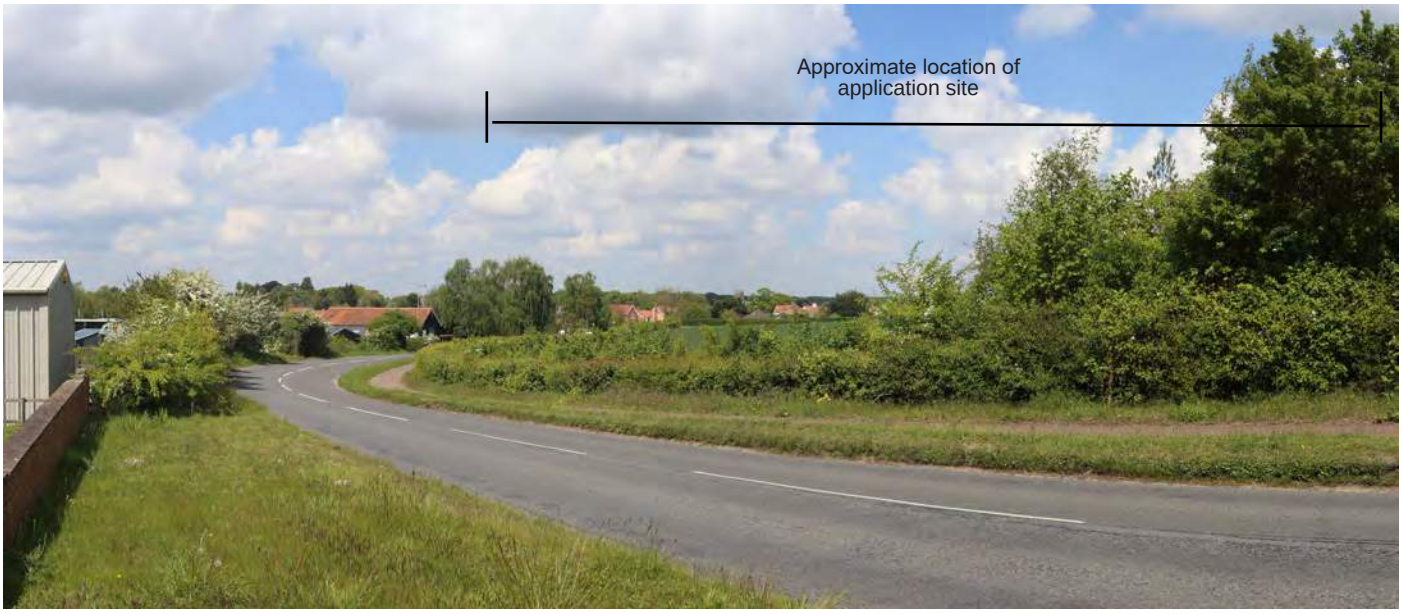
Grid ref: TG2332102166

Viewpoint 9	Sensitivity	Description of effects	Magnitude of visual effect	Significance
View south-eastwards from the eastern side of Beccles Road, with the hedgerow on the application site boundary visible on the left hand side	Medium	There are views here over the arable field up toward the plantation surrounding the site, and over the commercial area to the west. New development here will change the character of the site, although the nature of that change will depend on the quality of the design. Retention of existing landscape features will be important, such as the existing hedgerow (with allowances for visibility splays and entrances)	Major	Major

Viewpoint 10

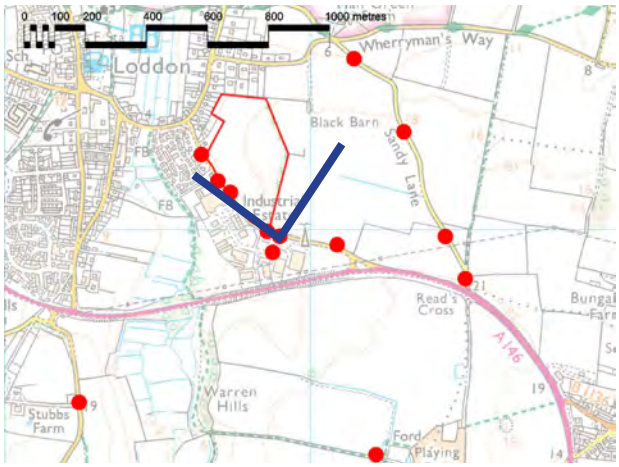


Grid ref: TG2331102234



Viewpoint 10	Sensitivity	Description of effects	Magnitude of visual effect	Significance
View northwards from Beccles Road, with the hedgerow on the application site boundary visible on the right hand side, and the commercial estate on the left	Medium	There are views here over the arable field up toward the plantation surrounding the site. New development here will change the character of the site, although the nature of that change will depend on the quality of the design. Retention of existing landscape features will be important, such as the existing hedgerow (with allowances for visibility splays and entrances)	Moderate	Moderate

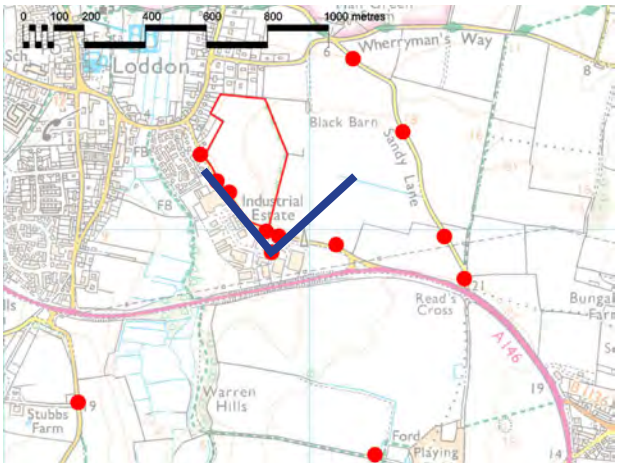
Viewpoint 11



Grid ref: TG2331102233

Viewpoint 11	Sensitivity	Description of effects	Magnitude of visual effect	Significance
View northwards from Beccles Road, with the plantation on the application site boundary visible on the right hand side, and the commercial estate on Little Money Road on the left	Medium	The site is largely screened by the plantation and veteran boundary Oak trees.	Negligible	Negligible

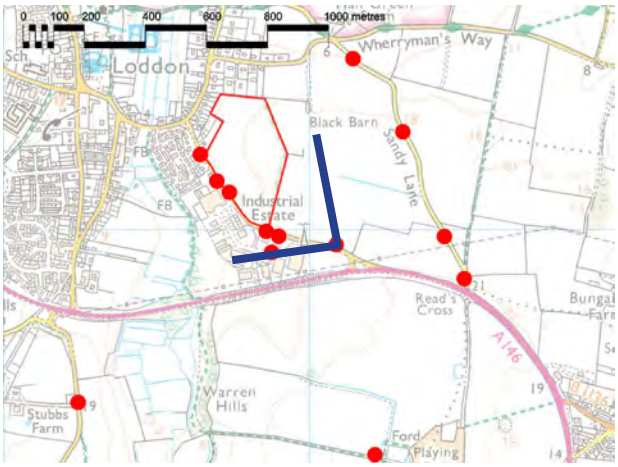
Viewpoint 12



Grid ref: TG2303302102

Viewpoint 12	Sensitivity	Description of effects	Magnitude of visual effect	Significance
View northwards from the commercial estate on Little Money Road	Low	The site is largely screened by the plantation and veteran boundary Oak trees.	Negligible	Negligible

Viewpoint 13



Grid ref: TG2303702046

Viewpoint 13	Sensitivity	Description of effects	Magnitude of visual effect	Significance
View northwards along Beccles Road, approximately 240 metres from the application site	Low This is a view from a busy road close to the A146	The application site is screened by local topography and landscape features	None	None

10. Conclusion

10.1 The anticipated key landscape and visual effects of the proposed development are summarised below

Landscape Features

10.2 As noted earlier, the Site comprises a single arable field, bounded by a plantation woodland belt which is to be retained and as such there are no landscape features within it (although the field itself is clearly a component of the existing local landscape).

10.3 The proposals would require the removal of some sections of established hedgerow to provide for access, but other than that, it is considered that there would be no losses of visually significant vegetation.

10.4 The magnitude of change to the landscape brought about by the proposed development is considered to be medium - the parts of the Site proposed for built development would obviously undergo a significant change (from open land to new housing), but the overall development would have a limited impact on the countryside around it, or on the settlement of Loddon to its north. The new houses would mainly be visible from close to the Site only, and in the context of a local edge of settlement area where such views are characteristic. No significant landscape features would be lost (though the presently open character of the two fields which make up the Site would be replaced by built development), and the new development would occupy an area enclosed by the main part of the settlement to the north , plantation woodland to the east and south-east, and by the Beccles Road to the west

Landscape Effects

10.5 The effects of the proposed development on the local landscape character would therefore be moderate adverse. This would be in the winter on completion of the development, and effects in the summer would be at a slightly lower level.

10.6 There would be some sense of development and the edge of the village extending out into the presently partly open land to the south of the settlement, but this would be limited by the fact that built development would not extend beyond the enclosing effect of the plantation, and by the presence of the existing commercial development on the opposite side of Beccles Road.

10.7 These effects would be expected to decrease slowly with time, as landscape measures begin to mature, and as the new development becomes integrated more fully with the surrounding area.

10.8 The above effects have been categorised as adverse, as there would be some inevitable and in-principle harm as a result of the introduction of new buildings into what is presently an undeveloped site, but it should be noted that the new houses would not in themselves necessarily be unsightly, intrusive or discordant - any harm would occur as a result of the development of what is presently a greenfield site, and the proposals should establish the parameters for an attractive and high quality form of development.

Visual Effects

10.9 The Zone of Theoretical Visibility mapping indicates (and this is confirmed by examination on site) that a combination of topography and vegetation results in the site being almost completely screened from view from an easterly direction, including the Broads area. The ZTV shows that the most extensive views are potentially to the south-west and west, although on-site examination demonstrates that these views are further limited by the extensive tree cover.

10.10 There would be some short distance but filtered views of the new development on the Site for people passing along Beccles Road, whether by car or cycle, or on foot. The views would be over (or in the winter through) the retained roadside hedge, and there would be clear views of the dwellings as they rise up the sloping land.

10.11 There would on average be a moderate magnitude of change in the view (the change would be locally higher where new houses are closer to the Site boundary, and lower where built development is set further back), and effects would be moderate adverse for pedestrians and cyclists (owing to their greater sensitivity) and slight adverse for motorists, though all of these effects would be experienced for a short duration only in an overall journey. There would also be some other more distant and limited views from further to the south west, mainly in the winter, but any such effects would be slight adverse at worst.

10.12 Intervening topography and vegetation, and in particular the boundary plantation, limit views toward the site.

10.13 In addition to the above, there would also be some effects on private views from nearby residential properties. From the north and north-west there would be some filtered views of new dwellings in the north western part of the Site from houses and the rear gardens along the eastern side of Norton Road, mainly from first floor windows. There would be a medium degree of change for receptors of medium sensitivity, and moderate adverse visual effects. However, the degree of impact will depend on the proximity of the new dwellings, their height and any mitigation boundary treatment.

10.14 As would be the case for landscape effects, the above visual effects would be in the winter, and effects in the summer would be at a lower level. The effects would also would be expected to decrease slowly with time.

10.15 This appraisal has found that there would be some adverse effects on the character of the local landscape, but that those effects would be on a limited area, and would decline over time. The limited adverse landscape effects which have been identified are no more than would be expected from development of any edge of settlement greenfield site, and result chiefly from the in-principle loss of open land. The Site is therefore considered suitable in principle for development of the type proposed.

10.16 The visual effects identified would be at a similar level, but again are a largely inevitable consequence of development on the edge of a settlement, though in this case the Site is generally well screened and relatively few existing properties would be affected.

10.17 Nevertheless, care must be taken in the positioning of any structures within the area to avoid visual intrusion which might compromise the landscape assets described in the South Norfolk Landscape Character Assessment.

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2. Tree Survey

OAKFIELD
ARBORICULTURAL SERVICES

Arboricultural Appraisal

Land off Beccles Road, Loddon

OAS 19-114-AR01

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Hunts Corner, Banham, Norfolk, NR16 2HL
01953 887220
info@oakfieldarb.co.uk

Contents

Section 1 : Introduction

1.1 Oakfield Arboricultural Services Ltd were instructed by Lanpro on Behalf of Hopkins Homes to undertake an arboricultural appraisal on land known as Land off Beccles Road, Loddon.

1.2 The aim is to collect data with regards to arboricultural constraints that may exist on the site with regards to a proposed residential development of the site.

1.3 Where appropriate recommendations for tree works or removals will be made in order to facilitate the proposed redevelopment or to improve the overall condition of trees and abide by any legal ' Duty of Care' obligations that may exist.

Tree Survey

1.4 The survey was carried out in June 2019 in fair weather conditions and was carried out in accordance with BS 5837: 2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'

1.5 In accordance with the BS:5837 recommendations, the survey will include all trees within the site that are 75mm in diameter at 1.5m, the survey may also include trees adjacent to the site up to a distance of 15m from the site boundary that may be affected by the proposed development. Trees may be represented individually or as part of larger groups and will be clearly marked on any provided plans.

1.6 The survey will include the following data:

- Tree/ Group number
- Species
- Height
- Branch spread in meters at the four cardinal points (individual trees only)
- Crown clearance in meters
- Diameter at 1.5m in mm
- Age class
- General condition
- Comments on structural condition
- Estimated remaining contribution in years
- Category
- Sub category
- Work recommendations

Further clarification is given within the survey explanatory notes in Appendix 1

Tree Categorisation

1.7 The purpose of the tree categorisation method is to help identify the overall quality and value, in a non-fiscal sense, of the existing trees stock so as to allow an informed decision to be made concerning which trees should either be retained or removed in the context of the proposed development. To qualify a tree must fall into one of the four categories A, B, C and U. Categories A, B and C are trees ranging from high to low quality with category U being trees of poor overall value. Further sub categories reflect arboricultural, 1, landscape, 2, or cultural values, 3; all carry the same weight and a tree can have more than one criterion.

- Category A - Trees of high quality and value that they are considered particularly good examples of their species and or essential components of groups such as dominant trees within avenues. Trees will have a minimum of 40 years life expectancy.

- Category B - Trees of moderate quality that may have been category A but have been downgraded due to impaired features such as significant remedial defects or poor past management that make their retention unsuitable beyond 40 years. Trees will have a minimum of 20 years life expectancy

- Category C - Trees of low quality that are unremarkable and have limited merit or such impaired condition they do not qualify for higher categories. Tree will have minimum of 10 years life expectancy

- Category U - Trees of poor quality and are in such condition they have less than 10 years useful life expectancy. Trees in this category are generally recommended for removal regardless of any proposals.

Preliminary Management Recommendations

1.8 Any recommendations made for management of the trees are preliminary only and are not to be considered a detailed work specification, this is of particular note if tree works must be applied for via the relevant local council due to presence of tree preservation orders or by location are within a conservation area.

1.9 All work recommendations recommended are done so on the basis they are carried out by qualified contractors and will be carried out in accordance as per the recommendation set out in BS:3998 'Recommendations for Tree Works'.

Limitations

1.10 This is a preliminary assessment from ground level and observations have been made solely from a visual perspective for the purposes of assessment in terms relevant to planning and development. No invasive or other detailed internal decay detection devices have been used in assessing internal conditions.

1.11 Any conclusions relate to conditions found at the time of inspection. Any significant alteration to the site that may affect the trees that are present or have a bearing on planning implications (including level changes, hydrological changes, extreme

climatic events or other site works) will necessitate a re-assessment of the trees and the site and render any previous advice/ findings invalid.

1.12 It must be noted this is not a health and safety risk assessment and should not be viewed as such. The survey carried out will assess general health however it may not have been appropriate or possible to view all parts of the tree so as to fulfil the criterion of a health and safety risk assessment.

1.13 This is an arboricultural report and no such reliance must be given to comments relating to buildings, engineering, soil or ecological issues, in particular this is not a survey to comment of the effects of trees with regards to subsidence or heave.

1.14 All measurements are metric and approximate.

1.15 Any lack of comments regarding recommended work does not imply that tree poses no level of risk and similarly it should not be implied that a tree will present an acceptable level of risk if any such recommended works are carried out. Trees are living things and exposed to extreme forces and other fungal or bacteria attack that are not necessarily visible to the naked eye and as such no tree should ever be viewed as safe. It is recommended that trees by regularly surveyed to ensure that any risk is limited as much as is practically possible.

Section 2 : Survey Findings

Site description

2.1 The site is a large agricultural field located north of Beccles Road

2.2 The site is bounded by residential gardens on the northern boundary clearly marked with fencing and vegetation. On the eastern and southern boundaries are highways with further agricultural/ grazing land to the west.

Tree Preservation Orders

2.3 A desk top search on South Norfolk website shows no tree preservation orders on or adjacent to the site and that the site does not sit within a conservation area. This has not been confirmed via a telephone call to the council and is not a guarantee that preservation orders are not currently being served.

Species Composition

2.4 The species on and adjacent to the site were dominated by Ash, Sycamore, Oak, Willow sp, Alder and Cherry a full list of species found within the site are as follows:

- Ash - *Fraxinus excelsior*
- Sycamore - *Acer pseudoplatanus*

- Oak English - *Quercus sp.*
- Willow weeping - *Salix sp.*
- Cherry - *Prunus sp.*
- Field Maple - *Acer campestre*
- Hawthorn - *Crataegus monogyna*
- Silver Birch - *Betula pendula*
- Hornbeam - *Carpinus betula*
- Scots Pine - *Pinus sylvestris*
- Horse Chestnut - *Aesculus hippocastanum*

Tree Discussion

2.5 The surveyed vegetation was in general of native species and can all be found to the site boundaries or within gardens adjacent to the site. Overall they appear in healthy condition and vary in their quality. Where trees are located offsite their retention will be mandatory.

2.6 The most significant vegetation was the large tree belt that runs along from the south east to north east boundary. This tree belt was likely plants as part of a Forestry Commission planting scheme and may still under strict conditions and unless otherwise informed should be retained in full as any removals not part of said condition may constitute a breach of the planting scheme that may result in action being taken.

Category Grading

2.7 Of the vegetation recorded within the site there is a percentage split between the following categories

- Category B 53% - 8 individuals or groups - retention highly desirable
- Category C 40% - 6 individuals or groups - retention desirable
- Category U 7% - 1 individual - remove on arboricultural grounds

Section 3: Preliminary Work Recommendations

Management Recommendations

3.1 It is clear that the sites vegetation has not undergone any major management over the years except for general highway clearance and field boundary flail operations. In general little immediate works are required with the exception of T8 that should given its deteriorating condition and location to the main highway be monitored on a regular basis.

Section 4 : Development Implications

Proposal

3.2 A fixed development layout is not available as yet and therefore cannot be assessed as part of this report and should not therefore be viewed as a full implications assessment (AIA) ; however the following observations can be made:

- The site characteristics and location of the vegetation to site boundaries will allow for most of the vegetation to be retained. It is assumed that the only vegetation at risk is G5 and T8 located to Beccles Road that may be within any visibility splay for a new access.
- Trees located within the private gardens of the dwellings on all boundaries must be retained regardless of any proposal. Any tree works required must first notify the owners of said works and be limited to the boundary line.
- Shading constraints are considered very low
- Construction constraints are considered low

3.3 Overall it would be considered that the tree constraints are very low, with the exception of any proposed access point and the planted tree belt to the eastern boundary.

Recommendations

3.4 The main considerations for the design are as follows

- Give adequate distance to the tree belt on the eastern boundary. This tree belt is young in age and over time will grown to 3 to 4 times in height this may over time give rise to lack of sun to any dwellings and or gardens if adequate space is not given
- Consideration of access to the site and the need for visibility splays that may require extensive removal of G5.

3.5 A formal implications assessment should be undertaken once a fixed layout is produced to inform any detailed design proposal for planning purposes on any tree issues. This should advise on any specialist construction detail required to aid tree protection and may include but not limited to foundation design, general construction activities, boundary treatments, tree protection and landscape proposals.

3.6 A method statement should also be produced to outline a methodical construction process and outline any tree protection methods that are to be utilised throughout the construction process as well as giving specific information on construction materials to be used, tree works, location of tree protection fencing, areas of hard landscaping that may affect the healthy retention of trees. This should be in conjunction with a tree protection plan showing the above in visible format.

Appendix 1 Tree Survey Schedule

			Canopy Spread													
Tree Ref. No.	Species (Common Name)	Height (m)	N	E	S	W	Grnd Clrnc	DBH (mm)	RPR (cm)	RPA (m)	Age class	Gen Cond	Structural Defects/Comments	Estimated remaining contribution (BS 5837)	BS Cat	BS Sub Cat	Prelim Tree Work Recommendations
T1	Cherry	6	4	4	3	4	1	300	360	40.69	MA	F	Offsite. No access to stem	20+	B	1	
T2	Sycamore	10	3	3	3	3	2	350	420	55.39	MA	F	Offsite. No access to stem	20+	B	1	
T3	Sycamore	10	3	3	3	4	2	500	600	113.04	MA	F	2 x stems. Poor condition cavities to main stem	10+	C	1	
T4	Willow (weeping)	12	5	6	4	4	2	700	840	221.56	MA	F	Heavy ivy to main stem prevents visual survey of main stem	20+	C	1	
T5	Norway Maple	10	3	3	3	3	2	300	360	40.69	MA	F	Offsite. No access to stem	40+	B	1	
T6	Pine	16	3	3	3	3	5	450	540	91.56	MA	F	Offsite. No access to stem	40+	B	1	
T7	Horse Chestnut	15	5	5	5	5	2	600	720	162.78	MA	F	Offsite. No access to stem	20+	B	1	

			Canopy Spread														
Tree Ref. No.	Species (Common Name)	Height (m)	N	E	S	W	Grnd Clrnc	DBH (mm)	RPR (cm)	RPA (m)	Age class	Gen Cond	Structural Defects/Comments	Estimated remaining contribution (BS 5837)	BS Cat	BS Sub Cat	Prelim Tree Work Recommendations
T8	Ash	15	5	4	4	4	2	500	600	113.04	MA	F	In moderate decline due to Ash dieback	<10	U	1	
T9	Oak	16	5	5	5	5	2	800	960	289.38	MA	F	X 2 Large Oaks to tree belt	40+	B	1, 2	
T10	Oak	16	5	5	5	5	2	800	960	289.38	MA	F	X 2 Large Oaks to tree belt	40+	B	1, 2	
G1	Privet	2	As on plan				0	100	120	4.52	MA	F	Boundary hedge to private garden	20+	C	2	
G2	Hawthorn, Privet, Cypress, Hornbeam	4	As on plan				0	100	120	4.52	MA	F	Hedges to private gardens	20+	C	2	
G3	Cypress	10	2	2	2	2	0	250	300	28.26	MA	F	Offsite group of 4 trees. No access	20+	C	1	
G4	Silver Birch, Pine, Oak, Cherry, Field Maple	12	As on plan				0	250	300	28.26	MA	F	Plantation tree belt. Possibly still under payment scheme. Good landscape value Requires thinning	40+	B	2	
G5	Hawthorn, Sycamore, Ash	2	As on plan				0	100	10	0.03	MA	F	Mixed field boundary hedge	20+	C	2	

Tree Survey Explanatory Notes

- **Ref No**. Identifies trees, groups, hedgerows and woodlands on any accompanying plan
- **Species** Common Name are provided to give wider comprehension
- **Height** Tree height given in meters (approximate)
- **Canopy spread** Indicated crown spread at the four cardinal points North, East, South and West
- **Ground clearance** Height of ground clearance of the canopy from the ground
- **DBH (mm)** Diameter of stem measured at 1.5m from ground level.
- **RPR (cm)** Root protection radius. Distance to be protected measured radially from the centre of the stem
- **RPA (m^2)** Root protection area is the minimum root area which should remain undisturbed
- **Age Class** Age of tree expressed as Y- Young, EM - Early Mature, MA - Mature or OM - Over Mature
- **General Condition** Overall condition of tree expressed as Good, fair or poor
- **Comments** General comments as to structural defects or characteristics of the tree. Will include specific problems such as disease, deadwood, fungal bodies and pests
- **Estimated remaining years** Expressed in <10, 10+, 20+ and 40+ years
- **BS Category** Overall tree category A - High value, B moderate value, C low value, U poor value
- **Sub Category** Refers to retention category where 1 is arboricultural value, 2 landscape value, 3 cultural value. Trees may have more than one sub category

KEY

- T1 — Existing Tree colour referenced in accordance with BS 5837 2005.
- Existing hedge or group. colour coded as above in accordence with BS 5837.
- Blue – Cat B Trees of moderate quality and value
- Grey – Cat C Trees of low quality and value
- Root Protection Area as calculated in accordance with BS 5837
- Shade pattern as to BS:5837.

N

REV.	DATE	INITIALS	DETAILS
.	.	.	.

CLIENT c/o Lanpro	DWG. TITLE Tree Constraints Plan
SITE: Land off Beccles Road, Loddon	

DRAWN BY	CHECKED BY	SCALE	DATE	DWG NO.	REV.
SPM	SPM	1:500 @A1	June 2019	OAS 19-114-TS01	.

KEY

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c/o Lanpro	Tree Constraints Plan

SITE:
Land off Beccles Road, Loddon

DRAWN BY	CHECKED BY	SCALE	DATE	DWG NO.	REV.
SPM	SPM	1:500 @A1	June 2019	OAS 19-114-TS02	.

3. Preliminary Ecological Appraisal

Preliminary Ecological Appraisal

Beccles Road, Loddon

On Behalf of:

Hopkins Homes

July 2019

www.ses-eco.co.uk

Author	Dan Carne BSc (Hons)
Technical Review	Sean Crossland BSc BCA CIEEM
Report Status	Final
Date of Issue	10.07.19

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Executive Summary

1. This report presents the results of a preliminary ecological appraisal undertaken at Beccles Road, Loddon.

2. The site is located within South Norfolk District Council. The site is bordered by residential and commercial development and hardstanding to the north, west, and south, and arable fields to the east.

3. There are five SSSI sites within 5km of the site, with three CWS and one RNR within 2km. Broadlands SPA/SAC/Ramsar is located approximately 900m from the site, as is Hardley Flood SSSI, which is contained within the SPA/SAC/Ramsar boundary.

4. The site consisted of an arable field with areas of semi-improved grassland and mixed woodland plantation, with hedgerows along the site boundaries.

5. A Habitat Regulations Assessment is required to assess potential impacts of the proposal on nearby designated sites, with particular consideration given to recreational pressure and wintering waterfowl.

6. Further survey effort has been advised for bats (seasonal activity transects and static deployments), birds (breeding and wintering bird surveys), great crested newts (eDNA survey), and reptiles (presence/likely absence surveys).

7. Precautionary measures are set out to mitigate negative effects on badger, invertebrates, nesting birds, and other notable species.

8. It is considered that all significant impacts on biodiversity, including potential adverse impacts upon specific protected species, habitats and designated sites can be wholly mitigated and there is scope within the proposal to enhance the ecological value of the site.

Contents

Appendices

1.0 Introduction

1.1 Southern Ecological Solutions Ltd. (SES) was commissioned by Hopkins Homes to undertake a preliminary ecological appraisal (PEA) of Beccles road, Loddon (the site) (Appendix 1). The site is located at Ordnance Survey Grid Reference TM 36795 98254 and is c.7.5ha comprising an arable field with semi-improved grassland margins, associated hedgerows and a mixed woodland plantation shelterbelt along the eastern boundary.

1.2 Planning permission is being sought for a residential development. Detailed proposals are not currently available, but the development is expected to include residential dwellings, in addition to areas of open space, access roads and strategic landscaping. Feasibility layouts for the scheme are shown in Appendix 2.

1.3 The objectives of this PEA were to:

- Map the main ecological features within the site and compile a plant species list for each habitat type;
- Make an initial assessment of the presence or likely absence of species of conservation concern;
- Identify any legal and planning policy constraints relevant to nature conservation which may affect the development;
- Determine any potential further ecological issues;
- Determine the need for further surveys and mitigation;
- Make recommendations for minimising impacts on biodiversity and providing net gains in biodiversity where possible in accordance with Chapter 15: Conserving and Enhancing the Natural Environment, of the National Planning Policy Framework (NPPF*)* (MHCLG, 2019) and relevant nature conservation policies within the South Norfolk Adopted Local Plan, which is made up of various documents including the Joint Core Strategy for Broadland, Norwich and South Norfolk (the JCS) (Broadland District Council, Norwich City Council, South Norfolk District Council (SNDC), and Norfolk County Council; 2011), the South Norfolk Site Specific Allocations and Policies Document (SNDC, 2015a), and the South Norfolk Development Management Policies Document (SNDC, 2015b).

1.4 Details of relevant wildlife legislation and planning policies are provided in Appendix 3.

2.0 Methods

2.1 The following PEA follows guidance and methods as prescribed by the Chartered Institute for Ecology and Environmental Management (CIEEM) Guidelines for Ecological Appraisal 2nd edition (2017) and the Guidelines for Ecological Impact Assessment (2018). Following these methods, a baseline of rare and/or noted ecological receptors (species and habitats) was established and valued. Predicted significant impacts upon these receptors have been identified and constraints and opportunities identified. This step-wise assessment process has informed likely mitigation and enhancement measures. Recommended phase 2 ecological surveys have been identified as well as a timetable for implementation. These surveys will fully inform the predicted impacts of the scheme in accordance with the National Planning Policy Framework (NPPF) (MHCLG, 2019), local planning policy and relevant wildlife legislation.

Desk Study

2.2 SES commissioned a data search for records of protected and notable species as well as non-statutory designated sites from the Norfolk Biodiversity Information Centre (NBIS). The data search encompassed the study area, and up to 2km from the boundary. Data were received from NBIS on 03 June 2019. Hazel dormouse *Muscardinus avellanarius* records were also sought from the National Biodiversity Network (NBN) Atlas, which holds data from the People's Trust for Endangered Species (PTES).

2.3 A web-based search for statutory designated sites via the Multi Agency Geographic Information for the Countryside (MAGIC) spatial data resource www.magic.gov.uk was undertaken on 11 June 2019 for the following designations: European (up to 8km from the site boundary); and national (5km from the site boundary).

2.4 An online search was undertaken for waterbodies within 500m of the site boundary utilising MAGIC Map on 20 May 2019.

Extended Phase 1 Habitat Survey

2.5 An extended Phase 1 habitat survey was carried out on 21 May 2019 by suitably qualified ecologist Daniel Carne BSc (Hons) in appropriate weather conditions. This is a standard technique for obtaining baseline ecological information for areas of land, including proposed development sites. Phase 1 Habitat Survey methods are set out in the Handbook for Phase 1 Habitat Survey (Joint Nature Conservation Committee, 2010). Habitat mapping was undertaken using the standard classification to indicate habitat types.

2.6 The dominant and readily identifiable higher plant species identified in each of the various habitat parcels were recorded and their abundances assessed on the DAFOR scale:

- D - Dominant
- A - Abundant
- F - Frequent
- O - Occasional
- R - Rare

2.7 These scores represent the abundance within the defined area only and do not reflect national or regional abundances. Plant species nomenclature follows Stace (2010).

2.8 All impacts upon ecological features have been considered for the purposes of this survey following industry best practice guidance. Only relevant protected and notable species have been discussed within this report to keep its contents concise and relevant to the works being undertaken and for ease of application.

Badgers

2.9 An initial assessment was made to identify areas that might be used by badgers *Meles meles* for foraging, commuting and sett creation.

Bats

2.10 The site was assessed for its suitability to support roosting, foraging and commuting bats. Trees were assessed for their potential to support roosting bats using guidelines issued by the Bat Conservation Trust (Collins, 2016). Roosting habitats assigned a level of suitability according to the descriptions outlined in Table 1.

2.11 Good bat foraging habitat generally includes sheltered areas and habitats with good numbers of insects, such as woodland, scrub, ponds lakes and species-rich or rough grassland. Good commuting habitat generally comprises linear features such as well-connected hedgerows, woodland edge and watercourses. The site was assigned a level of suitability according to the descriptions outlined in Table 1.

Table 1: Assessment of the potential suitability of a proposed development site for roosting, foraging and commuting bats (Collins, 2016)

Suitability	Roosting Habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting and foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically but not enough space, shelter, protection and appropriate conditions to be used on a regular basis or by larger numbers of bats. A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features seen with only very limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by another habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well-connected to the wider landscape that is likely used regularly by foraging bats such as broad-leaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Birds

2.12 The site was assessed for its potential to support breeding birds. Suitable habitat generally includes scrub, trees and ruderal vegetation but can also include buildings, open grassland and piles of debris.

2.13 The site was also assessed for its potential to support significant wintering and/or migratory bird populations.

Great Crested Newts

2.14 Any aquatic habitat on site and within 500m of the site as well as the terrestrial habitat on site was assessed for their suitability for great crested newts *Triturus cristatus*. Suitable terrestrial habitat generally includes rough grassland and woodland where they can forage and hibernate, with good links to the ponds where they breed.

Hazel Dormice

2.15 Habitats were assessed for their general suitability for hazel dormice. This species generally uses areas of dense woody vegetation and are more likely to be found where there is a wide diversity of woody species contributing to a three-dimensional habitat structure, a number of food sources, plants suitable for nest-building materials and good habitat connectivity.

Invertebrates

2.16 The site was assessed for its potential to support rare or notable invertebrate species.

Other Notable Species

2.17 The site was assessed for its potential to support species of principal importance listed under the UK Natural Environment and Rural Communities NERC Act (2006) which are likely to occur in the local area.

Reptiles

2.18 The site was assessed for its suitability for the four most common reptile species; common lizard *Zootoca vivipara*, slow-worm *Anguis fragilis*, grass snake *Natrix helvetica* and adder *Vipera berus*. Specific habitat requirements vary between species. Common lizard favour rough grassland, however they can be found in a variety of habitats ranging from woodland glades to walls and pastures. Slow-worms use similar habitats to common lizards and are often found in gardens and derelict land. Grass snake have similar habitat requirements to common lizards but have a greater reliance on ponds and wetlands where they hunt amphibians. Adders occupy areas of rough, open countryside and are often associated with woodland edge habitats.

Assessment of Nature Conservation Importance

2.19 CIEEM (2018) has been adopted to assess the impacts upon habitats within the zone of influence of the site. CIEEM suggests that it is best to use the geographical scale (i.e. international, national, regional etc.) at which a feature (i.e. a habitat, species or other ecological resource) may or may not be important as the appropriate measure of importance. As such, data from the data search and extended Phase 1 habitat survey have been reviewed and the likely occurrence of protected and notable species/species groups assessed. This has allowed predictions of impacts to be made along with recommendations for mitigation, compensation and enhancement. Further targeted survey will refine the evaluation and associated recommendations.

2.20 The following geographical scale categories is considered appropriate:

- International;
- National (England);
- Regional (East Anglia);
- County (Norfolk);
- District (South Norfolk);
- Local (Loddon); and
- Site.

Constraints

2.21 Desktop data searches are a valuable tool in evaluating a site's potential to hold rare and protected species, it is not however an absolute in confirming presence or absence of notable species due to the nature of how the records are collected.

2.22 These constraints are not considered to significantly constrain the recommendations of this report given the common habitat types present and the detailed site visit.

3.0 Baseline Ecological Conditions

Site Description

The site comprised an arable field with rough semi-improved grassland margins, with boundary hedgerows and a mixed plantation woodland shelterbelt along the eastern boundary. The site was bordered to the east by arable fields, with residential development to the north-west, and Beccles Road along the south-west boundary, with mainly commercial development beyond. In a wider context, the surrounding environment features residential development associated with Loddon to the north and west, within a mixed farmland mosaic featuring areas of wet grassland and small areas of woodland and scrub.

Statutory/Non-statutory Sites

European Designated Sites

3.1 There are three (largely overlapping) European designated sites within 8km of the site boundary. Broadlands Special Protection Area (SPA), Broadland Ramsar, and The Broads Special Area of Conservation (SAC), are located 0.9km north-east of the site. As these designations almost entirely overlap, they are treated as a single site in this report and referred to as Broadlands SPA/SAC/Ramsar. Broadlands SPA/SAC/Ramsar was designated as an SPA and Ramsar site for its wintering waterfowl assemblage and for supporting various breeding and wintering bird populations of European importance. The nearby designated site was selected as an SAC for its wetland habitats and due to the presence of various European Protected Species, including Ramshorn snail *Anisus vorticulus* and fen orchid *Liparis loeselii*.

3.2 European designated sites are considered important at an **international** level.

Nationally Designated Sites

3.3 There are five national statutory designated sites within 5km of the site, these included four Sites of Special Scientific Interest (SSSI) and one National Nature Reserve (NNR). Details of all statutory designated sites within 5km of the site are provided below in Table 2.

3.4 The site falls within the Natural England SSSI Impact Risk Zone (IRZ) for Hardley Flood SSSI in relation to residential development.

3.5 The SSSIs and NNRs are considered important at a **national** level.

Non-Statutory Designated Sites

3.6 There are four non-statutory designated sites within 2km of the site (three County Wildlife Sites (CWS) and one Roadside Nature Reserve (RNR)) (Table 2). RNR 96 is the closest at c.0.3km to the south-east of site. Details of all non-statutory designated sites are provided below in Table 2.

3.7 The RNRs and CWSs are considered important at a **county** level.

Table 2: Statutory Designated Sites within the vicinity of the site

Name and Site Designation	Approximate Distance and Direction from Site	Size (Ha.)	Designated Features
European Statutory Designated Sites			
Broadlands SPA, Broadland Ramsar, The Broads SAC	0.9km north-east	5889.43	Designated for its scarce wetland habitats, wintering and breeding waterfowl, and its outstanding assemblages of rare plants and invertebrates.
UK Statutory Designated Sites			
Hardley Flood SSSI	0.9km north-east	48.1	An area of shallow lagoons and reedbeds designated for breeding and wintering bird assemblages and valuable wetland habitats.
Poplar Farm Meadows, Langley SSSi	3.4km north	7.3	Spring-fed meadow designated for its uncommon assemblages of plants.
Mid-Yare NNR	4.4km north	779	Broadland floodplain wetland with wet woodland, lakes, meadows and wet grassland.
Cantley Marshes SSSI	4.4km north	296	Grazing marsh with woodland designated for nationally scarce plant species, rare dragonflies and wintering birds.
Ducan's Marsh, Claxton SSSI	4.9km north-west	3.6	Unimproved, wet valley grassland designated for its plant species.
Non-Statutory Designated Sites			
RNR 96	0.8km south-west	0.07	This RNR lies in the middle of the junction of a busy trunk road (A146). The whole verge is situated in an arable landscape and is designated for its lesser knapweed.
Hales Green CWS	1.4km south-east	Unknown	Neutral grassland with ponds and a small amount of scrub. The site is used for grazing cattle and for informal public access. Designated for scarce plant-species
Chedgrave Common and Marshes CWS	1.6km north-east	Unknown	This site consists of Chedgrave Common and the adjacent marshes, which lie to the west. The site is grazed by cattle and there is a small pond in the south-east corner.
Loddon Common & Heron House Marsh CWS	1.7km north-east	Unknown	Species-rich grassland and species-poor swamp adjacent to the River Chet. The site is partly grazed by horses, cattle and sheep.

SSSI: Site of Special Scientific Interest
CTA: Conservation Target Area

Habitats

3.8 The Phase 1 habitat map of the site is provided within Appendix 4 and the plant species recorded per habitat type are tabled in Appendix 5. Site plates are illustrated in Appendix 6. An ecological constraints map is provided in Appendix 7.

3.9 The Phase 1 Habitat types (JNCC, 2010) within the site were:

- Arable;
- Semi-improved grassland;
- Hedgerows; and
- Mixed woodland plantation

Arable

3.10 The site is centred around a large arable field. This habitat featured low plant diversity, limited to small patches of common arable weeds such as scentless mayweed *Tripleurospermum inodorum* and redshank *Polygonum persicaria*.

Semi-improved Grassland

3.11 The arable field featured semi-improved grassland margins which collectively covered an area of approximately 1 hectare. The width of these boundaries varied in width across the site, and generally displayed a tall, tussocky structure and moderate botanical diversity. The species found on site were generally widespread generalists typical of semi-improved grassland on clay soils and included abundant hairy tare *Vicia hirsuta* and frequent common vetch *Vicia sativa*, as well as occasional broomrape *Orobanche minor* which parasitises these species. The areas of greatest botanical diversity were concentrated along the western and southern boundaries.

Hedgerows

3.12 There were three distinct hedgerows that formed part of the boundary of the site. Descriptions of each hedgerow are provided in Table 4.

Table 4: Description of hedgerows on site

Number	Description
1	Native species-rich intact hedgerow running along south-western boundary (Appendix 6; plate 1). Species include hawthorn *Crataegus* monogyna, hazel *Corylus avellana* and dogwood *Cornus sanguinea*.
2	Native species-rich intact hedgerow running along southern boundary (Appendix 6; plate 2). Species include hawthorn, field maple *Acer campestre*, and elder *Sambucus nigra*.
3	Species-poor intact hedgerow running along western boundary (Appendix 6; plate 3). Species included dominant common box *Boxus sempervirens* and frequent ivy *Hedera helix*.

Mixed Woodland Plantation

3.13 A mixed woodland plantation shelterbelt ran the length of the eastern boundary. The woodland was planted less than fifty years ago and has a very uniform age structure with virtually no understory, though the eastern boundary of the woodland features a number of mature oaks along the boundary. The most abundant species was Scots pine *Pinus sylvestris*.

Summary

3.14 The arable habitat on site displayed very limited diversity and the areas of ecological importance on site are considered to be limited to the boundary habitats (hedgerows, semi-improved grassland margins, and the mixed woodland plantation). It is considered that the boundary hedgerow habitat is of importance at the **local** level; all other habitats on site are considered to be of importance at the **site** level. Confidence in this assessment is high.

Protected Habitats

Hedgerows

3.15 The hedgerows on site are considered to meet the definition for classification as a UK NERC Act (2006) habitat of principal importance, (i.e. more than 80% UK native woody species) (JNCC, 2008) (Table 5). A formal hedgerow survey was not conducted as it was outside the scope of the survey to undertake a detailed assessment. However, given the abundance of woody species, a provisional assessment has been made as to whether hedgerows on site are likely to be 'important' under the wildlife criteria of The Hedgerow Regulations *1997* (Table 5) *(*Appendix 4*)*

Table 5: Assessment of Hedgerows on site

Hedgerow number	Number of Woody Species	Number of Associated Features	Likely to be 'important' under *The Hedgerow Regulations 1997*
1	9	N/A	Yes
2	1	N/A	No
3	5	N/A	Yes

3.16 Hedgerows 1 and 3 have a high diversity of woody species. Therefore, these hedgerows are considered as 'important' under the hedgerow regulations 1997, Hedgerows are considered to be of **local** importance, with confidence in this assessment high.

Semi-improved Grassland (Arable Field Margins)

3.17 The semi-improved grassland along the northern, southern, and western margins of the arable field displayed moderate botanical diversity, though all the species found on site are either widespread or locally common. These margins are considered to meet the definition for classification as a UK NERC Act (2006) habitat of principal importance, (i.e. a permanent grass strip, usually 2-12m width, with a mixture of tussocky and fine-leaved grasses) (JNCC, 2008). The eastern and margin is narrower and less diverse with a generally sparse structure. It does not extend more than two metres beyond the canopy of the adjacent woodland and is therefore considered to be associated with this boundary feature and does not meet the criteria for classification as a habitat of principal importance.

3.18 Arable field margins provide valuable habitat for invertebrates and birds. Given the abundance of arable field margins within the wider landscape and the proportionately small are of habitat present on site, this habitat is only considered to be of **site** importance, with confidence in this assessment high.

Protected and Notable Species

Rare and Notable Plants

3.19 There were no records of Schedule 8 protected species within 2km of the site. There were records of Schedule 9 invasive species Indian balsam *Impatiens glandulifera*, and New Zealand pigmyweed *Crassula helmsii* within 2km of the site.

3.20 Small numbers of Schedule 8-listed bluebell *Hyacinthoides non-scripta* were recorded in the north-west corner of the site. It is considered likely that these plants have spread from nearby residential gardens. No species listed under Schedule 9 of the Wildlife and Countryside Act (WCA) 1981 were recorded on site. The site is assessed as being of **negligible** importance for rare and notable plants.

Badger

3.21 There were two badger records within 2km of site, most recently in 2017.

3.22 No badger setts or field signs such as badger tracks, hairs and snuffle marks were observed during the survey. The site offers opportunities for future sett-building in the form of the earth bank along the north-western boundary and the woodland plantation along the eastern boundary. Suitable foraging/commuting habitat is present along the site boundaries in the form of woodland, hedgerows, and semi-improved grassland.

3.23 The site is assessed as being of **site** importance for badgers and confidence in this assessment is currently high.

Bats

3.24 There were records of at least nine bat species within 2km of the site (Table 6).

Table 6: Records of bat species within 2km of the site boundary

Bat species	Number of records	Last recorded
Brown long-eared *Plecotus auritus*	10	2016
Barbastelle *Barbastella barbastellus*	3	2016
Common pipistrelle *Pipistrellus pipistrellus*	12	2016
Daubenton's *Myotis daubentonii*	7	2014
Natterer's *Myotis nattererii*	2	2016
Nathusius's pipistrelle *Pipistrellus nathusii*	2	2016
Noctule *Nyctalus noctula*	15	2016
Serotine *Eptesicus serotinus*	9	2016
Soprano pipistrelle *Pipistrellus pygmaeus*	21	2016
Unidentified myotis *Myotis sp.*	2	2014
Unidentified pipistrelle *Pipistrellus sp.*	11	2016

Bats – Roosting

3.25 No buildings were recorded on site. However, five trees on site were identified as having low to moderate potential for roosting bats (Table 7) (Appendix 7).

Table 7: Trees with bat roosting potential

Tree	Species	Potential roosting features (PRFs)	Suitability
1	Oak	All orientations: dense ivy around trunk between 2m and 10m above ground. Tree of sufficient size and age to contain additional potential roosting features not visible from the ground.	Low
2	Oak	South orientation: split along west-facing limb approximately 4m above ground.	Moderate
3	Oak	South orientation: split in bark on north-angled limb approximately 6m above ground. Tree of sufficient size and age to contain additional potential roosting features not visible from the ground.	Low
4	Oak	South-west-orientation: bark peeling away 1m above ground. Small splits and cracks widespread from 2m above ground.	Low
5	Willow	All orientations: dense ivy covers tree trunk from ground level up.	Low

Bats - Foraging/Commuting

3.26 The arable field was considered to be of negligible importance for foraging and commuting bats. However, the boundary habitats (hedgerows, woodland, and rough semi-improved grassland margins), were considered to provide low suitability habitat for foraging and/commuting bats. These boundary habitats are likely to act as an important corridor, connecting areas of suitable habitat within the wider local landscape.

3.27 The site was considered to be important up to **local** level of importance for bats and confidence in this assessment is currently moderate.

Birds

3.28 There were records of 106 bird species within 2km of the site; 23 of which were red-listed birds of conservation concern (BoCC) (Eaton *et al.* 2015). Additionally, 36 species were listed under Schedule 1 of the WCA 1981.

3.29 The arable field offers potential nesting habitat for small numbers of arable specialists and the boundary hedgerows and woodland are suitable for an array of bird species. Notable red-listed species which could feasibly breed on site include skylark *Alauda arvensis*, song thrush *Turdus philomelos*, grey partridge *Perdix perdix*, and yellow wagtail *Motacilla flava*.

3.30 The site has the potential to be of value to wintering birds, particularly waterfowl. Broadland SPA is designated partly for supporting large numbers of wintering waterfowl including up to 1.5% of the wintering Eastern Greenland/Iceland/UK population of pink-footed goose *Anser brachyrynchus*. Hardley Flood SSSI also supports small flocks of bean goose *Anser fabalis* and white-fronted goose *Anser albifrons*. All of these species are known to make use of arable fields for roosting and foraging and it is therefore possible that the arable habitats on site are of value to these species. However, it should be noted that the wider landscape features extensive areas of arable farmland, including several fields close to the site which are larger and further from residential development and therefore likely to be more attractive to wintering waterfowl. The arable habitat on site is considered suboptimal for wintering waterfowl due to its relatively small size and the surrounding boundary habitats and residential properties, which limit visibility and provide cover for potential predators e.g. red fox *Vulpes vulpes*. The site also offers suitable habitat for a large assemblage of wintering passerine such as fieldfare *Turdus pilaris* and redwing *Turdus iliacus*, which are both red-listed species of conservation concern.

3.31 Further surveys are necessary in order to assess the importance of the site for its breeding and wintering bird assemblage, however the site is considered likely to be of **local** importance. Confidence in this assessment is currently low.

Great Crested Newt

3.32 The data search returned a single record of great crested newt (GCN) within 2km of the site boundary, in 2002.The absence of more recent records may reflect the absence of individuals in the local area or may simply result from a lack of recording.

3.33 No aquatic habitats were found on site, though the site offers suitable terrestrial habitat for GCN along the site boundaries in the form of rough grassland and hedgerows. In addition, there were extensive piles of vegetation and compost along the northern boundary of the site as well as some scattered vegetation piles elsewhere on site, which could act as suitable refugia. The arable farmland which dominated the centre of the site was not considered to offer suitable habitat for GCN.

3.34 Aquatic habitat within the wider landscape includes two ponds and a complex network of drains, most of which appear to be connected to a tributary of the River Chet, which runs south to north, approximately 160m west of the site boundary at its closest point (Appendix 8). In addition, a short section of dyke (Pond 3) was identified approximately 140m west of the north-west corner of the site, isolated from the nearby river tributary, which was found to contain still water and submerged vegetation and was therefore considered to offer suitable habitat for GCN.

3.35 Research undertaken by English Nature (Cresswell, 2004), now Natural England, suggests it is most common to encounter GCN within 50m of a breeding pond, with few moving further than 100m unless significant linear features are involved when GCN can be encountered at distances of between 150m – 200m. Pond 1 was located approximately 300m north-west of the site, on the far side of the tributary, which was found to be approximately three metres wide and contained flowing water. It is therefore considered to constitute a significant barrier to dispersal for GCN. Pond 2 was located approximately 460m north-east of the site, on the far side of two small roads, set within a mosaic of woodland and grazing marsh. It was not possible to assess this pond's suitability for GCN as it was located on private land, however it is considered highly unlikely that GCN would travel between this pond and the site given the large distances involved and the abundance of apparently suitable terrestrial habitat close to Pond 2. Pond 3 is set within an area of rough grazing marsh, on the far side of Norton Road. Whilst this road and the associated residential properties are likely to pose a

moderate barrier to GCN dispersal, it is feasible that small numbers of GCN may traverse these habitats to make use of the suitable terrestrial habitats and potential refugia within the north-western section of the site.

3.36 The site is considered to have **site** importance for great crested newts. Confidence in this assessment is currently moderate.

Hazel Dormice

3.37 This species is likely extirpated within Norfolk (Natural England, 2014) and is therefore not considered further within this report.

Invertebrates

3.38 The data search only returned records of 14 invertebrate species within 2km of the site, however given the proximity of The Broads SAC it is likely that the local area features a large diversity of invertebrates including several notable aquatic species.

3.39 The majority of the site is an arable field and as such unlikely to support rare or notable invertebrates due to the lack of specific micro habitats and structural diversity. However, the semi-improved grassland exhibited moderate botanical diversity and moderate levels of invertebrate activity were observed within this nectar-rich habitat. The hedgerows and woodland featured small amounts of deadwood suitable for saproxylic invertebrates. However, given the small area of these habitats and the abundance of highly suitable habitat within the local area, particularly those habitats associated with the Broadlands SPA/SAC/Ramsar, it is considered unlikely that the site supports any assemblages of rare/noted invertebrates significant at a local level.

3.40 Given the small area of suitable habitats on site, and their relative abundance at a local level, the site is considered only to be of **site** importance for invertebrates. Confidence in this assessment is currently high.

Reptiles

3.41 The data search with NBIS did not return any records of reptile within 2km of the site boundary, however this may be due to a lack of recording rather than indicating absence as a search with the NBN Atlas revealed two records of grass snake approximately 400m north of the site. No further reptile records were returned within 2km of the site, though a 5km search returned records of adder, slow-worm, and common lizard.

3.42 The site offers suitable habitat for reptiles in the form of rough semi-improved grassland and hedgerows. There is limited habitat connectivity between the site and nearby areas of suitable habitat, however rough grassland is abundant within the wider environment and the site may form part of the range of a local reptile population.

3.43 Given the limited habitat connectivity and small area of suitable habitats on site relative to their abundance within the local area, the site is considered likely to be of **site** importance for reptiles, though confidence in this assessment is currently moderate.

Other Notable Species

3.44 There were 33 records of protected and notable mammals within 2km. These are summarised in Table 8.

Table 8: Records of mammal species within 2km of the site boundary

Mammal species	Number of records	Last recorded
Brown hare *Lepus europaeus*	16	2016
European hedgehog *Erinaceus europaeus*	16	2017
Harvest mouse *Micromys minutus*	1	2015

3.45 No notable mammals were observed, however the site provided suitable habitat for European hedgehog in the form of rough grassland, hedgerows, and woodland. The site also provided suitable habitat for brown hare in the form of arable farmland and rough grassland. The arable and grassland habitats on site were suitable for harvest mouse, though the arable habitat was considered sub-optimal due to the lack of botanical diversity. Each of these habitats is abundant within the local area. There were no nearby records of European polecat *Mustela putorius* and this species is considered likely to be absent from the site as it has only recently begun to recolonise the county, having previously been regionally extirpated.

3.46 The site is considered to have **site** importance for these species and confidence in this assessment is high.

Summary

Table 9: Summary Evaluation of Features

Feature	Summary Description	Importance	Confidence
SPA/SAC/Ramsar	Broadland SPA/SAC/Ramsar located 0.9km north-east.	International	High
SSSI/LNR	Four SSSI and one NNR within 5km, with Hardley Flood SSSI located 0.9km north-east.	National	High
CWS/RNR	Three CWS and one RNR within 2km, with RNR 96 located 0.8km south-east.	County	High
Habitats	Hedgerow Semi-improved grassland, mixed woodland plantation, and arable.	Local Site	High
Badger	No setts but the site provides suitable foraging and commuting habitat	Site	High
Bats	Potential roosting in trees on site and low foraging/commuting potential restricted to boundary habitat	Local	Moderate
Birds	Suitable habitat for a notable assemblage of breeding birds, and the potential to support flocks of wintering waterfowl.	Local	Low
Great crested newt	Suitable terrestrial habitat around site perimeter, with potential breeding waterbody within 250m.	Site	Moderate
Invertebrates	Semi-improved grassland, hedgerows, woodland. Some deadwood for saproxylic invertebrates.	Site	High
Reptiles	Suitable terrestrial habitat and compost heaps offer suitable refugia.	Site	Moderate
Other notable species	Suitable terrestrial habitat for brown hare, European hedgehog, and harvest mouse.	Site	High

4.0 Preliminary Prediction of Impacts, Recommendations and Mitigation Measures

Description of proposals

4.1 The proposal for the site is for residential development. Detailed proposals are not currently available; however, feasibility layouts suggest the development of 165 residential units along with additional areas of open space and access roads. It is proposed that boundary habitats (hedgerows and woodland) will be retained while all other habitats will be removed. It is anticipated that a small portion of hedgerow 1 will be removed to accommodate an access road and visibility splays.

Statutory/Non-statutory Sites

Internationally and Nationally Designated Sites

4.2 The site falls within the 1km and 2km IRZ (via DEFRA's Magic Map- magic.defra.gov.uk) for the nearby Broadland SPA/SAC/Ramsar and Hardley Flood SSSI. Adverse indirect effects of the proposed development upon these designated sites are therefore considered possible, and a Habitat Regulations Assessment (HRA) should be produced in order to fully assess the risk of any adverse impacts. The IRZ advises likely impacts as a result of residential developments of 50 units or more, and any residential development of 10 or more houses outside existing settlements/urban areas within 1km of the designated sites, and 50 or more houses outside existing settlements/urban areas within 2km of the designated sites. The IRZ also emphasises the risk posed by infrastructure such as pipelines, pylons, overhead cables and roads, which will be required by the development.

4.3 The site offers suitable roosting and foraging habitat for wintering waterfowl, which are a feature of the SPA and Hardley Flood SSSI. Given that this habitat will be lost as a result of the proposed development, there is a risk of a detrimental impact on this feature of the designated sites. The proposed development may also reduce the suitability of the adjacent eastern arable fields for wintering waterfowl due to the proximity of urban development and increased human disturbance, however the existing woodland plantation shelterbelt will continue to act as a visual barrier and may mitigate this risk. Further surveys and likely mitigation are detailed below in section 4.25.

4.4 The development proposal is bordered to the north, west, and south by existing urban residential and commercial development and is considered to fall within the existing urban area of Loddon. Further assessment is required, but it is considered highly likely that any direct or indirect risks to the SPA/SAC/Ramsar such as air pollution, possible surface runoff polluting nearby waterways, increased recreational pressure, and impacts on designated features such as wintering waterfowl can be effectively managed through appropriate mitigation measures.

4.5 Further assessment is required in the form of an HRA and further surveys, however, given that most of the local environment around Loddon falls within the SPA/SAC/Ramsar/SSSI IRZ, the proposed site is considered to represent a good opportunity for required expansion due to its location and its limited ecological value. Mitigation measures are likely to include the provision of green space for residents to relieve recreational pressure on local designated sites and the implementation of pollution control methods during the construction and operational phases of the development. Specific mitigation measures can be confirmed once the layout is fixed and the impacts on nearby designated sites have been fully assessed.

Non-statutory Designated Sites

4.6 All of the non-statutory designated sites identified within 2km of the site offer some degree of public access and are likely to experience a slight increase in recreational pressure as a result of the proposed development. It is considered that this impact can be fully mitigated through the provision of accessible green space within the development. Other indirect effects such as increased air pollution can likely be avoided through pollution control measures during construction and operation. A neutral impact is therefore predicted on all non-statutory designated sites, significant at a **county** level, with confidence in this assessment high.

Habitats

Hedgerow

4.7 The boundary hedgerows are to be retained where possible, though the loss of a small area is expected to accommodate visibility splays for a new access road. There is scope to enhance the external boundary through native species planting where there are gaps in the existing hedgerow. Additionally, there is potential to provide new stretches of hedgerow and scrub along new internal boundaries of the development. It is recommended that all planting is comprised of native species such as those listed in Appendices 9 and 10. Hedgerows on site should be managed through rotational cutting to further enhance their value for wildlife. A rotation where no more than half of the hedgerows on site are trimmed in any one year is considered appropriate, with longer rotations of up to five-yearly cuts providing even greater wildlife value. The value of the hedgerows could be further enhanced by allowing some trees to grow above the height of the surrounding hedge. In addition, portions of the hedgerows could be allowed to widen and develop into dense scrub.

4.8 The inclusion of native planting within the development plan, together with retaining hedgerows where possible, buffering works from remaining hedgerows, and managing the hedgerows on site through rotational cutting is predicted to result in a residual **positive** impact on this habitat at a **site** level.

Other habitats

4.9 The proposed development will result in the loss of the arable habitat on site, however this area is of relatively low ecological value and is abundant within the wider environment. There may also be a reduction in the area of semi-improved grassland on site, and these areas will no longer qualify as a habitat of principal importance as they will no longer function as arable field margins. However, the proposed development is expected to include areas of open green space, some of which should be managed primarily for biodiversity in the form of wildflower-rich grassland. Some of this green space could be newly created, however, retaining some of the established semi-improved grassland on site would provide greater value for wildlife. These habitats should be managed according to an appropriate management plan during the operational phase of the development.

4.10 The woodland plantation shelterbelt which forms the eastern boundary of the site is to be retained post-development. This area of the site is likely to be attractive to dogwalkers and other recreational users post-construction, and there is a risk that increased footfall will disturb wildlife and damage the field layer of the woodland, which is already sub-optimal due to heavy shading. This risk could be mitigated through the provision of a woodland management plan, to include selective thinning of the woodland, and the provision of a hard-surfaced footpath. With appropriate management, there is scope to enhance this habitat for biodiversity. In addition, a tree protection buffer should be established to protect all the trees on site from damage during construction.

4.11 It is further recommended that a sensitive lighting strategy is implemented to help mitigate potential indirect

impacts on species utilising the boundary habitats (also of benefit to a wide range of invertebrate species). Further details are outlined within section 4.21.

4.12 The retention of some or all of the semi-improved grassland on site, together with the provision of new areas of open green space and the retention and enhancement of boundary habitats is likely to result in a **positive** residual effect at a site level.

Badgers

4.13 Some of the habitats on site (semi-improved grassland, hedgerows, woodland plantation) provide foraging opportunities for badgers. To mitigate against the minor loss of foraging habitat expected to result from the proposed development, it is recommended that fruit and seed-bearing tree species (such as crab apple *Malus sylvestris*, elder *Sambucus nigra* and rowan *Sorbus aucuparia)* are included in the landscape plans. The proposed development will also result in increased human activity on site. Badgers are vulnerable to disturbance, and the landscape plan should include dense scrub thickets connecting to existing areas of suitable habitat to ensure the continued provision of sheltered foraging habitat. Traffic control measures such as a reduced speed limit and/or other speed control measures such as speed bumps are advised in order to reduce the risk presented by increased traffic on the new road network.

4.14 General precautionary techniques sympathetic to badgers (applicable to most sites) are recommended due to the potential for badgers to forage/disperse within the study area:

- Covering trenches at night or leaving a plank of wood leant against the side to ensure badgers can escape if they were to accidentally fall in;
- Storing chemicals safely (e.g. locked away); and
- A toolbox talk will be given to on-site operatives detailing these precautionary measures.

4.15 Due to the propensity of badgers to move around the landscape and dig out old setts/open new ones, it is recommended that a pre-construction walkover is undertaken no more than 12 months prior to the start of development. If an active sett is found, a Natural England licence may be required to close the sett if it is to be impacted by the development.

4.16 The implementation of general precautionary measures, together with the retention and enhancement of the woodland plantation is likely to result in a **positive** effect at site level.

Bats

Bats – Roosting

4.17 The trees on site which were assessed as having potential to support roosting bats are to be retained. It is considered that the provision of a tree protection zone and a sensitive lighting strategy should be sufficient to ensure that the proposed development has a neutral impact on these potential roosts. If the current plans change and any of these trees are to be removed, or if the development footprint is extended to include the woodland plantation, a further ground-level tree assessment will be required to re-assess the predicted impact of the proposal on roosting bats.

Bats - Foraging/Commuting

4.18 The site largely consists of negligible habitats for foraging and commuting bats in the form of amenity

grassland. However, the boundary habitats (hedgerows and woodland), are considered to be of low importance for foraging and/or commuting bats and a suite of further surveys should therefore be undertaken to determine the impacts of development on foraging/commuting bats. Seasonal surveys should be undertaken (spring, summer, autumn), in accordance with guidance (Collins, 2016).

4.19 Bat activity surveys will comprise one visit carried out per season (spring – April/May, summer – June/July/August, autumn – September/October) in appropriate weather conditions for bats. In addition, one static bat detector is to be deployed on five consecutive nights per season in appropriate weather conditions for bats.

4.20 In general, it is recommended that site lighting around key features likely to be used by roosting, foraging or commuting bats is avoided during both the construction and operational phases. If lighting is necessary then there are a number of ways to minimise the effect of lighting on bats. The following mitigation strategies have been taken from the Institution of Lighting Professionals and Bat Conservation Trust's Guidance Note 08/18 Bats and artificial lighting in the UK (2018) and other referenced sources:

- In general, light sources should not emit ultra-violet light so as to avoid attracting insects and thus potentially reducing numbers in adjacent areas, which bats may use for foraging. Metal halide and fluorescent sources should not be used.
- LED luminaires should be used where possible. A warm white spectrum (ideally <2700Kelvin) should be adopted to reduce blue light component. Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012).
- Limiting the height of lighting columns to eight metres and increasing the spacing of lighting columns (Fure, 2006) can reduce spill of light into unwanted areas such as the adjacent woodland. Only luminaires with an upward light ratio of 0% and with good optical control should be used. Luminaires should always be mounted on the horizontal, i.e. no upward tilt.
- Other ways to reduce light spill include the use of directional luminaires, shields, baffles and/or louvres. Flat, cut-off lanterns are best. Additionally, lights should be located away from reflective surfaces where the reflection of light will spill onto potential foraging/commuting corridors. Internal luminaires can be recessed where installed in proximity to windows to reduce glare and light spill. Where windows and glass facades etc. cannot be avoided, low transmission glazing treatments may be a suitable option in achieving reduced illuminance targets.
- Lighting that is required for security or access should use a lamp of no greater than 2000 lumens and be PIR sensor activated on a short timer (1 minute), to ensure that the lights are only on when required and turned off when not in use (Jones, 2000; Hundt, 2012). A control management system can be used to dim (typically to 25% or less) or turn off groups of lights when not in use.

4.21 Mitigation should also include the planting of scrub between the development and major bat corridors (likely the woodland shelterbelt) to shield them from light disturbance, thereby providing a dark corridor for commuting/foraging bats. This corridor could be managed as a woodland ride and would present an attractive walking route, reducing the recreational impact of the development on nearby designated sites.

4.22 There is abundant scope to enhance the site for bats including within the built environment, which is currently predominantly arable and of minimal value for foraging or roosting bats. Enhancement could include the planting of scrub, hedgerows, and/or scattered trees (see Appendix 9) along internal boundaries and the inclusion of integrated bat boxes within some of the proposed buildings (away from artificial light) or provision of traditional bat boxes that could be hung on retained trees/new buildings. This would provide additional foraging and roosting opportunities and enhance landscape connectivity for bats. There are numerous bat box

designs but the Habibat 001 Bespoke (www.habibat.co.uk) provides excellent summer roosting conditions for crevice inhabiting species including common pipistrelle *Pipistrellus pipistrellus* and Natterer's bat *Myotis nattereri*, which are both known to be present locally. No maintenance is required. See Figure 1 for a diagram.

Figure 1: Habibat Integrated Bat Box

4.23 With these lighting and planting recommendations, it is considered that any adverse effects from lighting upon potential bat populations within the wider landscape will be mitigated satisfactorily and result in a **positive** effect at site level.

Birds

4.24 Given the potential of the arable habitat and associated boundary habitats on site to support a locally significant breeding bird assemblage a breeding bird survey comprising four visits is to be undertaken between April and June (inclusive).

4.25 The arable habitat on site offers suitable foraging/roosting habitat for passage and wintering waterfowl such as pink-footed geese, white-fronted geese and bean geese, which are designated features of the nearby Broadland SPA/SAC/Ramsar and Hardley Flood SSSI, which are located 900m from the site. This habitat will be lost as a result of the proposed development, which poses the additional risk that the nearby arable fields to the east will become less attractive to wintering waterfowl due to increased human disturbance. Wintering bird surveys will therefore be required in order to determine whether waterfowl are currently using the site or the adjacent arable fields, assess the impacts of the proposal and inform mitigation measures. Wintering bird surveys will comprise seven survey visits between September and March.

4.26 If significant numbers of wintering waterfowl are currently using the site, off-site compensation is likely to be necessary. This would be determined in consultation with Natural England and would likely feature either habitat creation or a financial contribution to the management of a local nature reserve. If significant numbers of wintering waterfowl are found to be using the arable fields to the east of the site the existing woodland plantation would reduce the impact of increased human activity on site, and it is considered likely that the disturbance effect on the adjacent fields could be entirely mitigated through careful supplementary planting to screen eastern boundary. If small numbers of common waterfowl are found to be using the site, the creation of one or more ponds on site would ensure that the site continues to be of some value for common species.

4.27 If wintering waterfowl do not prove to be a major constraint, the loss of nesting and foraging habitat resulting from the development and increased disturbance to retained areas of suitable nesting habitat is expected to be more than mitigated for through the provision of native species planting associated with the dark corridor advised in section 4.21. The site could be further enhanced with native species planting along internal boundaries.

4.28 Given that it will take time for newly planted trees and hedges to develop into potential nesting bird habitat, bird-nesting features or boxes should be installed on site to provide additional nesting sites. Nest boxes should target species of conservation concern likely to occur within the local area, and the selection of boxes will be informed by the advised breeding bird surveys. An indicative selection of boxes to cater for a range of bird species is provided below:

- Swift *Apus apus* integrated bricks on buildings;
- House sparrow *Passer domesticus* terrace boxes (32mm hole x 3) on buildings;
- Starling *Sturnus vulgaris* boxes (45mm hole) on buildings; and
- Open-fronted boxes (suitable for a range of species) on retained trees.

4.29 Further surveys are required in order to fully assess the impacts of the proposal and inform mitigation, however, the retention and enhancement of boundary habitat, inclusion of native species planting (Appendix 10) and installation of bird-nesting features is likely to result in a **positive** effect at a site level.

Great Crested Newts

4.30 Due to a waterbody being located close to the site (Pond 3 is within 250m) it is possible that great crested newts may be present within the north-western corner of the site. However, this is considered unlikely, given that there is abundant suitable terrestrial habitat off-site in close proximity to Pond 3, and Norton Road and the intervening residential properties are likely to act as a moderate barrier to dispersal.

4.31 Impacts of residential development could include: death/injury/disturbance to individuals and the loss of a resting place/place of shelter, which are offences covered in the Conservation of Habitats Regulations 2017. Therefore, further surveys are advised in order to determine GCN presence/likely absence.

4.32 Further surveys may take the form of four presence/likely absence surveys from March to June with at least two surveys between mid-April to mid-May following published guidance (English Nature, 2004. If GCN are present an additional two surveys would be carried out to categorise the population class size, totalling six surveys with at least three surveys carried out between mid-April to mid-May. Alternatively, environmental DNA (eDNA) pond water samples could be taken between 15 April and 30 June to determine presence/absence following published guidance (Biggs *et al.*, 2014). Given that there is only a single pond located within 250m of the proposal site, an eDNA test is considered appropriate and a sample was taken on 27th June 2019, with the result pending at the time of writing this report.

4.33 If GCN presence is confirmed, it may be possible to proceed under a precautionary method statement in order to avoid risks to great crested newts, provided that suitable terrestrial habitats within 250m of Pond 3 are retained. This would require the area of semi-improved grassland within the north-western corner of the site to be retained. If suitable terrestrial habitats within 250m of Pond 3 are to be removed it may be necessary to conduct a full programme of presence/likely absence surveys to establish population size and inform a Natural England European Protected Species Mitigation (EPSM) licence.

4.34 There is potential to enhance the site for GCN through pond creation and the provision of artificial hibernacula within areas of suitable terrestrial habitat in the north-western corner of the site. Pond creation could be incorporated into a Sustainable Urban Drainage Scheme (SUDS) for the development. It is considered likely that the risk to great crested newts can be fully mitigated through the above recommendations, and a **neutral** residual impact is anticipated at a site level.

Invertebrates

4.35 The development will result in a reduction of habitat suitable for invertebrates due to the loss of arable farmland (currently of minimal ecological value), some semi-improved grassland, and the likely clearance of a small section of hedgerow to accommodate an access road. However, it is considered likely that the retention and enhancement of boundary hedgerows, some of the existing semi-improved grassland, and the woodland shelterbelt, together with the provision of new areas of open green space and native species planting associated with the landscape plans will result in a **positive** impact at a site level. The site could be further enhanced for invertebrates through the provision of deadwood piles.

Reptiles

4.36 The study area is considered to provide suitable habitat for reptiles in the form of hedgerows and semi-improved grassland. If reptiles are present, then the proposed development would result in a reduction of habitat for reptiles. Additionally, the development could lead to the injury or death of reptiles. Further surveys to determine reptile presence/likely absence are therefore recommended.

4.37 A seven-visit presence and likely absence survey (typically carried out Mid-March to September) will be undertaken during 'suitable' days for reptile activity; a 'suitable' survey day is determined by the weather with temperature being the pre-eminent factor (10°C-17°C). Reptile refugia (0.5m x 0.5m) should be used to observe reptiles basking. Refugia should be laid at a density of 10 per hectare. This survey methodology is recognised as best practice by Froglife (1999) and the Herpetofauna Worker's Manual (Gent and Gibson, 2003).

4.38 If common reptile species are recorded, then mitigation is likely to involve the removal of all individuals from the development area to avoid injury/death, potentially requiring translocation if the development footprint is to include areas of suitable habitat. Mitigation is likely to include the retention of suitable areas of undeveloped habitat within the site, which may have to be fenced during construction and maintained and enhanced through the provision of log piles. Habitats should be managed during operation to maintain any population currently present on site. Alternatively, if the development footprint is limited to the arable habitat on site, then the risk to reptiles could be adequately mitigated through the provision of a precautionary method statement. Providing scrub associated with the advised dark corridor (section 4.21) would also offer some suitable sheltering habitat for reptiles and help to maintain habitat connectivity across the site.

4.39 There is potential to enhance the site for reptiles through the creation of new areas of suitable terrestrial habitat, for example by widening the existing semi-improved grassland field margins. If the above recommendations are implemented, the development is expected to result in a **neutral** residual effect at site level.

Other Notable Species

Brown Hare

4.40 If present, brown hare is likely to stop using the site following development. The provision of an area of rough grassland along the eastern boundary would enable brown hares present in the arable landscape to the east to continue using part of the site for cover/foraging purposes.

4.41 A **negative** impact at a site level for this species is unavoidable but should be considered in the context of the wider local environment, which will remain suitable for brown hare.

European Hedgehog

4.42 Mitigation for European hedgehog includes the retention of hedgerows. If any suitable habitats (including rough grassland, heaped dead vegetation and log piles) are to be removed this should be undertaken outside of the hedgehog hibernating season (generally November to February inclusive) in a staged way to ensure animals can move from the area. The optimum time to remove vegetation would be during September/October as this avoids both the nesting bird season and the hedgehog hibernation season. It is recommended that hedgerows are retained and enhanced.

4.43 To retain hedgehog access into the site it is recommended that hedgehog highways are added to garden fences to maintain access by creating *ad hoc* 13cm x 13cm holes in fencing/walls (see Figure 2, below). This size gap is too small for most pets and can be undertaken by raising a fence panel per garden; installing hedgehog friendly fencing; removing a brick at the bottom of a wall or cutting a hole in fencing/walls. Furthermore, any new residential ponds to be created during landscaping should feature shallow margins to allow hedgehogs access/egress as they are known to drown if this is not provided.

4.44 The proposed development is likely to result in increased road traffic across the site. Traffic control measures such as speed bumps and/or a low speed limit is advised to mitigate against the increased risk of road traffic accidents.

4.45 The above measures and the retention and enhancement of boundary habitat is likely to result in a **positive** effect at site level.

Figure 2: Example hedgehog highway with signage sold by the People's Trust for Endangered Species.

Harvest Mouse

4.46 The loss of arable habitat and the anticipated reduction in the area of semi-improved grassland on site will result in a reduction of suitable foraging and nesting habitat for harvest mouse.

4.47 Mitigation for harvest mice should include the continued provision of rough grassland, well connected to the arable landscape to the east of the site. Allowing patches of bramble to establish within or adjacent to these areas of grassland will benefit this species.

4.48 The retention and sensitive management of semi-improved grassland, together with the advised scrub planting associated with the dark corridor (section 4.21) would ensure that the site remains suitable for this species and, provided the above recommendations are implemented, a **neutral** impact is predicted for this species.

5.0 Conclusions

5.1 The site is dominated by arable habitat, which is of inherently limited ecological importance, with major ecological interest limited to the semi-improved grassland and boundary habitats. The woodland plantation and boundary hedgerows (which are currently in sub-optimal condition) are due to be retained and the development provides an opportunity to enhance the value of the site for wildlife. A summary of likely impacts, together with advised further surveys and mitigation is provided in Table 9.

Table 10: Summary of Likely Impacts, Mitigation and Enhancement Measures and Residual Impacts.

Feature	Likely Impacts	Further Surveys	Likely Mitigation and Enhancement Measures	Residual Effect
SPA/SAC/Ramsar	Increased recreational pressure. Increased air pollution and possible surface runoff into nearby waterways. Loss of potential roosting/foraging habitat for wintering waterfowl (designated feature of the SPA and Ramsar)	A Habitat Regulations Assessment (HRA) is required to fully assess the impacts of the proposed development on these European designated sites. Wintering bird surveys (see below)	Provision of greenspace and pollution control measures during construction and operation.	To be determined through HRA.
SSSI	Increased recreational pressure. Increased air pollution and possible surface runoff into nearby waterways. Loss of potential roosting/foraging habitat for wintering waterfowl (designated feature of the SSSI)	The impacts on Hardley Flood SSSI will be considered within the advised HRA (see above) Wintering bird surveys (see below)	Provision of greenspace and pollution control measures during construction and operation.	To be determined through HRA.
CWS/RNR	Potential indirect effects (air pollution and increased recreational pressure)	N/A	Provision of greenspace and pollution control measures during construction and operation	Neutral
Habitats	Loss of arable habitat and reduction of semi-improved grassland. Loss of a small stretch of hedgerow for the access road and visibility splays. Lighting impacts on boundary habitat	N/A	Sensitive management of retained semi-improved grassland and provision of open green space within the development. Enhancement of retained hedgerows and woodland plantation through sensitive management and planting of native species. Planting of native species along new internal boundaries. Implementation of wildlife sensitive lighting.	Positive

Feature	Likely Impacts	Further Surveys	Likely Mitigation and Enhancement Measures	Residual Effect
Badgers	Potential injury/death during construction and post-construction due to increased traffic. Loss/disturbance of commuting and foraging habitat.	Pre-construction walkover.	Precautionary construction techniques. Enhancement of retained boundary habitat through planting of badger-friendly fruiting trees. Provision of dense scrub thickets connecting to areas of suitable foraging habitat. Traffic control measures to reduce chance of badger injury/death post-construction.	Positive.
Bats	Loss/disturbance of roost, commuting and foraging habitat.	Seasonal activity transects. Roost surveys if trees with bat roost potential impacted.	Implementation of wildlife sensitive lighting. Scrub planting between development and major bat corridor to provide dark corridor suitable for foraging/commuting bats. Enhancement of retained boundary habitat through planting of trees which are of value to bat prey species. Native species planting along internal boundaries of the development. Provision of bat boxes on buildings/retained trees.	Predicted impacts and mitigation advice will be dependent upon the results of the advised surveys. Likely positive.
Birds	Loss of nesting habitat in the form of arable farmland, semi-improved grassland, and a small section of hedgerow. Loss of roosting/foraging habitat for wintering waterfowl associated with Broadland SPA/Ramsar and Hardley Flood SSSI. Disturbance of adjacent arable fields which offer potential wintering waterfowl roosting/foraging habitat.	Breeding Bird Surveys. Wintering Bird Surveys.	Any vegetation clearance to be undertaken outside of breeding bird season or after an ecologist has confirmed no active nests. Mitigate for loss of nesting habitat through native planting. Enhancement of retained hedgerows and woodland plantation through sensitive management. Bird box installation.	Predicted impacts and mitigation advice will be dependent upon the results of the advised surveys. Likely positive.

Feature	Likely Impacts	Further Surveys	Likely Mitigation and Enhancement Measures	Residual Effect
Great crested newt	Loss of foraging habitat and potential refugia.	eDNA survey of Pond 3.	Precautionary method statement and/or translocation under Natural England licence. Enhancement measures could include pond creation and provision of artificial hibernacula.	Predicted impacts and mitigation advice will be dependent upon the results of the advised surveys. Likely neutral.
Invertebrates	Death/injury, disturbance, loss of foraging habitat in the form of arable and semi-improved grassland.	N/A	Sensitive management of retained semi-improved grassland. Boundary habitats to be retained where possible and enhanced through sensitive management. Deadwood generated through woodland/hedgerow management to be used to create deadwood piles. Landscape plans to feature native species planting.	Positive.
Reptiles	Loss of nesting, foraging, and commuting habitat.	Seven-visit presence/absence survey.	If reptiles are present on site, a translocation may be necessary, along with exclusion fencing through the construction phase. Alternatively, if all suitable habitats were retained then a precautionary method statement would be sufficient. Mitigation would include sensitive management of retained semi-improved grassland. Scrub and marginal grassland associated with the bat-friendly dark corridor would ensure continued habitat connectivity. Boundary habitats to be retained where possible.	Predicted impacts and mitigation advice will be dependent upon the results of the advised surveys. Likely neutral.

Feature	Likely Impacts	Further Surveys	Likely Mitigation and Enhancement Measures	Residual Effect
Other notable species	Loss of habitat. Injury/and or death.	N/A	Sensitive habitat removal. Enhancement of retained boundary habitats through sensitive management and native species planting. Native species planting associated with the advised bat-friendly dark corridor. Hedgehog holes added to internal boundaries such as fencing/walls. Provision of rough grassland suitable for brown hare and harvest mouse connected to nearby arable habitats.	Neutral

5.2 Through the above survey and precautionary methods, it is considered that all significant impacts upon biodiversity, including any potential adverse impacts upon specific protected species, habitats and designated sites will likely be able to be wholly mitigated in line with relevant wildlife legislation, chapter 15 of the National Planning Policy Framework (MHCLG, 2019); and local policies associated with the South Norfolk Local Plan (Broadland District Council *et al*, 2015).

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Appendix 1. Site Location

Appendix 2: Feasibility Layout

Appendix 3: Legislative and Policy Framework

National Planning Policy

The *NPPF* (MHCLG, 2019) outlines what the planning system should do to contribute to and enhance the natural and local environment through the following policy statements:

Paragraph 8

Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):

c) an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

Paragraph 20

Strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for:

d) conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation.

Paragraph 28

Non-strategic policies should be used by local planning authorities and communities to set out more detailed policies for specific areas, neighbourhoods or types of development. This can include allocating sites, the provision of infrastructure and community facilities at a local level, establishing design principles, conserving and enhancing the natural and historic environment and setting out other development management policies.

Paragraph 102

Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and

Paragraph 118

Planning policies and decisions should:

a) encourage multiple benefits from both urban and rural land, including through mixed use schemes and taking opportunities to achieve net environmental gains – such as developments that would enable new habitat creation or improve public access to the countryside;
b) recognise that some undeveloped land can perform many functions, such as for wildlife, recreation, flood risk mitigation, cooling/shading, carbon storage or food production;

Paragraph 141

Once Green Belts have been defined, local planning authorities should plan positively to enhance their beneficial use, such as looking for opportunities to provide access; to provide opportunities for outdoor sport and recreation; to retain and enhance landscapes, visual amenity and biodiversity; or to improve damaged and derelict land.

Paragraph 170

Planning policies and decisions should contribute to and enhance the natural and local environment by:

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate; d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

Paragraph 174

To protect and enhance biodiversity and geodiversity, plans should:

a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity56; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation57; and
b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

Paragraph 175

When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons58 and a suitable compensation strategy exists; and
d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

Paragraph 176

The following should be given the same protection as habitats sites: a) potential Special Protection Areas and possible Special Areas of Conservation; b) listed or proposed Ramsar sites59; and c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

Paragraph 177

The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

Paragraph 180

Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:

c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

Local Planning Policy

The policies related to nature conservation within the Joint Core Strategy for Broadland, Norwich, and South Norfolk are set out below.

Policy DM 4.4 Natural environmental assets - designated and locally important open space

a) The highest status natural environmental assets are identified on the Policies Map and in supporting evidence, and will be protected from any significant harmful impact arising from new development. New development impacting on these designated sites will be required to contribute positive improvement of these natural environmental assets where opportunities arise. International, National and County-wide level sites will be accorded the highest levels of priority.

b) At the Important Local Open Spaces identified in paragraphs 4.32 – 4.44 and on Maps 4.4 (1) – (6) and on the Proposal Map, development will only be permitted where it retains the open character and appearance of the site, where it respects the contribution which the identified open site or open frontage makes to the form and character of the Settlement and where there is no significant adverse impact on the setting of any existing building. New development impacting on these designated sites will be required to contribute positive improvement of these natural environmental assets where opportunities arise.

c) Developers will need to work with partners to evolve strategies to enable individual new development sites to contribute most effectively to the opportunities for the establishment and positive improvement of coherent ecological networks, Biodiversity Enhancement Areas and multi-functional Green Infrastructure Networks

Policy DM 4.8 Protection of Trees and Hedgerows

The Council will promote the retention and conservation of significant trees, woodlands and traditional orchards and will serve Tree Preservation Orders where necessary. 119 The Council will presume in favour of the retention of 'important' hedgerows as defined by the Hedgerows Regulations 1997. The Council will safeguard and promote the appropriate management of protected and other significant trees and hedgerows, unless the need for, and benefits of, a development clearly outweigh their loss.

Policy DM 4.9 Incorporating landscape into design

Where appropriate, detailed development proposals must demonstrate a high quality of landscape design, implementation and management as an integral part of the new development. The provision for new planted features (such as tree belts, hedgerows, wild flowers and specimen trees) is expected to form part of development proposals from their outset and should provide an appropriate landscape setting for the scheme. 'Hard' landscape features (such as paving, kerb stones, street furniture, boundary treatments etc) will reflect and where possible enhance locally distinctive character and styles where relevant; or innovative contemporary solutions reflecting local context and reinforcing or creating local distinctiveness and the setting of the development. Landscape schemes will be required to respect the character and distinctiveness of the local landscape and should ensure that any land remodelling respects the local topographic character in terms of height, slope, angle and character. Landscape schemes should be clearly and properly specified.

Wildlife Legislation

The two principal wildlife statutes are the Conservation of Habitats and Species Regulations (The Habitats Regulations 2017) that deals with internationally important sites and species, and the Wildlife and Countryside Act (WCA) 1981 that deals with nationally important sites and species.

Certain habitats and species within discrete sites are protected as SSSI under the WCA 1981. A proportion of these are more strictly protected as proposed or designated SPA, SAC and Ramsar sites under the Conservation of Habitats and Species Regulations (2017). These designations protect features and resources listed as being of international importance from both direct and indirect effects arising from a range of issues including proposed development. In addition, non-statutory designated sites (e.g. Local Wildlife Sites) are protected under the National Parks and Access to the Countryside Act, (1949) Section 21.

Certain species listed on Schedule 5 of the WCA 1981, including all bat species, great crested newt (GCN) *Triturus cristatus,* hazel dormouse *Muscardinus avellanarius* and otter *Lutra lutra* are also protected under Schedule 2 of the Habitats Regulations 2010 making them European Protected Species (EPS). Taken together it is illegal to:

- Deliberately kill, injure or capture any wild animal of EPS;
- Deliberately disturb wild animals of any EPS in such a way to be likely to significantly affect:
- The ability of any significant groups of animals of that species to survive, breed, rear or nurture their young; or
- The local distribution of that species.
- Recklessly disturb an EPS or obstruct access to their place of rest;
- Damage or destroy breeding sites or resting places of such animals;
- Deliberately take or destroy the eggs of such an animal;
- Possess or transport any part of an EPS, unless acquired legally; and/or
- Sell, barter or exchange any part of an EPS.

A range of species other than birds, including water vole *Arvicola amphibius*, is protected from disturbance and destruction under the WCA 1981 through inclusion on Schedule 5.

All breeding birds are protected from deliberate destruction under the WCA 1981. Certain species are further protected from disturbance at their nest sites being listed on Schedule 1 of the WCA 1981.

Common reptiles including common lizard *Zootoca vivipara,* slow-worm *Anguis fragilis*, grass snake *Natrix helvetica* and adder *Vipera berus* are protected under the WCA 1981, they are listed as schedule 5 species, therefore part of Section 9(1) and section 9(5) apply; the Countryside and Rights of Way Act 2000 (CRoW) also strengthens their protection.

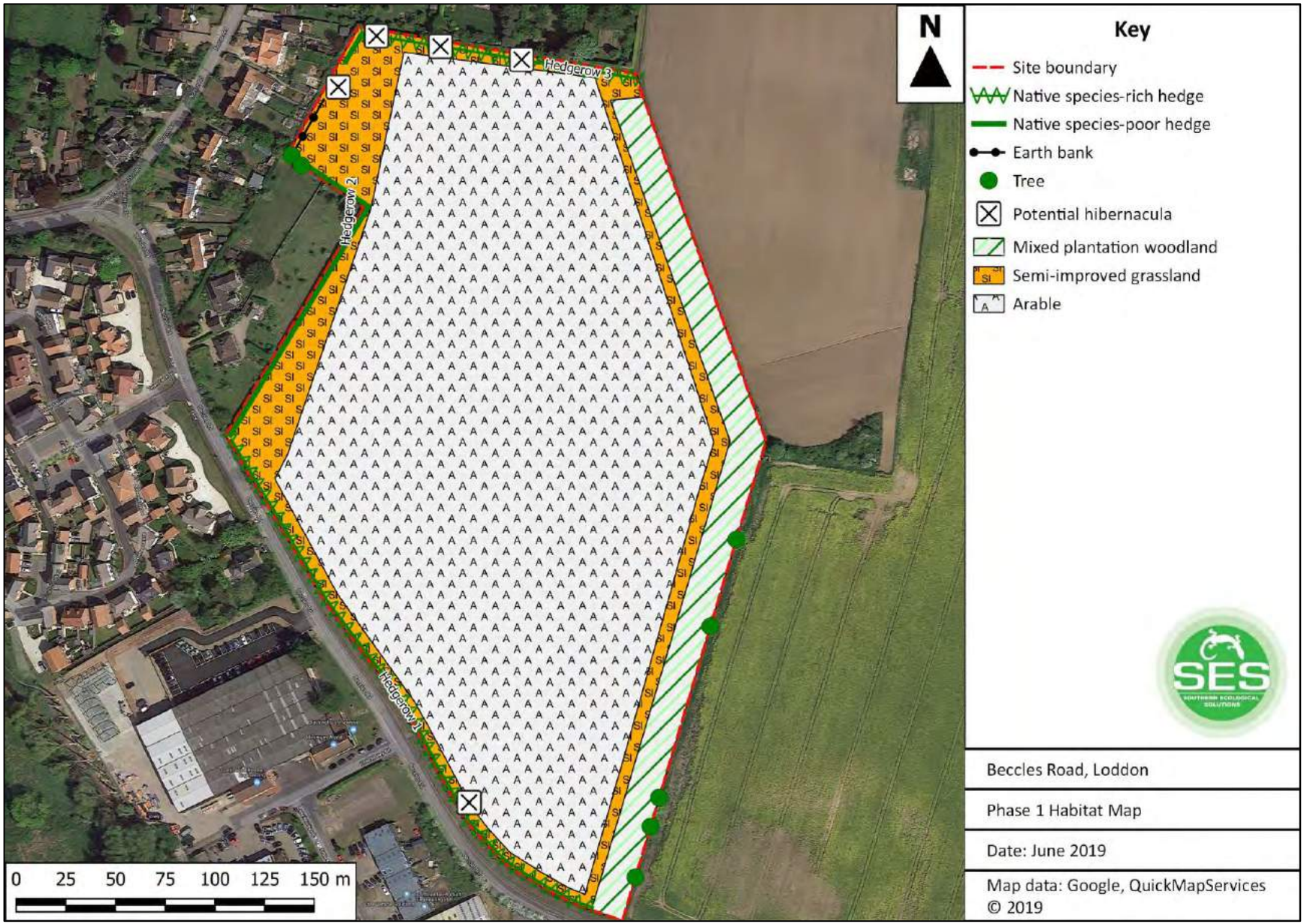
Badger *Meles meles* is protected from sett disturbance and destruction under the Protection of Badgers Act 1992.

Section 40 of The Natural Environment and Rural Communities Act (NERC) 2006 places a legal duty on Local Authorities to conserve biodiversity. Section 41 (S41) sets out a list of 943 species and habitats of principal importance. These species are known as England Biodiversity Priority (EBP) species and are those identified as requiring action under the former UK Biodiversity Action Plan (BAP) and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework.

Native, species-rich hedgerows that fit certain criteria are protected as being 'important' under the Hedgerow Regulations (1997).

Japanese Knotweed *Fallopia japonica*, along with other introduced and invasive species are listed under Schedule 9 of the WCA 1981. Japanese knotweed is highly invasive and its rhizomes cause damage to built structures. Hence it is also classed as controlled waste under the Environment Protection Act 1990 and has therefore either to be removed or disposed of in a licensed landfill or the rhizomes buried to a depth of at least 5m.

Appendix 4: Phase 1 Habitat Map



Appendix 5: Plant and fungus species list and relative abundance

Common name	Latin name	Hedgerow 1	Semi-improved grassland	Arable	Woodland	Hedgerow 2	Hedgerow 3
Alexanders	*Smyrnium olusatrum*		O				
Beech	*Fagus sylvatica*				O	R	
Black medick	*Medicago lupulina*		O				
Bluebell	*Hyacinthoides non-scripta*		R				
Bramble	*Rubus fruticosus*	R	O		R		
Broad-leaved dock	*Rumex obtusifolius*		R				
Bulbous buttercup	*Ranunculus bulbosus*		O		R		
Chickweed	*Stellaria media*		R	R			
Cleavers	*Galium aparine*		O				
Cocksfoot	*Dactylis glomerata*		F				
Common box	*Buxus sempervirens*						D
Common broomrape	*Orobanche minor*		O				
Common ivy	*Hedera helix*				O	A	F
Common mallow	*Malva sylvestris*		R				
Common mouse ear chickweed	*Cerastium fontanum*		O				
Common nettle	*Urtica dioica*		O	O			
Common vetch	*Vicia sativa*		F				
Cow parsley	*Anthriscus sylvestris*		R	R			
Creeping thistle	*Cirsium arvense*		O	R			
Cut-leaved cranesbill	*Geranium dissectum*		O				
Daisy	*Bellis perennis*		O				
Dandelion	*Taraxacum officinale*		O				
Dogwood	*Cornus sanguinea*	F					
Early marsh orchid	*Dactylorhiza incarnata*		R				
Elder	*Sambucus nigra*					O	
Field maple	*Acer campestre*	O				O	
False oat-grass	*Arrhenatherum elatius*		O				
Field maple	*Acer campestre*				O		
Garlic mustard	*Alliaria petiolata*		R				
Germander speedwell	*Veronica chamaedrys*				O		
Goat willow	*Salix caprea*	R					
Greater plantain	*Plantago major*		O				
Green alkanet	*Pentaglottis sempervirens*		R		R		
Grey field-speedwell	*Veronica polita*			R			
Grey willow	*Salix cinerea*	R					
Ground ivy	*Glechoma hederacea*		O		O		
Groundsel	*Senecio vulgaris*			O			
Guelder rose	*Viburnum opulus*	O					
Hairy tare	*Vicia hirsuta*		A				
Hawthorn	*Crataegus monogyna*	A			O	A	
Hazel	*Corylus avellana*	F					

Common name	Latin name	Hedgerow 1	Semi-improved grassland	Arable	Woodland	Hedgerow 2	Hedgerow 3
Hedge mustard	*Sisymbrium officinale*		O	R			
Holly	*Ilex aquifolium*					R	
Hogweed	*Heracleum sphondylium*		R				
Lucerne	*Medicago sativa*		R	R			
Meadow vetchling	*Lathyrus pratensis*		R				
Meadow-grass species	*Poa sp.*		O				
Lords-and-ladies	*Arum maculatum*				R		
Oak	*Quercus robur*	R			O		
Orange hawkweed	*Pilosella aurantiaca*		O				
Perennial ryegrass	*Lolium perenne*		O				
Ragwort	*Jacobaea vulgaris*		R				
Red fescue	*Festuca rubra*		R				
Redshank	*Polygonum persicaria*			R			
Ribwort plantain	*Plantago lanceolata*		F				
Round-leaved cranesbill	*Geranium rotundifolium*		O				
Scentless mayweed	*Tripleurospermum inodorum*			R			
Scots pine	*Pinus sylvestris*				A		
Shepherd's purse	*Capsella bursa-pastoris*		R				
Silver birch	*Betula pendula*				F		
Smooth sow-thistle	*Sonchus oleraceus*		R				
Spearthistle	*Cirsium vulgare*		R				
Suede bolete	*Xerocomus subtomentosus*				O		
Sweet chestnut	*Castanea sativa*				O		
Sycamore	*Acer pseudoplatanus*	R					
White bryony	*Bryonia alba*	O			R		
White clover	*Trifolium repens*		O				
Willowherb species	*Epilobium sp.*		R				
Yarrow	*Achillea millefolium*		F				

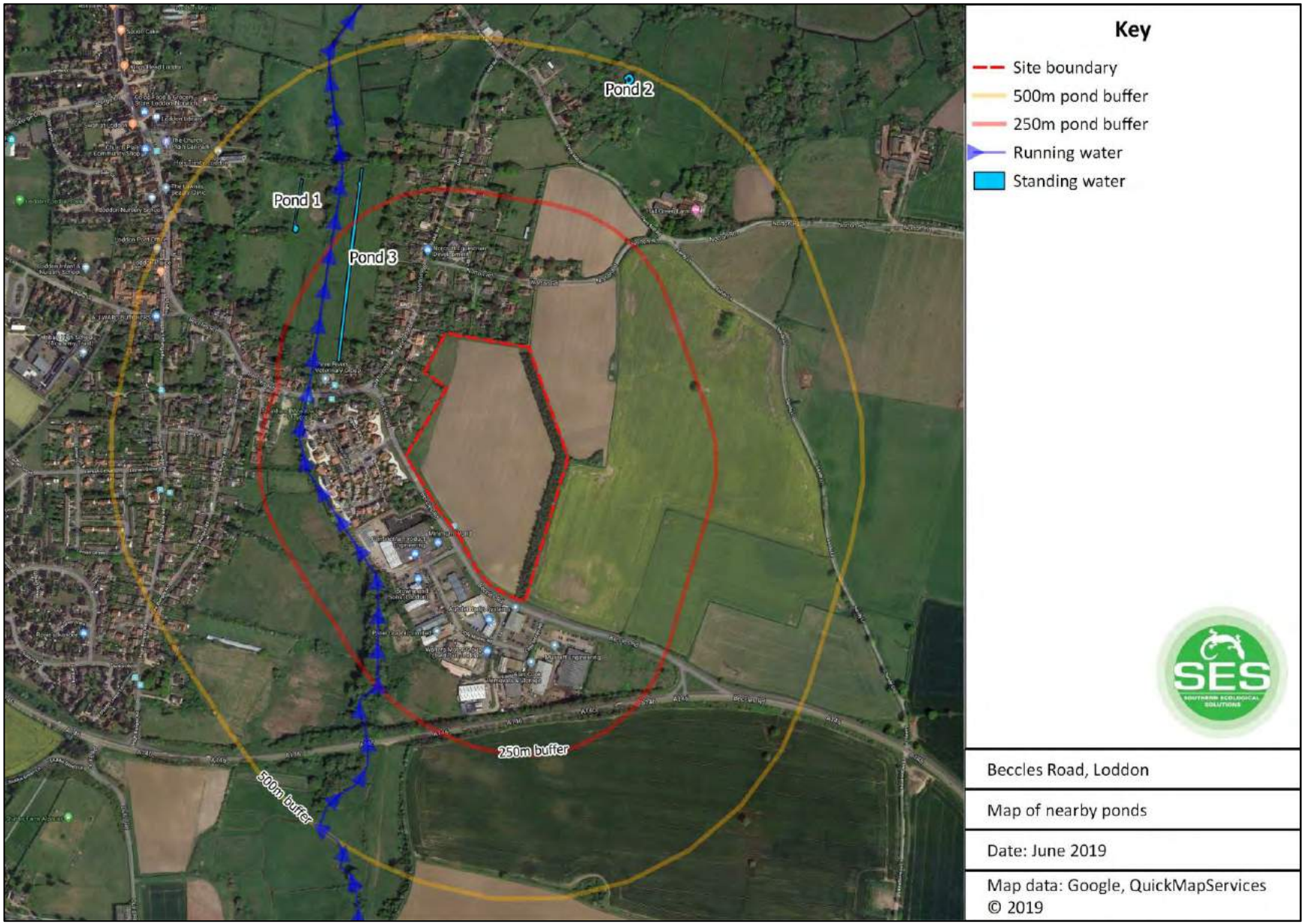
Appendix 6: Plates

		
Plate 1: Hedgerow 1, with potential reptile hibernacula in foreground. Viewed looking south.	Plate 2: Hedgerow 2. Viewed looking west.	Plate 3: Hedgerow 3. Viewed looking north.
		
Plate 4: Tree 1. Viewed looking north.	Plate 5: Trees 2 (on left) and 3 (on right). Viewed looking west.	Plate 6: Tree 4. Viewed looking north.

		
Plate 7: Tree 5. Viewed looking south.	Plate 8: Woodland plantation shelter belt and arable farmland visible on right with semi-improved grassland margin.	Plate 9: North-west semi-improved grassland with earth bank visible on the right. Viewed looking south.

Appendix 7: Ecological constraints map

Appendix 8: Pond map



Appendix 9: Plant species of known benefit to bats

The following table is reproduced from *Gunnell, K., Grant, G. and Williams, C. (2012). Landscape and Urban Design for Bats and Biodiversity, Bat Conservation Trust*. This suggests plant species that can provide benefit for bats by either providing a food source for insects and/or roost potential. The plants listed are predominately native to Britain. The small group of non-native plants included for their documented value for wildlife. This list has been checked against Natural England's list of invasive non-native plants.

Plant species	Common name	Native (N)	Type	Benefit	Soil	Light	Extensive green roofs	Living walls	Rain gardens	Hedge/ trees	Beds/ borders
Acer campestre	Field maple	N	T/S	C	Any	Sun/ shade				Y	
Acer platanoides	Norway maple		T	S	Well drained/ alkaline	Sun/ shade				Y	
Acer saooharum	Sugar maple		T	S	Any	Sun/ shade				Y	
Achillea millefolium	Yarrow	N	HP	C,F	Well drained	Sun				Y	
Ajuga reptans	Bugle	N	HP	C,F	Any	Sun/ shade	Y		Y		
Anthyllis vulneraria	Kidney vetch	N	HP	F	Well drained	Sun	Y				
Aubrieta deltoidea	Aubrieta		H	F	Well drained	Sun/shade		Y			
Betula pendula	Sliver birch	N	T	C	Sandy/ acid	Sun				Y	
Cardamine pratensis	Cuckoo- flower	N	HP	F	Moist	Sun/ shade			Y		Y
Carpinus betulus	Hornbeam	N	T	C	Clay	Sun				Y	
Centaurea nigra	Common knapweed	N	HP	C,F	Dry, not acid	Sun	Y				Y
Centranthus ruber	Red valerian		HP	F	Well drained	Sun	Y				Y
Clematis vitalba	Old man's Beard	N	C	F	well drained/ alkaline	Sun				Y	
Corylus avellana	Hazel	N	S	C	Any dry	Sun/ shade		Y		Y	
Crataegus monogyna	Hawthorn	N	S	S,C	Any	Sun/shade				Y	
Daucus carota	Wild carrot	N	Bi	S,C,F	Any	Sun	Y				Y
Dianthus spp.	Pinks	N	A-Bi	F	Well drained	Sun	Y	Y			Y
Digitalis purpurea	Foxglove	N	Bi	C	Well drained	Shade/ partial shade				Y	Y
Erica cinera	Bell heather	N	S	F	Sandy	Full sun					Y
Ersimum cherira	Wallflower		Bi-P	F	Well drained	Sun		Y			Y
Eupatorium	Hemp agrimony	N	H	F	Moist	Sun/ shade			Y		Y
Fagus sylvatica	Beech	N	T	C, R	Well drained alkaline	Sun/shade				Y	
Foeniculum vulgare	Fennel		H	F	Well drained	Sun					Y
Fraxinus excelsior	Common Ash	N	T	C, R	Any	Sun/ shade				Y	

Plant species	Common name	Native (N)	Type	Benefit	Soil	Light	Extensive green roofs	Living walls	Rain gardens	Hedge/ trees	Beds/ borders
Hebe spp.	Hebe species		S	F	Well drained	Sun /shade				Y	Y
Hedera Helix	Ivy	N	C	F,C	Any	Sun/ shade		Y	Y	Y	Y
Hesperis matrionalis	Sweet Rocket		H	F	Well drained/ dry	Sun/ shade					Y
Hyacinthoides non -scripta	Bluebell	N	B	F	Loam	Shade/ partial shade		Y		Y	Y
Ilex aquailfolium	Holly	N	T	C	Any	Sun/ shade				Y	
Jasmine officinale	Common jasmine		C	F	Well drained	Sun		Y			Y
Lavandula spp.	Lavender species		S	F	Well drained / sandy	Sun		Y			Y
Linaria vulgaris	Toadflax	N	HP	C	Well drained/ alkaline	Sun	Y				Y
Lonicera periclymenum	Honeysuckle	N	C	F	Well drained	Sun		Y		Y	
Lotus corniculatus	Bird's foot trefoil	N	HP	F	Well drained/ dry	Sun	Y				Y
Lunaria annua	Honesty		Bi	F	Any	Sun/ partial shade	Y				Y
Malus spp.	Apple		T	C	Any	Sun				Y	Y
Matthiola longipetala	Night - scented stock		A	F	Well drained/ moist				Y		Y
Myosotis spp.	Forget me not species	N	A	F	Any	Sun	Y	Y			Y
Nicotiania alata	Ornamental tobacco		A	F	Well drained moist	Sun /partial shade			Y		Y
Oneothera spp.	Evening primrose		Bi	F	Well drained	Sun	Y				Y
Origanum vulgare	Marjoram	N	HP	F	Well drained / dry	Sun				Y	
Populus alba	White poplar	N	T	C	Clay loam	Sun				Y	
Primula veris	Cowslip	N	HP	F	Well drained/ moist	Sun/ partial shade	Y				Y
Primula vulgaris	Primrose	N	HP	F	Moist	Partial shade	Y	Y		Y	Y
Prunus avium	Wild cherry	N	T	C	Any	Sun				Y	Y
Prunus domestica	Plum		T	C	Well drained/ moist	Sun				Y	Y
Prunus spinosa	Blackthorn	N	S	C	Any	Sun/ partial shade				Y	
Querois petraea	Sessile oak	N	T	C,R	Sandy loam	Sun/ shade				Y	
Quercus robur	Common oak	N	T	R	Clay Loam	Sun/ shade				Y	
Rosa canina	Dog rose	N	S	C	Any	Sun			Y	Y	Y
Salix spp.	Willow species	N	S	S,C	Moist	Sun/ shade			Y	Y	
Sambucus nigra	Elder	N	T	C	Clay loam	Sun				Y	
Saponaria officinalis	Soapwort	N	HP	F	Any	Sun					Y

Plant species	Common name	Native (N)	Type	Benefit	Soil	Light	Extensive green roofs	Living walls	Rain gardens	Hedge/ trees	Beds/ borders
Saxifraga oppositifolia	saxifage	N	HP	C	Well drained	Sun	Y	Y			Y
Scabiosa columbaria	small scabious	N	HP	F	Well drained/ alkaline	Sun	Y				Y
Sedum spectabile	Ice plant		HP	F	Well drained/ dry	Sun	Y				Y
Silene dioecia	Red campion	N	HP	F	Any	Shade/ partial shade		Y	Y	Y	Y
Sorbus aucuparia	Rowan	N	T	C	Well drained	Sun				Y	
Stachys lanata	Lamb's ear		HP	F	Well drained/ dry	Sun					Y
Symphotrichum spp.	Michalemas daisies		HP	F	Any	Sun					Y
Tages patula	French marigold		A	F	Well drained	Sun					Y
Thymus serpyllum	Creeping thyme	N	HP/S	F	Well drained/ dry	Sun	Y	Y			Y
Tilia x europaea	Common lime		T	C	Any	Sun/ shade				Y	
Trifolium spp.	Clover species	N	H	F	Any	Sun	Y				Y
Valerina spp.	Valerian species	N	HP	F	Moist	Sun/ partial shade			Y		Y
Verbascum spp.	Mulliens	N	Bi, HP	C	Well drained	Sun					Y
Verbena bonariensis	Verbena		HP	F	Well drained/moist	Sun					Y
Viburnum lantana	Wayfaring tree	N	S	C	Any	Sun/ shade				Y	Y
Viburnum opulus	Guelder rose	N	S	C	Moist	Sun/ shade			Y	Y	
Viola tricolor	Pansy	N	A	F	Well drained/ moist		Y	Y			Y

Legend

Type		Benefit	
HP	Herbaceous perennial	C	Moth caterpillar food plant
Bi	Biennial	S	Sap sucking insects (e.g. whiteflies)
BiP	Biennial perennial	F	Flowers attract adult moths
T	Tree	E	Good roost potential
S	Shrub		
H	Herb		
A	Annual		
B	Bulb		
C	Creeper/ climber		

Appendix 10. Plants Offering a Value to Wildlife

Common Name	Scientific Name	Benefits
Blackthorn	*Prunus spinosa*	Nectar, fruit, larval foodplant, nesting cover
Broom	*Cystisus scoparius*	Nectar, larval foodplant
Buckthorn #	*Rhamnus cathartica*	Nectar, berries, larval foodplant, nesting cover
Crab Apple	*Malus sylvestris*	Nectar, nesting cover, fruit
Dog Rose	*Rosa canina agg.*	Nectar, fruit, larval foodplant, nesting cover
Dogwood	*Cornus sanguinea*	Nectar, fruit, larval foodplant
Elder	*Sambucus nigra*	Nectar , fruit, larval foodplant, nesting cover
Field rose	*Rosa arvensis*	Nectar, larval foodplant, fruit
Field maple	*Acer campestre*	Nesting cover,
Gorse	*Ulex europaeus*	Nectar, larval foodplant, nesting cover
Guelder rose	*Viburnum opulus*	Nectar, fruit, larval foodplant
Hawthorn (Common)	*Crataegus monogyna*	Nectar, fruit, larval foodplant, nesting cover
Hawthorn (Midland)	*Crataegus laevigata*	Nectar, fruit, larval foodplant, nesting cover
Hazel	*Corylus avellana*	Nuts, larval foodplant, nesting cover, early pollen for bees.
Holly	*Ilex aquifolium*	Nectar, fruit, larval foodplant, nesting cover
Hornbeam	*Carpinus betulus*	Year-round shelter, roosting nesting & foraging opportunities for birds and small mammals
Oak	*Quercus robur/Quercus petraea*	Nesting cover, nuts, larval foodplant,
Rosemary *	*Rosmarinus officinalis*	Nectar
Rowan	*Sorbus aucuparia*	Fruit, nesting cover
Silver Birch	*Betula pendula*	Nesting cover
Spindle #	*Euonymous europaeus*	Nectar, fruits
Wayfaring tree	*Viburnum lantana*	Nectar, fruit, larval foodplant
Wild Cherry	*Prunus avium*	Nectar, fruit, nesting cover, larval food plant
Yew#	*Taxus baccata*	Berries, nesting cover
Wild Service Tree	*Sorbus torminalis*	Nectar, larval foodplant, fruit
Climbers		
Clematis*	*Clematis tangutica*	Nectar, seeds
Honeysuckle	*Lonicera periclymenum*	Nectar, fruit, larval foodplant, nesting cover

Ivy	*Hedera helix*	Nectar, fruit, larval foodplant, nesting cover
Traveller's joy	*Clematis vitalba*	Nectar, seeds, larval foodplant

Note:

* Non-native species

poisonous

4. Archaeological Desk Based Assessment

ARCHAEOLOGICAL DESK-BASED ASSESSMENT

LAND EAST OF BECCLES ROAD LODDON NORFOLK

Planning • Heritage

Specialist & Independent Advisors to the Property Industry

JUNE 2019

Local Planning Authority:
SOUTH NORFOLK DISTRICT COUNCIL

Site centred at:
NGR TM 3680 9826

Author:
Richard Mortimer MCIfA

Report Status:
DRAFT

Issue Date:
June 2019

CgMs Ref:
RM/25624/1

CONTENTS

LIST OF ILLUSTRATIONS

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EXECUTIVE SUMMARY

- Land east of Beccles Road, Loddon has been assessed for its below ground archaeological potential.

- In terms of relevant designated heritage assets, no nationally designated World Heritage Sites, Scheduled Monuments, Historic Battlefield sites or Historic Wreck sites lie within the one-kilometre radius study area around the site. There are a large number of Listed Buildings within the study area, principally within the Loddon Conservation Area immediately to the northwest of the site; the Built Heritage aspects of the proposed development will be addressed within a separate Heritage Assessment document. The study site has remained undeveloped agricultural land throughout the historic periods.

- A review of available archaeological and historical sources indicates the site has a theoretically high archaeological potential for activity dating from the Roman period, due to the collection of quantities of Romano-British pottery during a fieldwalking survey in the 1980s and the presence of cropmarks of unknown date recorded on the site. A moderate potential has also been identified for evidence of later prehistoric and Anglo-Saxon activity, again due to the fieldwalking collection, available cropmarks and the site's location on an open, well-drained valley side.

- Overall it would appear that the proposed development of this site could have an archaeological impact, although nationally significant archaeological assets are not anticipated on the site.

- We would suggest that a Geophysical Survey of the site was undertaken prior to planning but that any requirement for further archaeological investigation could follow planning consent secured by an archaeological condition.

1.0 INTRODUCTION AND SCOPE OF STUDY

1.1 This below ground archaeological desk-based assessment has prepared by Richard Mortimer of CgMs Heritage (part of the RPS Group) on behalf of Hopkins Homes Limited.

1.2 The subject of this assessment, also known as the study site, comprises land east of Beccles Road, Loddon, Norfolk. The site is approximately 7.6ha in extent and is centred at TM 3680 9826 (Fig. 1). The site is bounded to the north and northwest by residential development, to the west and south by the Beccles Road with residential and light industrial development beyond, and to the east by a wide tree belt beyond which are open fields.

1.3 Ian Douglass of Lanpro Services has commissioned CgMs Heritage (Part of the RPS Group) on behalf of Hopkins Homes Ltd to establish the archaeological potential of the site and to provide guidance on ways to address any archaeological constraints identified.

1.4 In accordance with relevant policy and guidance on archaeology and planning, and in accordance with the 'Standard and Guidance for Historic Environment Desk-Based Assessments' (Chartered Institute for Archaeologists January 2017), this assessment draws together the available archaeological, topographic and land-use information in order to clarify the archaeological potential of the site.

1.5 This desk-based assessment comprises an examination of evidence on the Norfolk Historic Environment Record (NHER), and other sources including the Norfolk Record Office, and includes the results of a comprehensive map and satellite image regression exercise. A site visit was carried out in June 2019.

1.6 The Assessment thus enables relevant parties to assess the archaeological potential of the site and to consider the need for design, civil engineering, and archaeological solutions to the archaeological potential identified.

2.0 PLANNING BACKGROUND AND DEVELOPMENT PLAN FRAMEWORK

2.1 National legislation regarding archaeology, including scheduled monuments, is contained in the Ancient Monuments and Archaeological Areas Act 1979, amended by the National Heritage Act 1983 and 2002, and updated in April 2014.

2.2 In March 2012, the government published the National Planning Policy Framework (NPPF), which was later revised in July 2018 and updated in February 2019. The NPPF is supported by the National Planning Practice Guidance (NPPG), which was published online on the 6th March 2014 and last updated in February 2018 (http://planningguidance.planningportal.gov.uk).

2.3 The NPPF and NPPG are additionally supported by three Good Practice Advice (GPA) documents published by Historic England: GPA 1: *The Historic Environment in Local Plans*; GPA 2: *Managing Significance in Decision-Taking in the Historic Environment* (both published March 2015). The second edition of GPA3: *The Setting of Heritage Assets* was published in December 2017.

National Planning Policy

2.4 Section 16 of the NPPF, entitled *Conserving and enhancing the historic environment* provides guidance for planning authorities, property owners, developers and others on the conservation and investigation of heritage assets. Overall, the objectives of Section 16 of the NPPF can be summarised as seeking the:

- Delivery of sustainable development;
- Understanding the wider social, cultural, economic and environmental benefits brought by the conservation of the historic environment;
- Conservation of England's heritage assets in a manner appropriate to their significance; and
- Recognition that heritage makes to our knowledge and understanding of the past.

2.4.1 Section 16 of the NPPF recognises that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. Paragraph 189 states that planning decisions should be based on the significance of the heritage asset and that level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.

2.4.2 *Heritage Assets* are defined in Annex 2 of the NPPF as: a building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. They include designated heritage assets (as defined in the NPPF) and assets identified by the local planning authority during the process of decision-making or through the plan-making process.

2.4.3 Annex 2 also defines *Archaeological Interest* as a heritage asset which holds or potentially could hold evidence of past human activity worthy of expert investigation at some point.

2.4.4 A *Nationally Important Designated Heritage Asset* comprises a: World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area.

2.4.5 *Significance* is defined as: The value of a heritage asset to this and future generations because of its heritage interest. This interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.

2.4.6 *Setting* is defined as: The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.

2.4.7 In short, government policy provides a framework which:

- Protects nationally important designated Heritage Assets;
- Protects the settings of such designations;
- In appropriate circumstances seeks adequate information (from desk-based assessment and field evaluation where necessary) to enable informed decisions;
- Provides for the excavation and investigation of sites not significant enough to merit in-situ preservation.

2.5 The NPPG reiterates that the conservation of heritage assets in a manner appropriate to their significance is a core planning principle, requiring a flexible and thoughtful approach. Furthermore, it highlights that neglect and decay of heritage assets is best addressed through ensuring they remain in active use that is consistent with their conservation. Importantly, the guidance states that if complete, or partial loss of a

heritage asset is justified, the aim should then be to capture and record the evidence of the asset's significance and make the interpretation publically available. Key elements of the guidance relate to assessing harm. An important consideration should be whether the proposed works adversely affect a key element of the heritage asset's special architectural or historic interest. Additionally, it is the degree of harm, rather than the scale of development, that is to be assessed. The level of 'substantial harm' is considered to be a high bar that may not arise in many cases. Essentially, whether a proposal causes substantial harm will be a judgment for the decision taker, having regard to the circumstances of the case and the NPPF. Importantly, harm may arise from works to the asset or from development within its setting. Setting is defined as the surroundings in which an asset is experienced and may be more extensive than the curtilage. A thorough assessment of the impact of proposals upon setting needs to take into account, and be proportionate to, the significance of the heritage asset and the degree to which proposed changes enhance or detract from that significance and the ability to appreciate it.

2.6 In considering any planning application for development, the planning authority will be mindful of the framework set by government policy, in this instance the NPPF, by current Development Plan Policy and by other material considerations. The site is located within the District of South Norfolk, which has adopted a Joint Core Strategy alongside adjoining local authorities.

2.7 The Joint Core Strategy for Broadland, Norwich and South Norfolk was adopted in March 2011 (amended January 2014) and contains the following policy relating to the historic environment:

Policy 1: Addressing climate change and protecting environmental assets
The built environment, heritage assets, and the wider historic environment will be conserved and enhanced through the protection of buildings and structures which contribute to their surroundings, the protection of their settings, the encouragement of high-quality maintenance and repair and the enhancement of public spaces.

2.7.1 The following 'saved' policy within to the South Norfolk Local Plan (2003) is pertinent to the study site:

POLICY ENV9 NATIONALLY AND LOCALLY IMPORTANT ARCHAEOLOGICAL REMAINS

THERE WILL BE PRESUMPTION AGAINST PROPOSALS WHICH WOULD INVOLVE SIGNIFICANT ALTERATION OR CAUSE DAMAGE, OR WHICH WOULD HAVE A SIGNIFICANT IMPACT ON THE SETTING OF VISIBLE ARCHAEOLOGICAL REMAINS OF

NATIONAL IMPORTANCE, WHETHER SCHEDULED OR NOT, ANCIENT MONUMENTS ARE SHOWN ON THE PROPOSALS MAP.

DEVELOPMENT AFFECTING SITES OF ARCHAEOLOGICAL REMAINS OF LOCAL INTEREST AND THEIR SETTINGS WILL ONLY BE PERMITTED IF THE NEED FOR THE DEVELOPMENT OUTWEIGHS THE LOCAL VALUE OF THE REMAINS.

APPLICANTS WILL BE REQUIRED TO ARRANGE FOR ARCHAEOLOGICAL FIELD EVALUATION OF ANY SUCH REMAINS BEFORE APPLICATIONS ARE DETERMINED. PROPOSALS SHOULD INCLUDE PROVISION FOR THE REMAINS AND THEIR SETTINGS TO BE PROTECTED, ENHANCED OR PRESERVED.

WHERE IT IS ACCEPTED THAT PHYSICAL PRESERVATION IN SITU IS NOT MERITED, PLANNING PERMISSION MAY BE SUBJECT TO CONDITIONS AND/OR FORMAL AGREEMENT REQUIRING THE DEVELOPER TO SECURE INVESTIGATION AND RECORDING OF THE REMAINS, AND PUBLICATION OF THE RESULTS.

2.7.2 The following policy within the Development Management Polices Document (October 2015) relates to the historic environment.

POLICY DM4.10 HERITAGE ASSETS

ALL DEVELOPMENT PROPOSALS MUST HAVE REGARD TO THE HISTORIC ENVIRONMENT AND TAKE ACCOUNT OF THE CONTRIBUTION WHICH HERITAGE ASSETS MAKE TO THE SIGNIFICANCE OF AN AREA AND ITS SENSE OF PLACE, AS DEFINED BY REFERENCE TO THE NATIONAL AND LOCAL EVIDENCE BASE RELATING TO HERITAGE.

CHANGE OF USE, ALTERATIONS AND EXTENSIONS AFFECTING THE SIGNIFICANCE OF A DESIGNATED HERITAGE ASSET, INCLUDING ITS SETTING, MUST HAVE REGARD TO AND POSITIVELY RESPOND TO, THAT SIGNIFICANCE.

PROPOSALS MUST SUSTAIN, AND WHERE POSSIBLE ENHANCE AND BETTER REVEAL THE SIGNIFICANCE OF THE ASSET AND MAKE A POSITIVE CONTRIBUTION TO LOCAL DISTINCTIVENESS.

PROPOSALS MUST SHOW HOW THE SIGNIFICANCE OF THE HERITAGE ASSET HAS BEEN ASSESSED AND TAKEN INTO ACCOUNT BY REFERENCE TO THE HISTORIC ENVIRONMENT RECORD, SUITABLE EXPERTISE AND OTHER EVIDENCE/RESEARCH AS MAY BE NECESSARY.

CONSIDERABLE IMPORTANCE AND WEIGHT MUST BE GIVEN TO THE DESIRABILITY OF PRESERVING LISTED BUILDINGS, THEIR SETTINGS AND THE CHARACTER AND APPEARANCE OF CONSERVATION AREAS. DEVELOPMENT SHOULD AVOID CAUSING ANY LOSS TO A HERITAGE ASSET, OR HARM TO IT. SUBSTANTIAL HARM OR TOTAL LOSS WILL ONLY BE JUSTIFIED WHERE IT CAN BE DEMONSTRATED THAT IT IS NECESSARY TO ACHIEVE SUBSTANTIAL BENEFITS OR WHERE THE RETENTION OF THE ASSET IS UNSUSTAINABLE, NO VIABLE ALTERNATIVES CAN BE IDENTIFIED AND THE HARM OR LOSS IS OUTWEIGHED BY THE BENEFITS OF BRINGING THE SITE BACK INTO USE.

LESS THAN SUBSTANTIAL HARM WILL ONLY BE JUSTIFIED WHERE THERE ARE PUBLIC BENEFITS THAT OUTWEIGH THE HARM. IN CARRYING OUT THIS PLANNING BALANCE, LESS THAN SUBSTANTIAL HARM WILL BE AFFORDED CONSIDERABLE IMPORTANCE AND WEIGHT.

PROPOSALS WHICH ADVERSELY AFFECT THE SIGNIFICANCE OF A HERITAGE ASSET WILL ONLY EXCEPTIONALLY BE PERMITTED WHERE CLEAR AND CONVINCING JUSTIFICATION IS PROVIDED.

2.8 In terms of relevant designated heritage assets, as defined above and as shown on Figure 2, no nationally designated World Heritage Sites, Historic Battlefield sites or Historic Wreck sites lie within the vicinity of the study site. The closest Scheduled Monument is Hales Hall Moated Site over 2km to the south (List Entry 1003754) and there are two Grade I or II* Listed buildings within the one-kilometre study area - the Church of Holy Trinity 475m northwest of the site (List Entry 1373159) and Loddon House (List Entry 1050533) 400m to the west. The Loddon Conservation Area covers much of the village core to the northwest and is at its closest approximately 60m from the site.

2.9 Built Heritage assets will be considered in a separate Built Heritage Assessment.

2.10 In line with relevant planning policy and guidance, this desk-based assessment seeks to clarify the site's archaeological potential and the need or otherwise for additional mitigation measures.

3.0 GEOLOGY AND TOPOGRAPHY

3.1 Geology

3.1.1 The solid geology of the study site is shown by the British Geological Survey (BGS Online 2018) as Crag Group - Sands and Gravels. Superficial deposits are banded west to east with Crag Group and Bytham Sand and Gravel overlain by Happisburgh Glacigenic Formation (Sand) overlain by Lowestoft Deposits Diamicton at the far eastern edge of the site.

3.1.2 No site-specific borehole data is currently available.

3.2 Topography

3.2.1 The study site occupies one large field on a relatively steep west-facing slope falling from approximately 20m AOD at the far east to 10m AOD at the Beccles Road. A stream, a tributary of the River Chet, flows south to north in the valley bottom 150m to the west. The eastern edge of the field flattens out onto a wide plateau that extends to the east and south of the site.

3.2.2 The study site is located approximately 750m south of the River Chet.

4.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND WITH ASSESSMENT OF SIGNIFICANCE

4.1 Timescales used in this report:

Prehistoric

Palaeolithic	900,000	-	12,000	BC
Mesolithic	12,000	-	4,000	BC
Neolithic	4,000	-	1,800	BC
Bronze Age	1,800	-	600	BC
Iron Age	600	-	AD	43

Historic

Roman	AD	43	-	410
Saxon/Early Medieval	AD	410	-	1066
Medieval	AD	1066	-	1485
Post Medieval	AD	1486	-	1799
Modern	AD	1800	-	Present

4.2 Introduction

4.2.1 This chapter reviews the available archaeological evidence for the study site and the archaeological/historical background of the general area, and, in accordance with NPPF, considers the potential for any as yet to be discovered archaeological evidence on the study site.

4.2.2 What follows comprises a review of known and relevant archaeological assets within a 1km radius of the study site (Figure 2), also referred to as the study area, held on the Norfolk Historic Environment Record (NHER), together with a historic map and satellite image regression exercise charting the development of the site from the 18th century until the present day.

4.2.3 By far the majority of HER records within the study area comprise evidence of potential Roman and Medieval sites and features recorded as finds scatters from fieldwalking and as find spots from test pits and stray finds.

4.2.4 Chapter 5 subsequently considers the site conditions and whether the proposed development will impact the theoretical archaeological potential identified below.

4.3 HER records on and immediately adjacent to the study site

4.3.1 The only systematic archaeological fieldwork that has been undertaken on the study site itself is a fieldwalking exercise over two days in 1985 (NHER 21543). This exercise produced a quantity of surface pottery (217 sherds) from an area of approximately 1.5ha centred on TM 3683 9828 in the central eastern part of the field (see 1 on Figure 12). The assemblage comprised 1 prehistoric sherd, 122 Roman, 2 Middle Saxon, 30 Medieval and 52 post-Medieval. Eight struck flints were also found.

4.3.2 The fieldwalking was part of an extensive project focusing on the development of the three parishes of Loddon, Hales and Heckingham and has been published in East Anglian Archaeology Volume 49 (Davison 1990). The study site was known as Hales Survey Site 161 (HSS 161); other sites within the wider survey are referenced in the same manner throughout the text below.

4.3.3 The remains of a Cold War Royal Observer Corps post survive in the field immediately to the east of the site (NHER 21511). It is believed to have been in use between 1961 and 1968, part of a national network of such sites. Aerial photographs show both the Cold War features and, on 1940s aerial photographs, a small group of structures and earthworks that may mark the site of a World War Two observation post.

4.3.4 Three 1m x 1m Test Pits were excavated immediately to the northwest of the site around Norton Rd but no finds are recorded on the NHER (ENF 141121, 141214, 141285). A resistivity survey was also undertaken around the latter pit but with no results (ENF 141443).

4.3.5 There are a very large number of find spots within the area of the village proper, to the west of the study site, many associated with further test pits excavated by the Loddon and District History Group. These contain the usual array of prehistoric flints, Roman finds, early Medieval, Medieval and post-Medieval ceramic etc. Apart from noting that the area of the current village is rich in finds of all periods, these are not specifically relevant to the study site.

4.3.6 The closest archaeological intervention to the site is a relatively large evaluation immediately to the west of the site on the far side of Beccles Road (NHER 57865/ENF 128357). The evaluation recorded no pre-modern archaeological features.

4.4 Early Prehistoric – Palaeolithic & Mesolithic

There is no evidence for Early Prehistoric occupation within the study area. The potential for the discovery of Early Prehistoric finds or features within the study site itself is assessed as negligible.

4.5 Later Prehistoric – Neolithic, Bronze Age & Iron Age

4.5.1 Six struck flints and a pottery sherd were recovered from the fieldwalking scatter recorded as HSS 161 in the central, eastern part of the site. Further fieldwalking in 1984/5 in the field to the east of the study site produced struck flints in a number of locations (NHER 21510/Hales Survey Site 124; NHER 21545/HSS 143; NHER 21529/HSS 145; NHER 20380/HSS 147; NHER 21532/HSS 148). Single later prehistoric sherds were also found (NHER 20380/HSS 147; NHER 21533/HSS 149).

4.5.2 The few prehistoric finds recovered from the site, the sandy nature of the soils and the valley side location suggest a moderate potential for as yet unknown later Prehistoric finds and features on the site.

4.6 Roman

4.6.1 Fieldwalking of the site recovered 122 sherds of Romano-British pottery, predominantly local greywares, within the central eastern part of the site (1 on Figure 12). Cropmarks are visible on Google Earth within this same area (see Figures 11 & 12) including a potential rectilinear structure or small enclosure (3 on Figure 12).

4.6.2 Approximately 850m to the south, on the east side of the tributary stream in a similar situation to the study site, is the site of a putative Roman villa and/or bath house (NHER 17982/HSS 46). Quantities of Roman pottery, CBM, coins and metalwork have been collected here over many years.

4.6.3 In addition to the fieldwalking finds scatter recovered on the study site itself, and the potential villa site to the south, Roman pottery, coins and other material have been found at numerous locations across the wider study area (NHER 1051; NHER 10515; NHER 18134; NHER 19316; NHER 19499; NHER 20364; NHER 20386; NHER 21537; NHER 21541-44 and NHER 58566-67). The site is assessed as having a high potential for the discovery of as yet unknown features of Romano-British date.

4.7 Anglo-Saxon / Early Medieval & Medieval

4.7.1 There is evidence from fieldwalking for both Early Anglo-Saxon burials (brooches) and Middle Saxon settlement on the putative Roman villa site to the south of the site (NHER 17982/HSS 46).

4.7.2 Some 600m west of the site an Early Saxon spearhead was recovered at the site of Loddon Secondary School (NHER 13857) with a Viking spearhead found 1000m to the northwest at the north end of the village (NHER 10518). Further Early Saxon material has been found within the wider study area at NHER 19316 and 19488.

4.7.3 Two Middle Saxon pottery sherds were recovered from the study site as part of the fieldwalking scatter of Hales Survey Site 161 (NHER 21543). Further Middle Saxon finds have been recovered across the study area at NHER 10517, NHER 20386, NHER 21512, NHER 21537-8, NHER 21540-42, NHER 58573 and NHER 58577.

4.7.4 Fieldwalking in 1984/5 in a field across Norton Road to the north of the site produced c. 30 sherds of Late Saxon/Early Medieval pottery, principally Thetford-type wares as well as c. 20 sherds of Medieval pottery (NHER 21531/HSS 147).

4.7.5 Further Late Saxon finds have been recovered across the study area at NHER 10518, NHER 21535, NHER 35110, NHER 51710, NHER 58565, NHER 58566, NHER 58569-76, NHER 59904, NHER 59910-11 and NHER 59986-87.

4.7.6 Fieldwalking in the field to the east of the study site produced medieval pottery sherds in a number of locations (NHER 20379/HSS 115; NHER 21509/HSS 123; NHER 21510/HSS 124; NHER 21545/HSS 143; NHER 21529/HSS 145; NHER 20380/HSS 147; NHER 21532/HSS 148; NHER 21533/HSS 149). Two medieval finds were collected by metal-detecting in the same field in 2014 (NHER 59783). Much of this material will represent manuring scatters rather than in-situ settlement activity.

4.7.7 400m to the north, at the far end of Mill Road evidence of a deserted Medieval settlement was recorded (NHER 21541/HSS 159) – 163 sherds of Medieval and transitional pottery were recovered including individual sherds of Ipswich and Thetford wares.

4.7.8 Further to the northeast (550m from the study site) the fieldwalking survey revealed another deserted Medieval site, just to the south of Norton Rd (NHER 21544/HSS 162) – 134 Medieval and transitional pottery sherds were recovered including one sherd of Ipswich ware. A second, similar site was recorded 500m further to the northeast on the edge of the study area closer to the Chet River (NHER 21538 & 39/HSS 155-7).

4.7.9 At the opposite edge of the study area, at the southwest beyond the A146 bypass, a smaller area of Medieval settlement was recorded (NHER 19488/HSS 79).

4.7.10 The site is assessed as having a moderate potential for as yet undiscovered features of Early and Middle Anglo-Saxon date due to its topographical and geological location and the presence of quantities of Roman pottery alongside two sherds of Middle Saxon pottery. Potential for Medieval finds and features other than those of an agricultural nature is thought to be low.

4.8 **Post Medieval & Modern (including map regression exercise)**

4.8.1 Fieldwalking in 1984/5 in the field to the east of the study site produced post-medieval pottery sherds in a number of locations (NHER 20379/HSS 115; 20379NHER 21509/HSS 123; NHER 21510/HSS 124; NHER 21545/HSS 143; NHER 21529/HSS 145; NHER 20380/HSS 147; NHER 21532/HSS 148; NHER 21533/HSS 149). Much of this material will represent manuring scatters rather than *in-situ* settlement activity.

4.8.2 A trench evaluation to the southeast of the site at the junction of Beccles Road and the AS146 found a post-medieval ditch and several undated ditches (ENF 117118).

4.8.3 The remains of a Cold War Royal Observer Corps post survive in the field immediately to the east of the site (NHER21511). It is believed to have been in use between 1961 and 1968, part of a national network of such sites. Aerial photographs show both the Cold War features and, on 1940s aerial photographs, a small group of structures and earthworks that may mark the site of a World War Two observation post. A pair of World War Two Home Guard shelters are also still standing some 400m west of the site (NHER 35982). Both these and the Observer Corps post are recorded on the National Mapping Programme database.

4.8.4 Potential for the discovery of post-Medieval and Modern finds or features other than those of an agricultural nature is thought to be low.

4.8.5 **Map Regression**

4.8.6 A number of early maps have been consulted but are not reproduced within this report as they simply show Loddon as a village within southeast Norfolk, these are the 1579 Saxton map, 1654 Sanson map, 1665 Blaeu map, 1724 Moll map, 1749 Hinton map, 1807 Cary map, 1815 Cary map and the 1830 Chapman & Hall map.

4.8.7 The earliest maps to show the site in any detail are the 1797 Barringer (Figure 3) and Faden (Figure 4) maps. One is a direct and identical copy of the other and both show the site location on the valley side with the buildings of Town Farm on the far side of Beccles Road, a windmill enclosed by roads to the north and a quarry pit just outside the site boundary to the southeast.

4.8.8 The 1826 Bryant map shows the site quite clearly in relation to the town as it then stood (Figure 5) and the 1838 Tithe map shows the site divided into three separate fields with a roughly central west-east field boundary and a north-south division perpendicular to this heading north (Figure 6).

4.8.9 The 1886 Ordnance Survey (Figure 7) is the first map to show the site and its immediate surrounds in any real detail, the west-east field boundary cuts the site in two, but the north-south division has already been removed (the north-south line seen on the image here is not 'real', simply marking the joining of two map pages). The south-eastern site boundary is formed by a tree line beyond which lies a small quarry pit. By 1905 (Figure 8) the site has become one large field with the removal of the central west-east boundary. By the 1972 OS map (Figure 9) development of houses and gardens have encroached into the field at the north and northwest forming the current site boundaries at these points.

4.8.10 The final, north-eastern, boundary of the site is in place by the time of the 1999 Google Earth image (Figure 10) with the planting of a broad tree band here and to the south along the original hedgeline. A wide (private) track or path has been set out around the site perimeter by the time of the 2006 Google image (Figure 11).

4.9 **Cropmarks**

4.9.1 The NMP database (National Mapping Programme) records little of interest for the site and its immediate surrounds, though the Royal Observer Corps post in the field to the east is recorded along with two Home Guard huts to the west of the site.

4.9.2 Google Earth imagery offers some extra potential information, though cropmarks are faint, perhaps due to the free-draining sandy nature of the soils. However, a number of potential features are discernible as cropmarks on the September 2006 image (see Figures 11 and 12). Both the west-east and north-south enclosure ditches, removed in the 19th century, are clearly visible (5 on Figure 12), the latter cutting across a large palaeochannel flowing east out of the northern part of the field. Other features are somewhat fainter: at the centre of the field are a series of west-northwest to east-southeast linear features (2), either representing an earlier Bronze Age or Roman field system or deep plough/drainage marks from modern agriculture. There are more convincing earlier ditches, on different alignments, in the northern part of the field (4). Perhaps the least convincing feature, but flagged up here as a possibility, is a potential structure or small enclosure at the centre of the field (3). The feature, if real, would be approximately 10m long and 7m wide and aligned west-southwest to east-northeast. Possibly coincidentally the feature sits at the centre point of the fieldwalked Roman pottery scatter recorded as Hales Survey Site 161 (1).

4.10 LiDAR Plot

4.10.1 The LiDAR plot does not show the east to west downward slope of the field well but instead picks up a series of faint, wide, roughly west to east ridges and hollow across the central part of the site (Fig. 13). These are also faintly visible in the field surface and, too broad to represent any form of ridge and furrow agriculture, are probably natural in origin. A number of deep quarries are also picked out well by the LiDAR, including one at the southern tip of the study site.

4.11 Assessment of Significance (Designated Assets)

4.11.1 Existing national policy guidance for archaeology (the NPPF as referenced in section 2) enshrines the concept of the ‘significance’ of heritage assets. Significance as defined in the NPPF centres on the value of an archaeological or historic asset for its ‘heritage interest’ to this or future generations.

4.11.2 In terms of relevant designated heritage assets, as defined above and as shown on Figure 2, no nationally designated World Heritage Sites, Scheduled Monuments, Historic Battlefield sites or Historic Wreck sites lie within the vicinity of the study site.

4.12 Assessment of Significance (Non-Designated Assets)

4.12.1 The site contains fieldwalked evidence of on-site Roman activity as recorded in the Hales Survey as site 161. There are cropmarks of ditches and a possible structure visible on Google Earth images that correlate with this pottery scatter. Two Middle Saxon pottery sherds were also recorded. The site generally sits within a much wider and densely populated Romano-British and Medieval landscape.

4.12.2 On this basis, any as yet undiscovered archaeological finds or features within the study site, would in the context of the Secretary of State's non-statutory criteria for Scheduled Monuments (DCMS 2013) be most probably of local significance.

4.12.3 As identified by desk-based work, archaeological potential by period and the likely significance of any archaeological remains which may be present is summarised in table form below:

Period:	**Archaeological Potential**	**Significance**
Early Prehistoric	negligible	local
Later Prehistoric	moderate	local
Roman	high	local
Anglo-Saxon	moderate	local
Medieval	low	local
Post-Medieval	low	local
Modern	low	local

5.0 SITE CONDITIONS, THE PROPOSED DEVELOPMENT & REVIEW OF POTENTIAL DEVELOPMENT IMPACTS ON ARCHAEOLOGICAL ASSETS

5.1 Site Conditions

5.1.1 The study site currently comprises a single large agricultural field currently under arable cultivation (Figure 14 & Plates 1-6).

5.1.2 A site visit was undertaken on the 7th June 2019, weather was dry and overcast and the field was under a single crop of young wheat. There is a wide path around the outside of the cropped area (Plate 6) and sizeable areas of flower-rich grassland at the northwest of the site (Plate 4). A wide tree belt forms the eastern edge of the site with mature hedgerows at the southwest and residential development and gardens at the northwest. There are some wide, faint west-east ridges and depressions within the site (picked up on the LiDAR plot, see Figure 13) that are probably geological in origin, and one deeper, more discrete hollow at the southern tip of the site that may represent a partially infilled quarry pit (Plate 3 and Figure 13).

5.1.3 As the site occupies a relatively steep slope and the underlying natural deposits are sandy, it is likely that past and recent agricultural land use, specifically ploughing, will have had a widespread impact on any underlying archaeological deposits, particularly on the higher areas at the north and east of the site. The lower-lying areas at the west might be expected to contain a greater depth of colluvial subsoils as a result.

5.2 Proposed Development

5.2.1 The study site is being considered for residential development, details of the proposed development are not currently available.

5.3 Review of Potential Development Impacts on Archaeological Assets

5.3.1 No designated archaeological assets will be directly impacted by the proposed development.

5.3.2 The study site is assessed as having a high archaeological potential for activity dating from the Roman period and moderate potential for the later Prehistoric and Early-Middle Anglo-Saxon periods.

5.3.3 Given the study site's theoretical archaeological potential, the proposed development has the potential to impact upon as yet undiscovered archaeological remains. It is likely that any archaeological features present within the higher northern and eastern parts of site will be covered by thinner topsoil and subsoil layers, with those within the lower western area potentially better protected by deeper colluvial soil layers.

5.3.4 The presence of archaeological finds and features can be predicted on the site, however, as no sites of national significance are anticipated on the study site, there is no archaeological reason to preclude the study site from development.

6.0 SUMMARY AND CONCLUSIONS

6.1 Land east of Beccles Road, Loddon, Norfolk has been assessed for its below ground archaeological potential.

6.2 In terms of relevant designated heritage assets, no nationally designated World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck sites lie within the vicinity of the study site. The study site has remained undeveloped agricultural land throughout the historic periods.

6.3 The study site is considered to have a theoretically high archaeological potential for activity dating from the Roman period and moderate potential for the later Prehistoric and Early-Middle Anglo-Saxon periods. This assessment is arrived at with reference to the fieldwalking data, potential cropmark features and the site's topographical and geological location. All other periods (Early Prehistory, Late Saxon, Medieval and post-Medieval) are assessed as having a low archaeological potential.

6.4 Overall it would appear that the proposed development of this site could have an archaeological impact, although nationally significant archaeological assets are not anticipated on the site.

6.5 Therefore, it is anticipated that the Norfolk County Council archaeological advisor will require further archaeological assessment. On the basis of the available evidence, it is recommended that a programme of archaeological investigation comprising geophysical survey and targeted archaeological trenching, would form an appropriate archaeological assessment strategy in this particular instance.

6.6 It is suggested that the Geophysical Survey should be undertaken prior to applying for planning consent if cropping conditions allow, otherwise work could follow planning consent secured by an archaeological planning condition.

SOURCES CONSULTED

1. General

British Library

Norfolk Historic Environment Record

Norfolk Record Office

The National Archive

2. Internet

British Geological Survey –

http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html

British History Online – http://www.british-history.ac.uk/

Domesday Online – http://www.domesdaybook.co.uk/

Historic England: The National Heritage List for England – http://www.historicengland.org.uk/listing/the-list/

Portable Antiquities Scheme – www.finds.org.uk

3. Bibliographic

Chartered Institute for Archaeologists Standard & Guidance for historic environment desk-based assessment 2014, revised 2017

DCMS Scheduled Monuments and Nationally Important Non-Scheduled Monuments 2013

Davison, A. 1990 The Evolution of Settlement in Three Parishes in South-East Norfolk. *East Anglian Archaeology* Report No. 49

Department of Communities and Local Government *National Planning Policy Framework* 2012, updated 2019

Department of Communities and Local Government/Department of Culture Media and Sport/English Heritage *PPS5 Planning for the Historic Environment: Historic Environment Planning Practice Guide* 2010

Historic England *Archaeological Priority Area Guidelines* July 2016 unpublished document

Historic England (formerly English Heritage) *Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment* 2008 (new draft 2017)

Historic England *Historic Environment Good Practice Advice in Planning: 1 The Historic Environment in Local Plans* July 2015 unpublished document

Historic England *Historic Environment Good Practice Advice in Planning: 2 Managing Significance in Decision-Taking in the Historic Environment* July 2015 unpublished document

Historic England *Historic Environment Good Practice Advice in Planning: 3 The Setting of Heritage Assets* December 2017 unpublished document

Margary, I. D. *Roman Roads of Britain* 1955

Mills, A.D. *A Dictionary of British Place Names* 1991

Victoria County History, *A History of the County of Norfolk Volume 2*, 1906

4. **Cartographic**

1579 Saxton Map

1654 Sanson Map

1665 Blaeu Map

1724 Moll Map

1749 Hinton Map

1807 Cary Map

1815 Cary Map

1830 Chapman & Hall Map.

1797 Barringer Map of Norfolk

1797 Faden Map of Norfolk

1826 Bryant Map of Norfolk

1838 Tithe Map

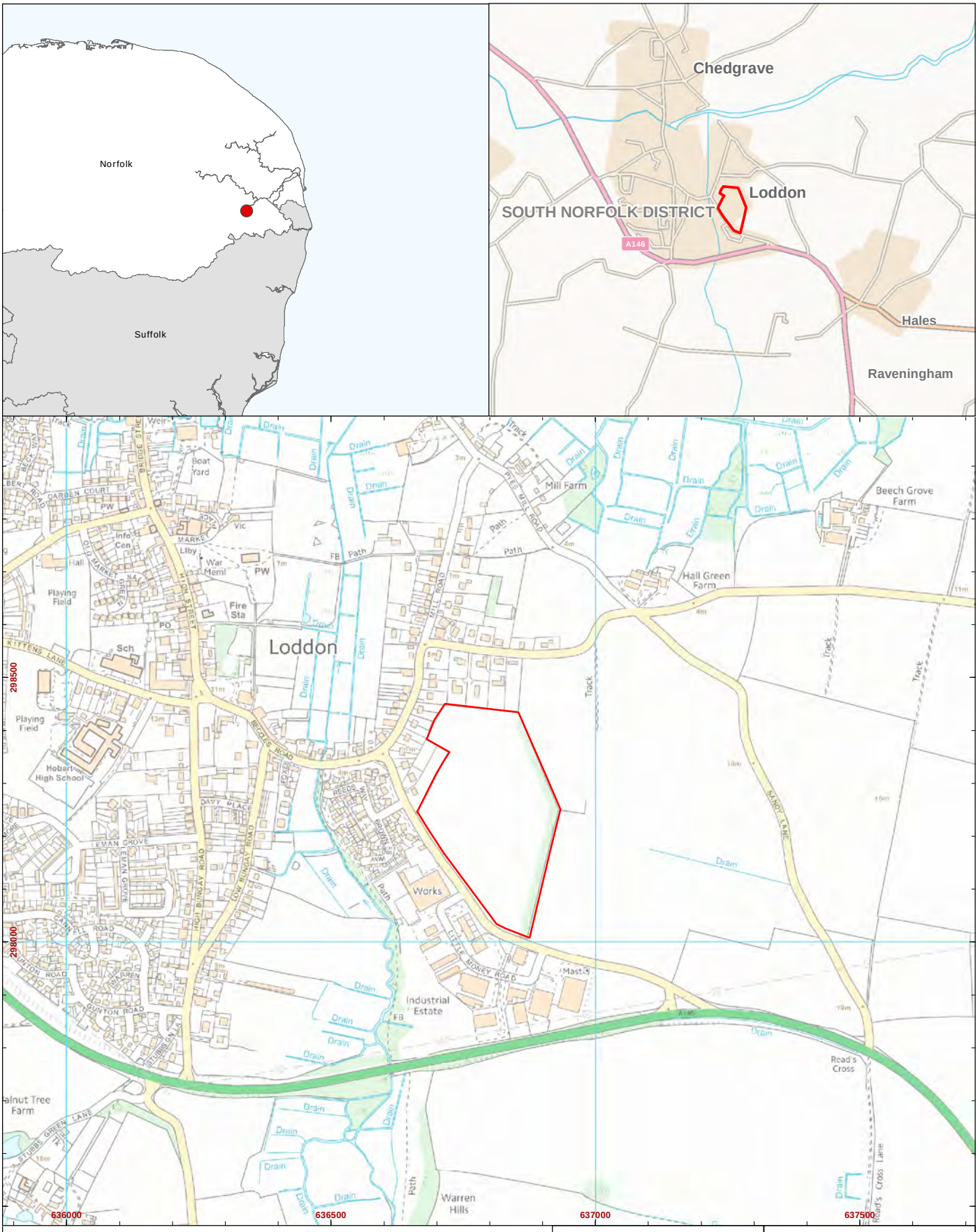
1886 Ordnance Survey 1:2500

1905 Ordnance Survey 1:2500

1972 Ordnance Survey 1:2500

Google Earth Image 1999

Google Earth Image 2006



Site Boundary

N

Scale at A4: 1:10,000

0 250 m

CgMs HERITAGE PART OF RPS

Figure 1:
Site Location

N:\25000-25999\25624 - Beccles Road, Loddon\Figures\Mapping\GIS\Projects\figure 2.mxd

TL / 31.05.19

CgMs HERITAGE PART OF RPS

1km Radius

Site Boundary

Designated Assets:

Listed Building

Conservation Area

Loddon and Chedgrave

Non-Designated Assets:

HER Record (point)

Find Spot

Monument

HER Record (polygon)

Find Spot

Monument

Negative evidence

Building

Previous Archaeological Work:

Event Record (point)

Event Record (polygon)

N

Scale at A3: 1:10,000

0 300 m

Figure 2:
HER Data Plot

Site Boundary (approximate)

N

CgMs HERITAGE PART OF RPS

Not to Scale: Illustrative Only

Figure 3: 1797 Barringer Map of Norfolk

Site Boundary (approximate)

N

Not to Scale: Illustrative Only

CgMs HERITAGE PART OF RPS

Figure 4: 1797 Faden Map of Norfolk

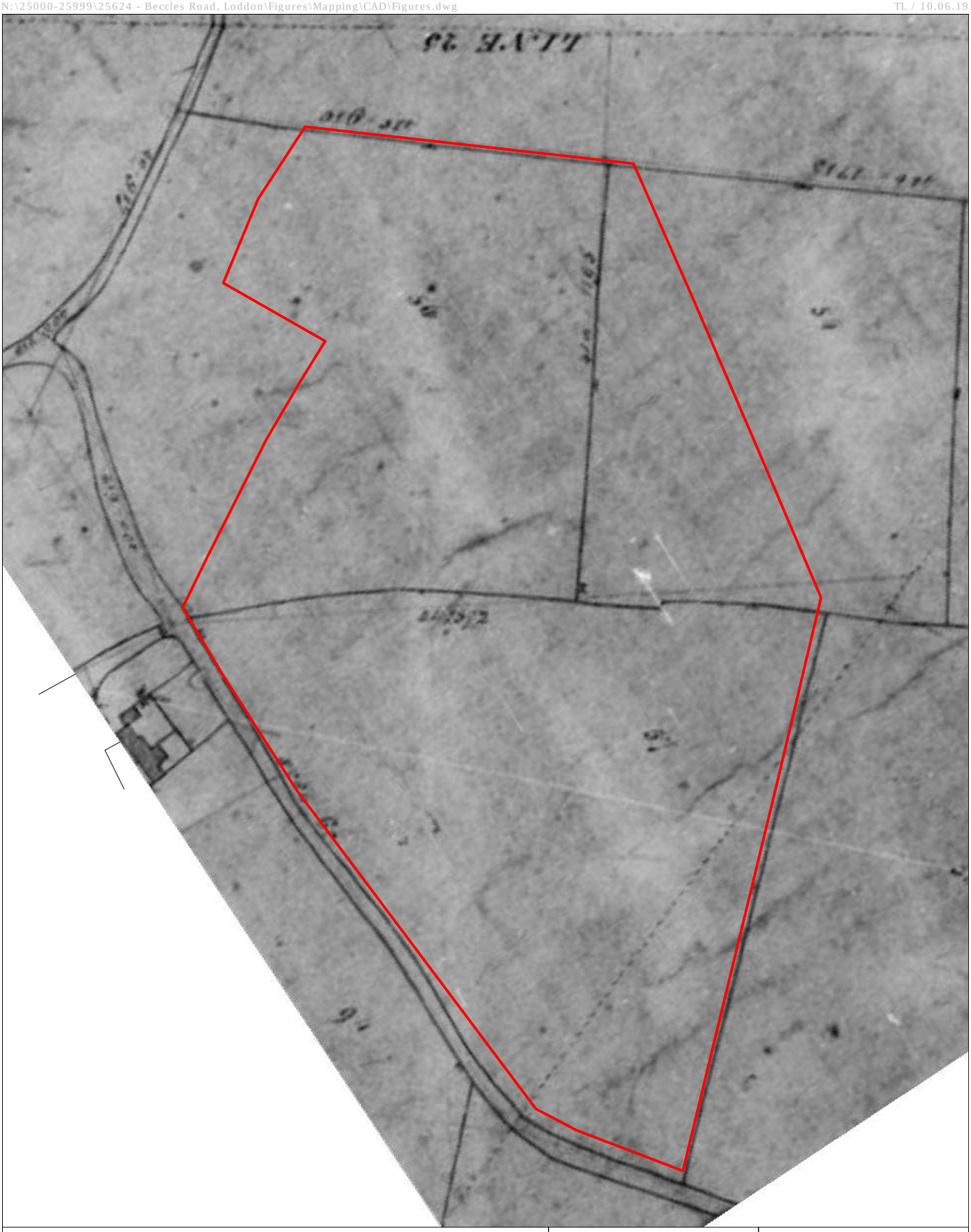
Site Boundary (approximate)

N

Not to Scale: Illustrative Only

CgMs HERITAGE PART OF RPS

Figure 5: 1826 Bryant Map of Norfolk



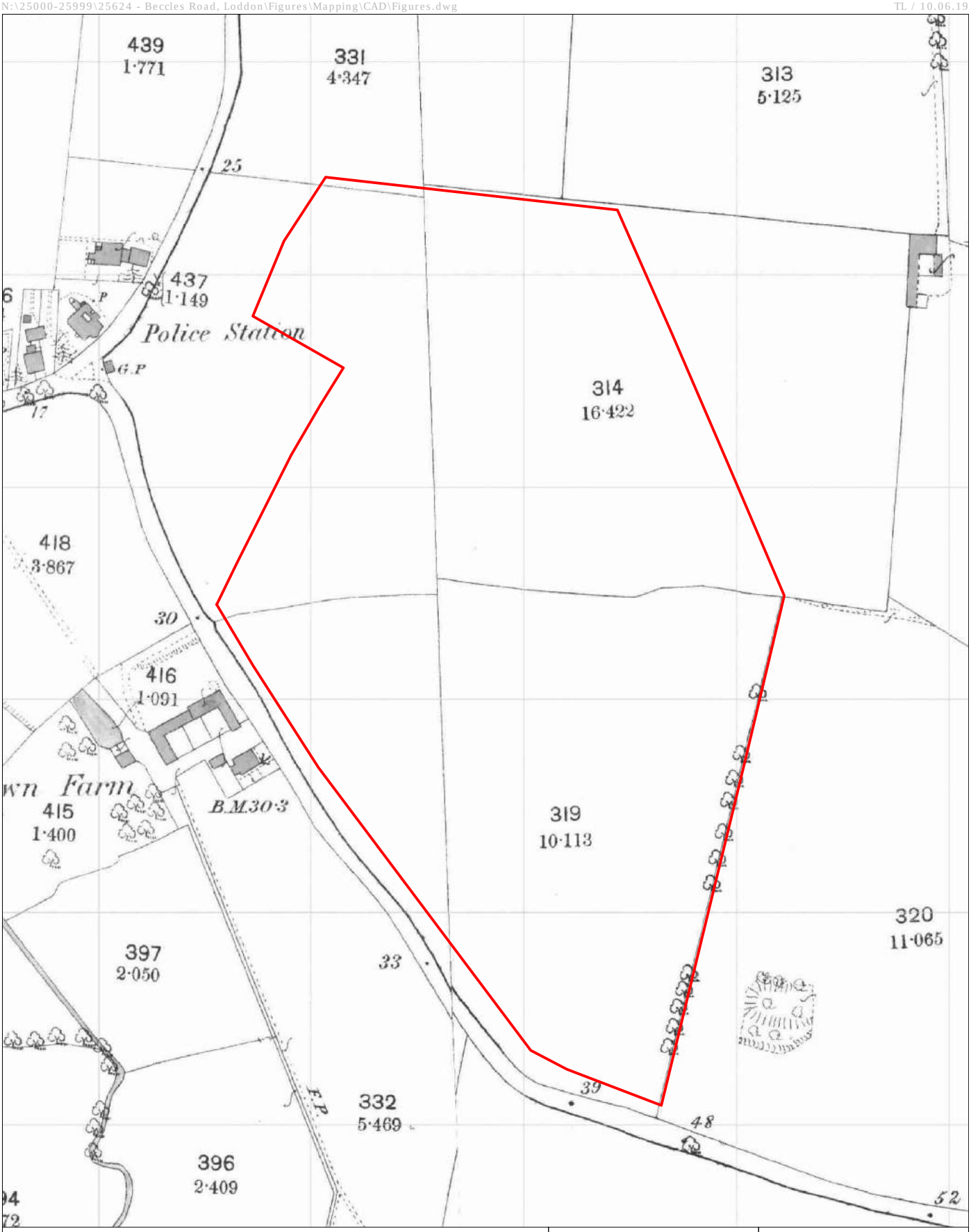
Site Boundary
(approximate)

N

CgMs HERITAGE
PART OF RPS

Not to Scale:
Illustrative Only

Figure 6:
1838 Tithe Map



Site Boundary

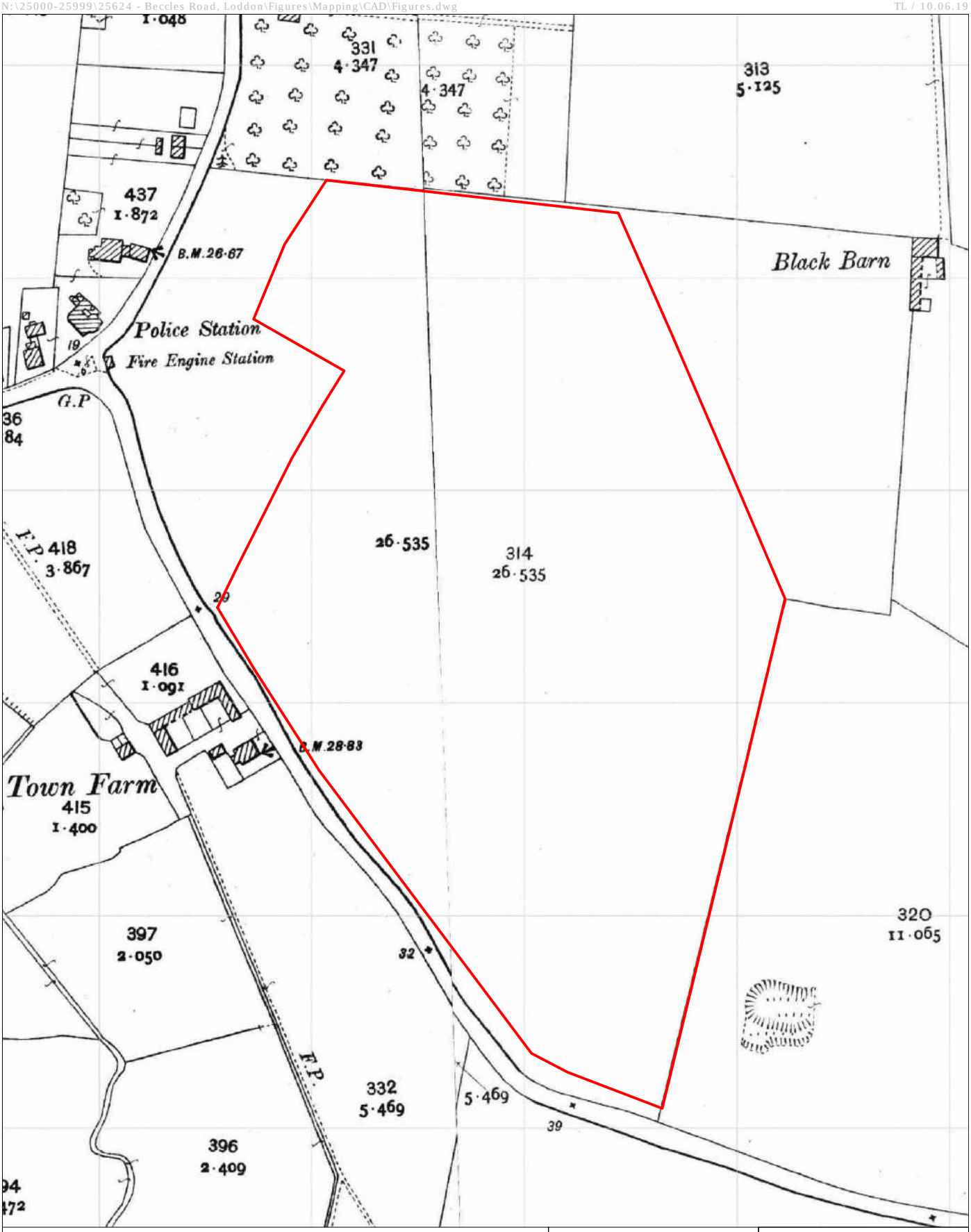
N

Scale 1:2500 @ A4

0 50 m

CgMs HERITAGE PART OF RPS

Figure 7:
1886 Ordnance Survey



Site Boundary

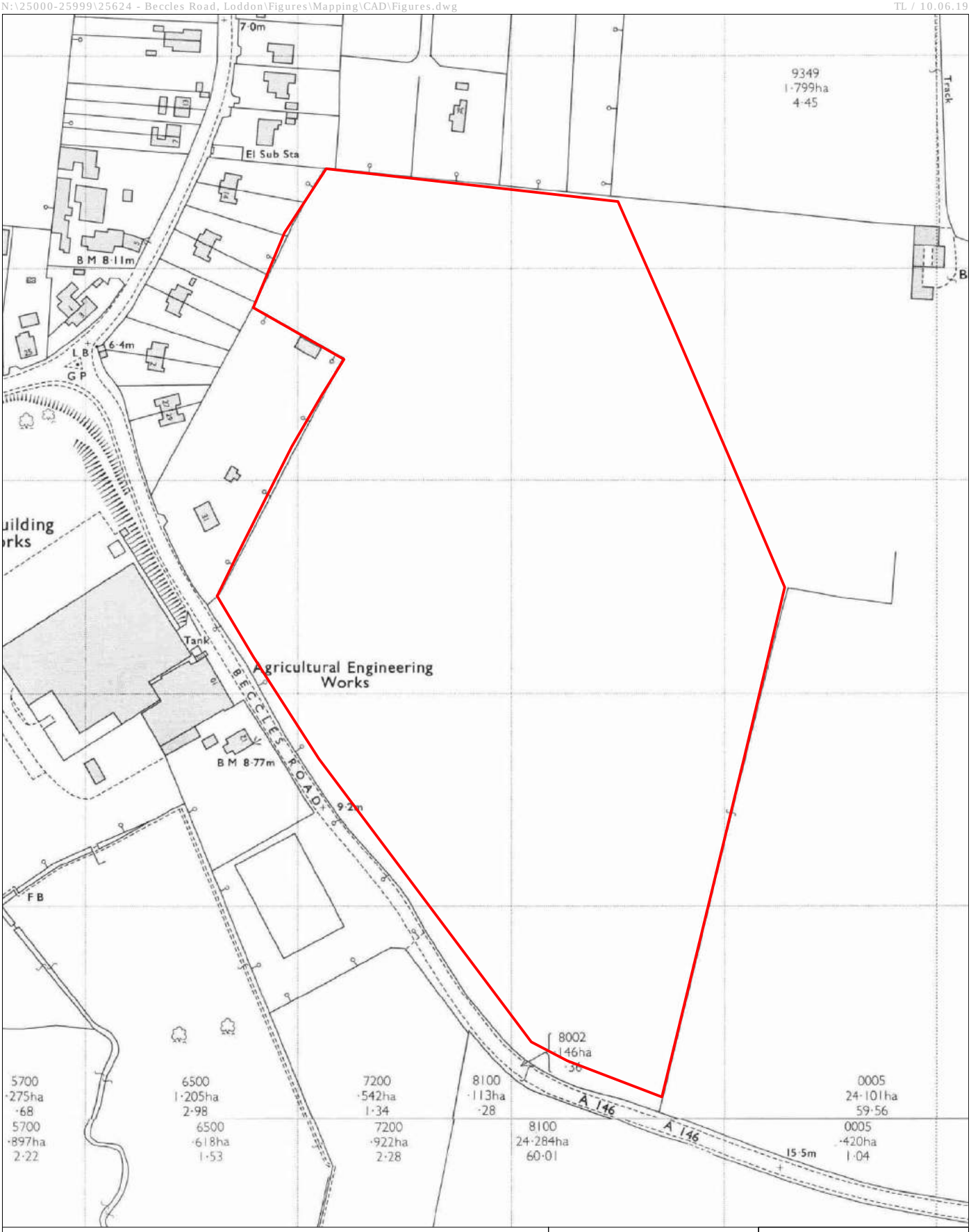
N

Scale 1:2500 @ A4

0 50 m

CgMs HERITAGE PART OF RPS

Figure 8:
1905 Ordnance Survey



Site Boundary

N

Scale 1:2500 @ A4

0 50 m

CgMs HERITAGE PART OF RPS

Figure 9:
1972 Ordnance Survey

Site Boundary

N

CgMs HERITAGE
PART OF RPS

Not to Scale:
Illustrative Only

Figure 10:
Google Earth Image 1999

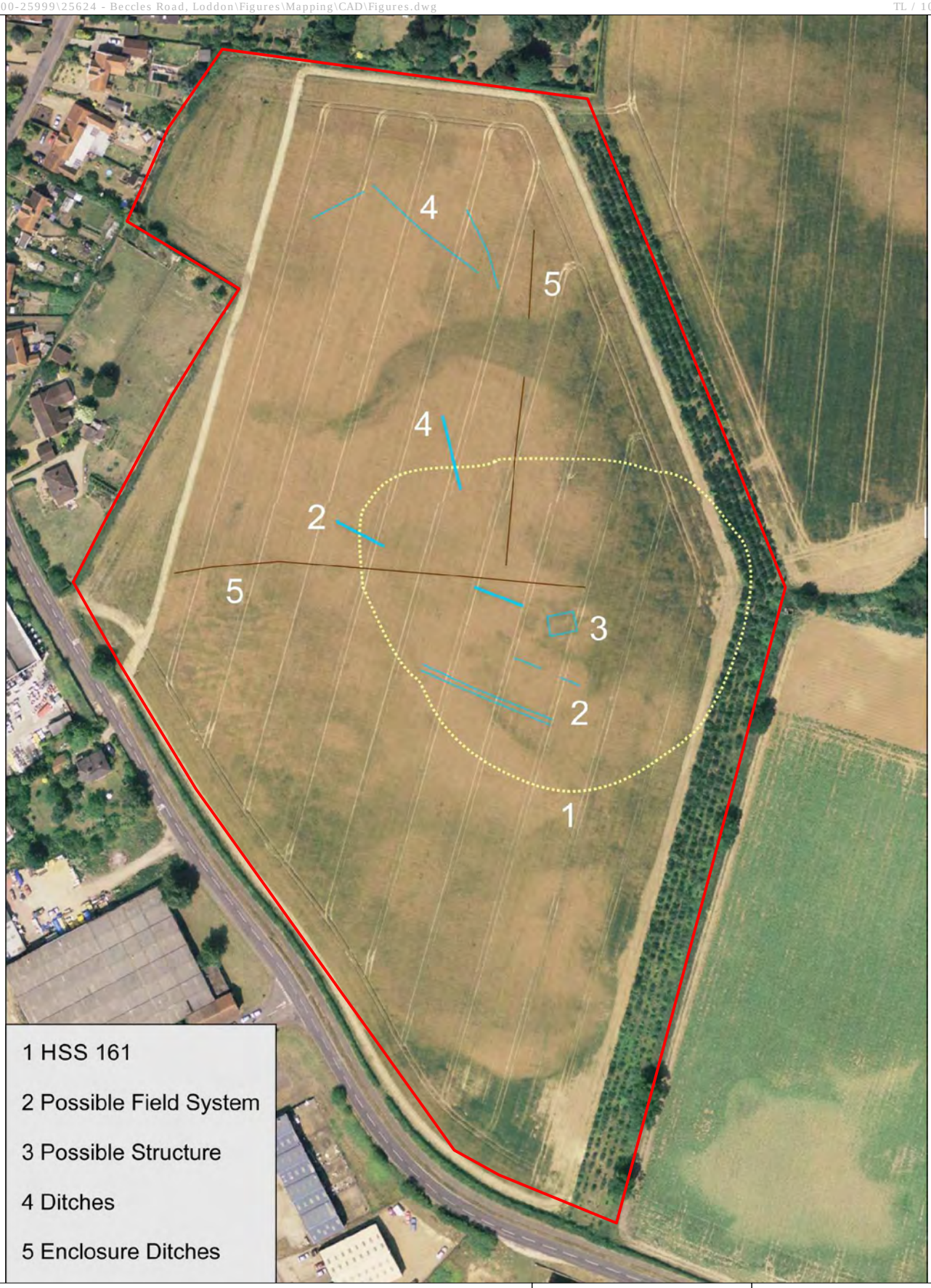
Site Boundary

N

CgMs HERITAGE
PART OF RPS

Not to Scale:
Illustrative Only

Figure 11:
Google Earth Image 2006



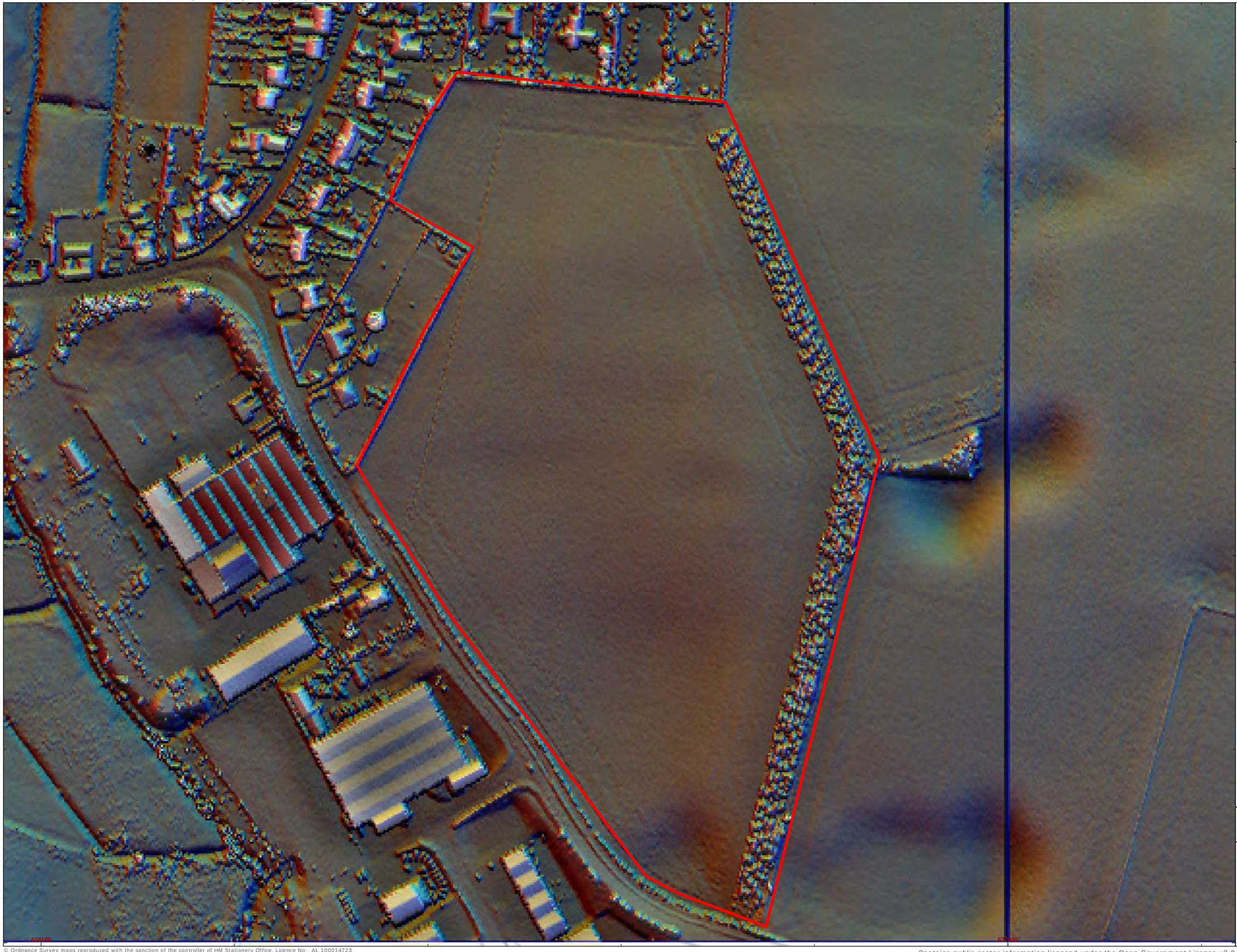
Site Boundary

N

Not to Scale:
Illustrative Only

CgMs HERITAGE
PART OF RPS

Figure 12:
Google Earth Image 2006 with cropmarks and HSS 161 plotted



CgMs HERITAGE PART OF RPS

Site Boundary

LiDAR DATA

Source:
Environment Agency

Data Type: DSM

Resolution: 1m

Date Captured:
03/1999

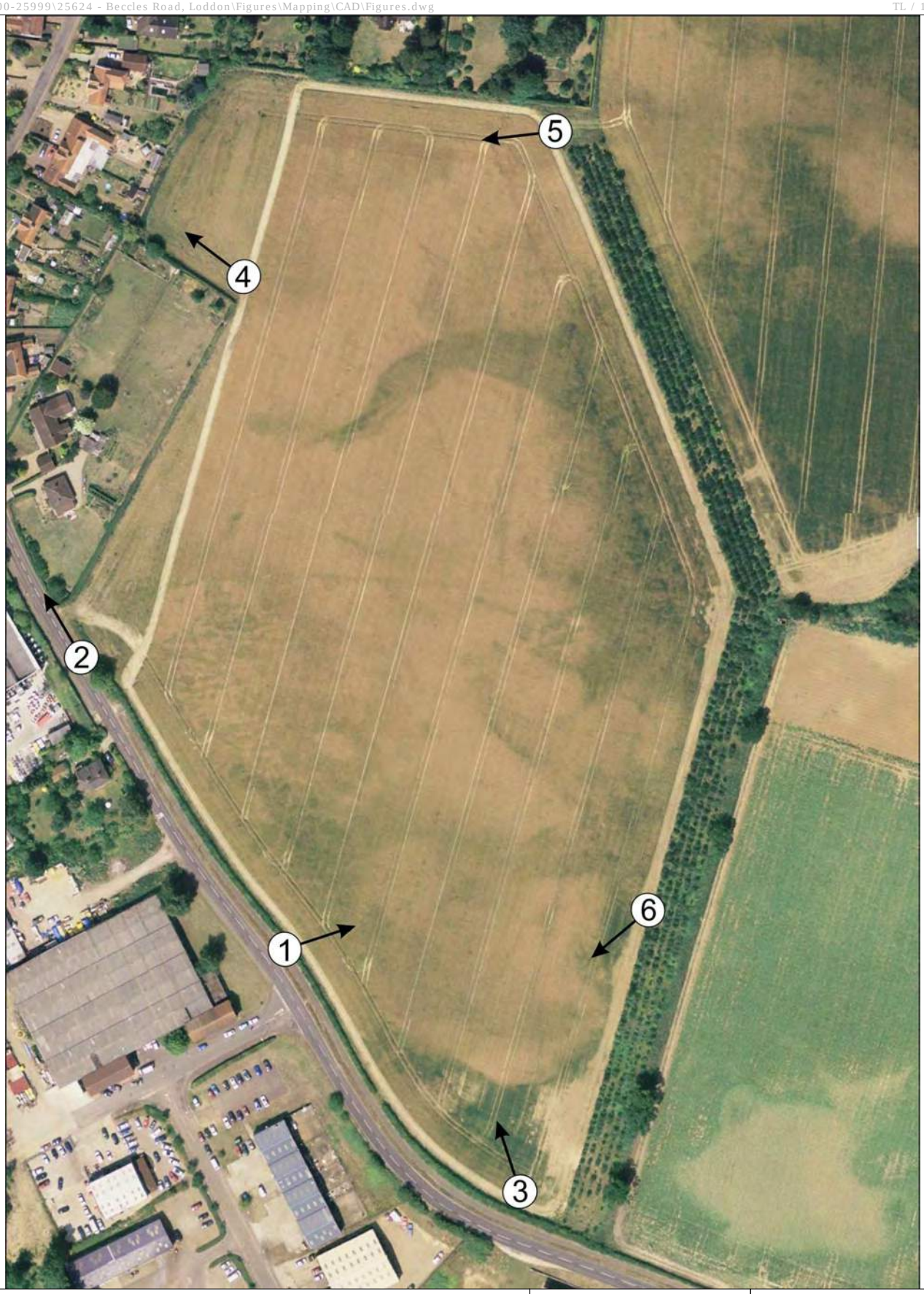
Processing:
simple Local Relief Model overlaid on Multi-direction Hillshade

N

Scale at A3: 1:1,800

0 50 m

Figure 13:
LiDAR Data Plot



N

CgMs HERITAGE
PART OF RPS

Not to Scale:
Illustrative Only

Figure 14:
Location of Plate Photos

Plate 1: Looking east into site from Beccles Road

Plate 2: Looking north along Beccles Road

Plate 3: Looking northwest from southern corner of site

Plate 4: Residential development to the northwest of the site

Plate 5: Looking west from northeast corner of site

Plate 6: Looking southwest from eastern edge of site

APPENDIX 1: GAZETTEER OF HER DATA

EvUID	EventName	Ref	Organisati	Location
ENF131927	Excavation by Heather Wallis at the River Chet, Loddon, 2013 (Broadland Flood Alleviation Project Compartment 22)	heatherw1-154947	Heather Wallis	Compartment 22, The Right Bank Of The River Chet, Between Pyes Mill And Nogdam End
ENF132081	Excavation by Heather Wallis at the River Chet, Loddon, 2013 (Broadland Flood Alleviation Project Compartment 22)	heatherw1-154953	Heather Wallis	Compartment 22, The Right Bank Of The River Chet, Between Pyes Mill And Nogdam End
ENF137214	Test-pitting by Loddon Parish Study, land opposite Barton Lodge, Pyes Mill Road, Loddon, April 2015		Loddon Parish Study	
ENF137214	Test-pitting by Loddon Parish Study, land opposite Barton Lodge, Pyes Mill Road, Loddon, April 2015		Loddon Parish Study	
ENF137215	Test-pitting by Loddon Parish Study, land south of Pye Mill, Pyes Mill Road, Loddon, April 2015.		Loddon Parish Study	
ENF137215	Test-pitting by Loddon Parish Study, land south of Pye Mill, Pyes Mill Road, Loddon, April 2015.		Loddon Parish Study	
ENF137969	Test-pitting by Loddon Parish Study at land opposite Shoe String, Pye's Mill Road, Loddon, 2015.		Loddon Parish Study	Pye's Mill Road
ENF137969	Test-pitting by Loddon Parish Study at land opposite Shoe String, Pye's Mill Road, Loddon, 2015.		Loddon Parish Study	Pye's Mill Road
ENF138290	Test-pitting by Loddon Parish Study at Mill Farm and land south of Barton Lodge, Pyes Mill Road, Loddon, April 2015		Loddon Parish Study	
ENF138290	Test-pitting by Loddon Parish Study at Mill Farm and land south of Barton Lodge, Pyes Mill Road, Loddon, April 2015		Loddon Parish Study	
ENF140825	Test-pitting by Loddon Parish Study at The Angel Public House, High Street, Loddon, May 2016		Loddon Parish Study	The Angel Public House
ENF140826	Test-pitting by Loddon Parish Study at The Grove, 33 Mill Road, Loddon, Loddon, June 2016		Loddon Parish Study	The Grove, 33 Mill Road
ENF141121	Test-pitting by Loddon Parish Study at 17 Norton Road, Loddon, August 2016		Loddon Parish Study	17 Norton Road, Loddon
ENF141214	Test pit by Loddon Parish Study at 22 Norton Road, Loddon, September 2016		Loddon Parish Study	22 Norton Road, Loddon
ENF141285	Test pit by Loddon Parish Study at 18 Norton Road, Loddon, September 2016		Loddon Parish Study	18 Norton Road, Loddon
ENF142306	Test pit by Loddon Parish Study at 6 Market Place, Loddon, 2017		Loddon Parish Study	6 Market Place
ENF142581	Test pit by Loddon Parish Study at 14 Langley Road, Chedgrave, 2017		Loddon Parish Study	14 Langley Road
ENF144857	Building Survey by the Loddon Parish Study at 23 Low Bungay Road, Loddon, June 2018		Loddon Parish Study	23 Low Bungay Road, Loddon
ENF15431	Trial Trenching by Norfolk Archaeological Unit at Little Money Road, Loddon, August 1996		NAU (Norfolk Archaeological Unit)	Little Money Road
ENF15431	Trial Trenching by Norfolk Archaeological Unit at Little Money Road, Loddon, August 1996		NAU (Norfolk Archaeological Unit)	Little Money Road
ENF15431	Trial Trenching by Norfolk Archaeological Unit at Little Money Road, Loddon, August 1996		NAU (Norfolk Archaeological Unit)	Little Money Road
ENF15431	Trial Trenching by Norfolk Archaeological Unit at Little Money Road, Loddon, August 1996		NAU (Norfolk Archaeological Unit)	Little Money Road
ENF98266	Trial Trenching by Norfolk Archaeological Unit at 47 Bridge Street, Chedgrave, May 2005	norfolka1-12308	NAU (Norfolk Archaeological Unit)	Former Browne's Garage
ENF105181	Trial Trench by Chris Birks Archaeological Services at Hobart High School, Loddon, October 2005	chrisbir1-12285	Chris Birks Archaeological Services	Hobart High School
ENF117108	Trial Trenching by Archaeological Project Services at junction of the A146 and Beccles Road, Loddon, February 2007	archaeol1-23806	APS (Archaeological Project Services)	Junction of the A146 and Beccles Road
ENF121024	Trial Trench by AOC Archaeology at Church Plain, Loddon, June 2008	aocarcha1-47217	AOC Archaeology Group	Co-op Retail Ltd., Church Plain
ENF121559	Trial Trench by NAU Archaeology at Market Place, Loddon, September 2008	norfolka1-51320	NAU Archaeology	Old Police Station, Market Place
ENF128357	Trial Trenching by Oxford Archaeology East at 8 Beccles Road, Loddon, January 2011	oxfordar3-117846	Oxford Archaeology East	The Old Express Plastics Factory, Beccles Road
ENF131593	Watching Brief by Heather Wallis at the River Chet, Loddon, 2013 (Broadland Flood Alleviation Project Compartment 22)	heatherw1-151313	Heather Wallis	Compartment 22, The Right Bank Of The River Chet, Between Pyes Mill And Nogdam End
ENF136418	Watching Brief by Chris Birks Archaeological Services at Pyes Mill Farm, Pyes Mill Road, Loddon, 2014	chrisbir1-208993	Chris Birks Archaeological Services	Pyes Mill Farm, Pyes Mill Road
ENF141113	Casual observation by Lodden Parish Study at 19 Bridge Street, Loddon, August 2016			19 Bridge Street, Loddon
ENF141443	Resistivity Survey by Loddon Parish Study at 18 Norton Road, Loddon, October 2016		Loddon Parish Study	18 Norton Road, Loddon
ENF142224	Test pit by Loddon Parish Study at Hall Green Farm, Loddon, 2017		Loddon Parish Study	Hall Green Farm
ENF142271	Resistivity Survey by the Loddon Parish Study at field adjacent to 6 Market Place, Loddon, 2017		Loddon Parish Study	field adjacent to 6 Market Place
ENF142455	Geophysical Survey by Pre-Construct Geophysics Ltd at land east of High Bungay Road, Loddon, April 2017	preconst2-284978	Pre-Construct Geophysics Ltd	
ENF144545	Test pit by Loddon Parish Study at 23 Low Bungay Road, Loddon, June 2018		Loddon Parish Study	Garden of 23 Low Bungay Road, Loddon

PrefRef	MonUID	MonRecordT	Period	MonTypes	Name
1051	MNF1051	Find Spot	Lower Palaeolithic to Medieval	FINDSPOT	Multi-period finds
10515	MNF10515	Find Spot	Beaker to Medieval	FINDSPOT	Multi-period finds from garden of The Beeches
10516	MNF10516	Find Spot	Roman	FINDSPOT	Roman coin
10517	MNF10517	Find Spot	Middle Saxon to Medieval	FINDSPOT	Middle Saxon pin and medieval coffin
10518	MNF10518	Find Spot	Late Saxon	FINDSPOT	Viking spearhead and Late Saxon finds
10519	MNF10519	Monument	Medieval	INHUMATION	Medieval inhumation
10532	MNF10532	Monument	Medieval	CHAPEL	Site of St Mary's Chapel
10537	MNF10537	Building	Post Medieval	WATERMILL, MILL HOUSE	Loddon Watermill
10538	MNF10538	Building	Medieval to Post Medieval	CHURCH, RAILINGS, CHURCH, GATE PIER, WALL, CHEST TOMB, COMMEMORATIVE BRASS, FINDSPOT	Holy Trinity Church, Loddon
12896	MNF12896	Find Spot	Neolithic	FINDSPOT	Neolithic arrowhead from garden of 11 Sycamore Close
13857	MNF13857	Find Spot	Roman to Early Saxon	FINDSPOT	Roman or Early Saxon spearhead
13867	MNF13867	Building	Post Medieval	HOUSE, TIMBER FRAMED BARN, STABLE, BARN	Barn and stables behind Fox and Hounds public house, Beccles Road
13869	MNF13869	Building	Post Medieval	BARN	Post medieval barn, Garden Court
13870	MNF13870	Building	Post Medieval	HOUSE	13 to 15 Bridge Street, formerly Street Farm
13871	MNF13871	Building	Post Medieval to Modern	NONCONFORMIST CHAPEL, SCHOOL, RAILINGS, GATE, WALL, WESLEYAN METHODIST CHAPEL	St John's Chapel, George Lane
13872	MNF13872	Building	Medieval to Post Medieval	TIMBER FRAMED BUILDING, TIMBER FRAMED BUILDING, HOUSE	Bugdon House
13873	MNF13873	Building	Medieval to Post Medieval	INN, TIMBER FRAMED BUILDING	The Swan Inn
13874	MNF13874	Building	Medieval to Modern	HOUSE, DATE STONE, SHOP	15 to 21 Church Plain
13875	MNF13875	Building	Post Medieval	HOUSE	Mornington House, 33 Church Plain
13876	MNF13876	Building	Medieval to Modern	HOUSE, CELLAR, SHOP, LABOUR EXCHANGE	1 to 5 High Street
13877	MNF13877	Building	Post Medieval	HOUSE	Farthing Green House (District Council Offices)
13878	MNF13878	Building	Post Medieval	HOUSE, GARDEN WALL, GATE PIER	Loddon House
16288	MNF16288	Monument	Post Medieval	WATERMILL, WRECK, WATERMILL, WINDMILL	Possible undated watermill, windmill and wreck
17154	MNF17154	Monument	Post Medieval	WINDMILL, SMOCK MILL	Site of post medieval smock mill
17497	MNF17497	Monument	World War Two	PILLBOX, PILLBOX (TYPE FW3/22)	World War Two Type 22 pillbox
17498	MNF17498	Monument	World War Two	PILLBOX, PILLBOX (TYPE FW3/22)	World War Two Type 22 pillbox
17591	MNF17591	Monument	Unknown	RING DITCH, NON ANTIQUITY, PIT	Site of ring ditch of non-archaeological origin at Hobart High School
17982	MNF17982	Monument	Roman to Middle Saxon	BATH HOUSE, VILLA, INHUMATION CEMETERY, SETTLEMENT	Site of possible Roman bath house, Early Saxon inhumation cemetery and Middle Saxon settlement
18132	MNF18132	Monument	Lower Palaeolithic to Post Medieval	SETTLEMENT, FINDSPOT	Site of medieval settlement and multi-period finds
18133	MNF18133	Find Spot	Medieval to Post Medieval	FINDSPOT	Medieval and post medieval pottery
18134	MNF18134	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Multi-period finds

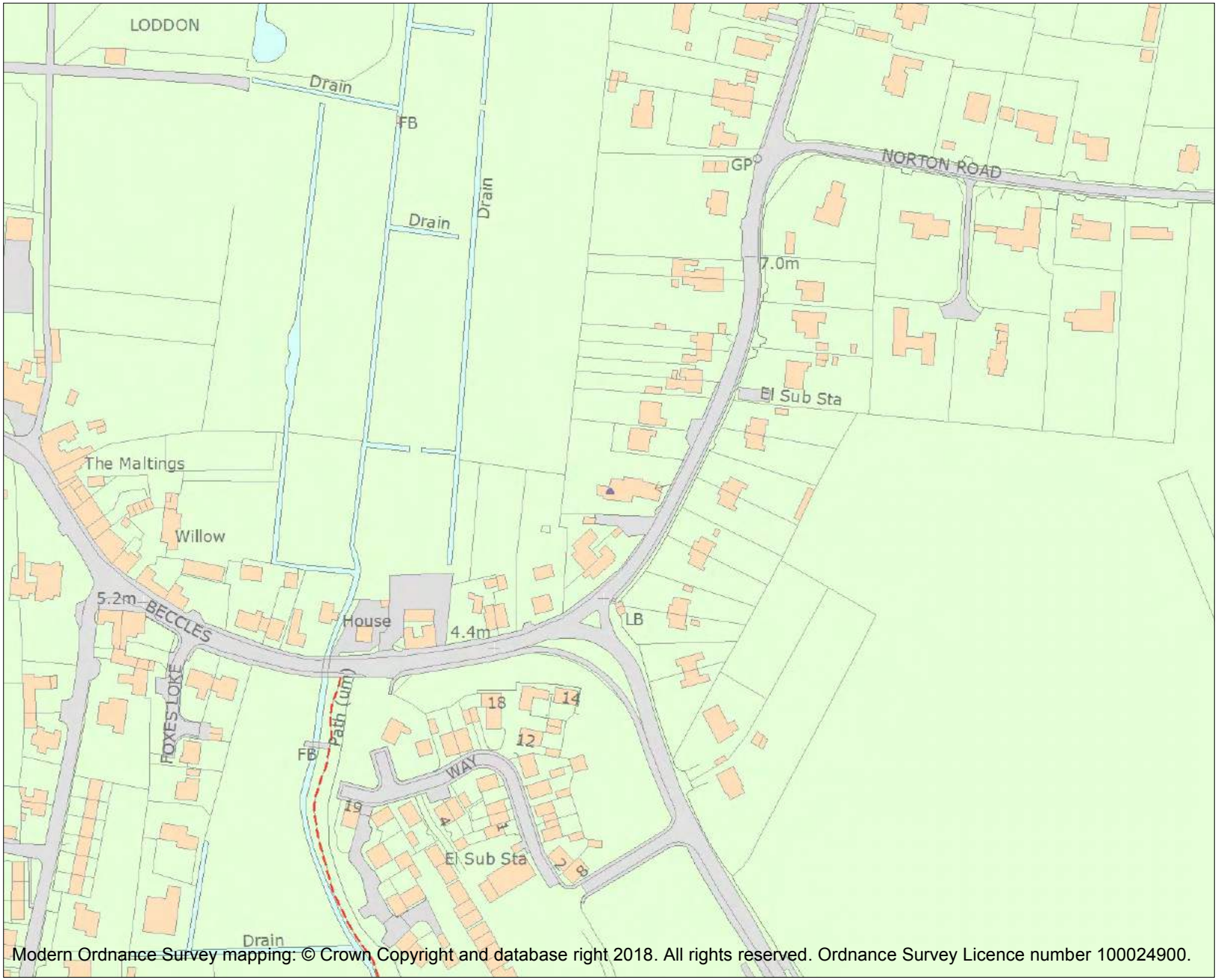
18379	MNF18379	Find Spot	Early Neolithic to Late Bronze Age	FINDSPOT, FINDSPOT	Neolithic or Bronze Age axe
18403	MNF18403	Building	Medieval to Post Medieval	HOUSE	3 Norwich Road
19314	MNF19314	Monument	Medieval	CROSS, SETTLEMENT	Site of medieval settlements and cross
19316	MNF19316	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Prehistoric flints and multi-period pottery
19319	MNF19319	Find Spot	Medieval	FINDSPOT	Medieval pottery
19484	MNF19484	Find Spot	Medieval	FINDSPOT	Medieval pottery
19486	MNF19486	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Multi-period finds
19488	MNF19488	Monument	Medieval	SETTLEMENT	Site of medieval settlement and multi-period finds
19490	MNF19490	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Multi-period finds
19491	MNF19491	Find Spot	Prehistoric	FINDSPOT	Prehistoric flints
19499	MNF19499	Find Spot	Late Iron Age to Post Medieval	FINDSPOT	Multi-period finds
19688	MNF19688	Building	Post Medieval	HOUSE, TIMBER FRAMED HOUSE	3 and 5 Market Place
20364	MNF20364	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Prehistoric flint flake and medieval to post medieval metal objects
20379	MNF20379	Find Spot	Medieval to Post Medieval	FINDSPOT	Medieval and post medieval pottery
20380	MNF20380	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Prehistoric flints and multi-period pottery finds
20386	MNF20386	Find Spot	Post Medieval	DITCH, LINEAR FEATURE, FIELD BOUNDARY	Multi-period finds and evaluation at Junction of the A146 and Beccles Road
21509	MNF21509	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Multi-period finds
21510	MNF21510	Find Spot	Post Medieval	FINDSPOT	Post medieval finds
21511	MNF21511	Monument	Cold War	ROYAL OBSERVER CORPS SITE	World War Two and Cold War Royal Observer Corps post
21512	MNF21512	Find Spot	Middle Saxon to Post Medieval	FINDSPOT	Prehistoric flints and multi-period pottery finds
21528	MNF21528	Find Spot	Lower Palaeolithic to Medieval	FINDSPOT	Multi-period finds
21529	MNF21529	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Prehistoric flints and medieval pottery
21530	MNF21530	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Multi-period finds
21531	MNF21531	Monument	Late Saxon to Medieval	SETTLEMENT	Site of Late Saxon to medieval settlement
21532	MNF21532	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Multi-period finds
21533	MNF21533	Find Spot	Early Neolithic to Post Medieval	FINDSPOT	Prehistoric flints and multi-period pottery
21535	MNF21535	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Prehistoric flints and multi-period pottery finds
21535	MNF21535	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Prehistoric flints and multi-period pottery finds
21536	MNF21536	Find Spot	Medieval	FINDSPOT	Medieval pottery
21537	MNF21537	Find Spot	Beaker to Post Medieval	FINDSPOT	Beaker arrowhead and multi-period pottery finds
21538	MNF21538	Monument	Middle Saxon	SETTLEMENT	Site of Middle Saxon settlement and multi-period finds
21539	MNF21539	Monument	Lower Palaeolithic to Post Medieval	SETTLEMENT, SETTLEMENT, FINDSPOT	Sites of Middle Saxon and medieval settlements and multi-period finds

21540	MNF21540	Monument	Middle Saxon to Medieval	SETTLEMENT	Site of Middle Saxon to medieval settlement
21541	MNF21541	Monument	Medieval	SETTLEMENT	Site of medieval settlement and multi-period finds
21542	MNF21542	Find Spot	Roman to Post Medieval	FINDSPOT	Roman tile and multi-period pottery finds
21543	MNF21543	Monument	Roman to Middle Saxon	SETTLEMENT, SETTLEMENT	Site of Roman and Middle Saxon settlement and multi-period finds
21544	MNF21544	Monument	Medieval	SETTLEMENT	Site of medieval settlement and multi-period finds
21545	MNF21545	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Multi-period finds
22660	MNF22660	Find Spot	Early Neolithic to Modern	FINDSPOT	Multi-period finds
22691	MNF22691	Find Spot	Early Neolithic to Post Medieval	FINDSPOT	Multi-period finds
23809	MNF38004	Find Spot	Medieval	FINDSPOT	Medieval arrowhead and rivet
28280	MNF28280	Building	Post Medieval	TIMBER FRAMED BARN, CART SHED, STABLE, BARN	Barn at Hall Green Farm
28815	MNF28815	Monument	Medieval	MANOR, MANOR HOUSE	Site of Bacon's Manor
31873	MNF31873	Building	Post Medieval to Modern	HOUSE, TIMBER FRAMED BUILDING, SHOP	The Surgery, 35 and 37 Market Place
31941	MNF31941	Find Spot	Prehistoric	FINDSPOT	Prehistoric flints from site on Little Money Road
32725	MNF32725	Monument	World War Two	PILLBOX	Site of World War Two pillbox
32790	MNF32790	Building	Post Medieval	HOUSE	Maltby House, 9 Beccles Road
35110	MNF39274	Monument	Late Saxon to Post Medieval	DITCH, DITCH, DITCH, POST HOLE, FLOOR, WALL, HOUSE, POST HOLE, BUILDING, ROBBER TRENCH, FINDSPOT	Late Saxon and medieval features on land off 1 High Street
35982	MNF40176	Monument	World War Two	HOME GUARD SHELTER, SHELTER	Pair of World War Two Home Guard shelters
36179	MNF40119	Building	Post Medieval to Modern	SCHOOL, SCHOOL HOUSE, PUBLIC LIBRARY	Old School Library, Church Plain
39587	MNF43258	Find Spot	Undated	FINDSPOT	Human remains of unknown date
40451	MNF44300	Monument	World War Two	SPIGOT MORTAR EMPLACEMENT	World War Two spigot mortar emplacement, Old Market Green
41150	MNF45772	Building	Post Medieval	HOUSE, SHOP	2, 4 High Street
41279	MNF46384	Building	Post Medieval	HOUSE	9,11,13 High Street
41280	MNF46385	Building	Post Medieval	HOUSE, SHOP	34 to 40 (even) High Street
41643	MNF46262	Find Spot	Medieval to Post Medieval	FINDSPOT	Medieval and post medieval finds from 47 Bridge Street
42633	MNF47541	Building	Post Medieval	HOUSE, PUBLIC HOUSE	White Horse, Norwich Road
42758	MNF47582	Find Spot	Prehistoric	FINDSPOT	Worked flints, Hobart High School
44552	MNF49782	Building	Post Medieval to Modern	HOUSE	3 and 5 Beccles Road
44553	MNF49783	Building	Post Medieval to Cold War	MALTINGS	The Maltings, Beccles Road
44554	MNF49784	Building	Post Medieval to Unknown	HOUSE	7 Bridge Street
44555	MNF49785	Building	Post Medieval to Modern	HOUSE	The Lodge, Stubbs Green
44556	MNF49786	Building	Post Medieval to Modern	HOUSE, SHOP	11 Beccles Road
44557	MNF49787	Building	Post Medieval to Modern	HOUSE	27 Bridge Street

44558	MNF49788	Building	Post Medieval to Modern	HOUSE, SHOP, RAILINGS, GATE	1 and 3 Church Plain
44559	MNF49789	Building	Post Medieval to Modern	TERRACE, COMMERCIAL OFFICE, TERRACED HOUSE, RAILINGS, GATE	26, 28, 30 and 32 High Street
44560	MNF49790	Building	Post Medieval to Modern	HOUSE	7 Church Plain
44561	MNF49791	Building	Post Medieval to Modern	HOUSE	Rose Cottage, 25 High Bungay Road
44562	MNF49793	Building	Post Medieval to Modern	HOUSE, BREWERY, INN	5 Norton Road
44563	MNF49794	Building	Post Medieval to Modern	SHOP, HOUSE	13 Beccles Road
44564	MNF49795	Building	Post Medieval to Modern	HOUSE	19 and 21 High Street
44565	MNF49796	Building	Post Medieval to Modern	HOUSE	42 High Street
44566	MNF49797	Building	Post Medieval to Modern	HOUSE	48 High Street
44567	MNF49798	Building	Post Medieval to Modern	HOUSE	Stubbs House Cottages, Stubbs Green
44568	MNF49799	Building	Post Medieval to Modern	HOUSE, SHOP	29 Bridge Street
44569	MNF49800	Building	Post Medieval to Modern	HOUSE, SHOP	Brown and Sons Ltd and Moreton House, 52, 54 and 56 High Street
44570	MNF49801	Building	Post Medieval to Modern	HOUSE	9 Church Plain
44571	MNF49802	Building	Post Medieval to Modern	NONCONFORMIST CHAPEL, ELEMENTARY SCHOOL, YOUTH CLUB, SCHOOL, PRIMITIVE METHODIST CHAPEL	Former Primitive Methodist chapel
44572	MNF49803	Building	Post Medieval to Modern	HOUSE, SHOP	19 and 21 Bridge Street
44573	MNF49804	Building	Post Medieval to Modern	FARMHOUSE	Hall Green Farmhouse, Norton Road
44574	MNF49805	Building	Post Medieval to Modern	HOUSE	Church Grove, 19 Mill Road
44575	MNF49806	Building	Post Medieval to Modern	HOUSE	6 and 8 High Street
44576	MNF49807	Building	Post Medieval to Modern	TIMBER FRAMED BARN	Barn north east of Cannel's Farmhouse or Walnut Tree Farm, Stubbs Green
44577	MNF49808	Building	Post Medieval to Modern	TOWN HALL, COMMERCIAL OFFICE	Former Town Hall, 1 and 3 Bridge Street
44578	MNF49809	Building	Post Medieval to Modern	TIMBER FRAMED HOUSE, FARMHOUSE	Beech Grove Farmhouse, Norton Road
44579	MNF49810	Building	Post Medieval to Modern	SHOP, APARTMENT	44 High Street
44580	MNF49811	Building	Post Medieval to Modern	TIMBER FRAMED BUILDING, SHOP, OFFICE, APARTMENT	22 and 24 High Street
44581	MNF49812	Building	Post Medieval to Modern	HOUSE	17 High Street
44582	MNF49813	Building	Post Medieval to Modern	HOUSE	Walcote, 16 Market Place
44583	MNF49814	Building	Post Medieval to Modern	FARMHOUSE	Cannel's Farmhouse or Walnut Tree Farmhouse, Stubbs Green
44584	MNF49815	Building	Post Medieval to Modern	PUBLIC HOUSE	The Angel Public House, 15 High Street
44585	MNF49816	Building	Post Medieval to Modern	HOUSE	5 Church Plain
44586	MNF49817	Building	Post Medieval to Modern	PUBLIC HOUSE	King's Head Public House, 16 Bridge Street

44587	MNF49818	Building	Post Medieval to Modern	HOUSE	31 and 33 Bridge Street
44588	MNF49819	Building	Post Medieval to Modern	HOUSE	23 High Street
44589	MNF49820	Building	Post Medieval to Modern	HOUSE	46 High Street
44590	MNF49821	Building	Post Medieval to Modern	HOUSE	35 and 37 Bridge Street
44591	MNF49822	Building	Post Medieval to Modern	HOUSE, SHOP	12, 14 and 16 High Street
44592	MNF49823	Building	Post Medieval to Modern	HOUSE	2 and 4 Lower Bungay Road
44593	MNF49824	Building	Post Medieval to Modern	STABLE, SMOKE HOUSE	Stables east of The Angel public house
44595	MNF49826	Building	Post Medieval to Modern	HOUSE	13 Church Plain
44596	MNF49827	Building	Post Medieval to Modern	HOUSE	4 High Bungay Road
44597	MNF49828	Building	Post Medieval to Modern	HOUSE, RAILINGS, GARDEN WALL	The Beeches, 1 High Bungay Road
44598	MNF49829	Building	Post Medieval to Modern	HOUSE	Penrose, 18 High Street
44599	MNF49830	Building	Post Medieval to Modern	HOUSE	The Chestnuts, 4 Beccles Road
44600	MNF49831	Building	Post Medieval to Modern	SHOP	11 Church Plain
44602	MNF49833	Building	Modern	TELEPHONE BOX	Telephone box, Church Plain
44603	MNF49834	Building	Post Medieval to Modern	BUNGALOW, SERPENTINE WALL, TERRACE, TERRACED HOUSE	5, 7 and 9 High Bungay Road
44604	MNF49835	Building	Cold War to Modern	BUNGALOW, DAY CENTRE, TERRACE, TERRACED HOUSE	1 to 6 Davy Place
44605	MNF49836	Building	Cold War to Modern	BUNGALOW, TERRACE, TERRACED HOUSE, HOUSING ESTATE	Davey Terrace, 3 to 13 (odd) Low Bungay Road
44606	MNF49837	Building	Cold War to Modern	BUNGALOW, TERRACE, TERRACED HOUSE, HOUSING ESTATE, SERPENTINE WALL	6, 8 and 10 Low Bungay Road
44607	MNF49838	Building	Cold War to Modern	BUNGALOW, TERRACE, TERRACED HOUSE, HOUSING ESTATE	10 to 14 Davy Place
44608	MNF49839	Building	Cold War to Modern	BUNGALOW, TERRACE, TERRACED HOUSE, HOUSING ESTATE	15 to 20 Davy Place
49635	MNF55739	Monument	Post Medieval	DITCH, FIELD BOUNDARY	Site of probable post medieval field boundaries
49641	MNF55714	Monument	Medieval to Modern	RIDGE AND FURROW?, VILLAGE GREEN	Hales Green and associated earthworks
51508	MNF56848	Find Spot	Early Neolithic	FINDSPOT	Early Neolithic laurel leaf flint
51572	MNF56988	Monument	Medieval to Post Medieval	PIT, CONSTRUCTION TRENCH, FINDSPOT, FINDSPOT	Post-medieval construction cuts and pit
51710	MNF57237	Monument	Late Saxon	RUBBISH PIT, PIT, FINDSPOT, FINDSPOT	Late Saxon refuse pit
57845	MNF63630	Monument	World War Two	ROADBLOCK	World War Two road block
57865	MNF63700	Negative evidence	Undated		Negative evidence
58018	MNF63947	Building	World War Two	AIR RAID SHELTER?, AIR RAID WARDENS POST?	World War Two Air raid shelter
58565	MNF64663	Find Spot	Early Neolithic to Post Medieval	FINDSPOT	Multi-period finds

58566	MNF64664	Find Spot	Roman to Post Medieval	FINDSPOT	Multi-period finds
58567	MNF64666	Find Spot	Roman to Post Medieval	FINDSPOT	Multi-period finds
58568	MNF64667	Find Spot	Post Medieval	FINDSPOT	Post-medieval pottery
58569	MNF64668	Find Spot	Late Saxon	FINDSPOT	Multi-period finds
58570	MNF64670	Find Spot	Late Saxon to Post Medieval	FINDSPOT	Multi-period finds
58571	MNF64671	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Multi-period finds
58572	MNF64673	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Multi-period finds
58573	MNF64674	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Multi-period finds
58574	MNF64675	Find Spot	Early Neolithic to Late Saxon	FINDSPOT	Multi-period finds
58575	MNF64676	Find Spot	Late Saxon to Post Medieval	FINDSPOT	Multi-period finds
58576	MNF64677	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Multi-period finds
58577	MNF64790	Find Spot	Middle Saxon to Medieval	FINDSPOT	Multi-period finds
59659	MNF65714	Monument	Post Medieval to Modern	POST MILL, WINDMILL	Site of post mill
59660	MNF65715	Monument	Post Medieval to Modern	TOWER MILL, WINDMILL	Site of a tower mill
59783	MNF66249	Find Spot	Medieval to Post Medieval	FINDSPOT	Medieval to post-medieval finds
59901	MNF65826	Find Spot	Medieval to Post Medieval	FINDSPOT	Multi-period finds
59902	MNF65827	Find Spot	Post Medieval	FINDSPOT	Multi-period finds
59903	MNF65828	Find Spot	Medieval to Post Medieval	FINDSPOT	Medieval and post-medieval finds
59904	MNF65829	Find Spot	Late Saxon to Post Medieval	FINDSPOT	Multi-period finds
59905	MNF65830	Find Spot	Early Neolithic to Post Medieval	FINDSPOT	Multi-period finds from test pit
59906	MNF65831	Find Spot	Medieval to Post Medieval	FINDSPOT	Multi-period finds
59907	MNF65832	Find Spot	Medieval to Post Medieval	FINDSPOT	Multi-period finds from test pit
59908	MNF65833	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Multi-period finds
59909	MNF65834	Find Spot	Medieval to Post Medieval	FINDSPOT	Multi-period finds
59910	MNF65835	Find Spot	Beaker to Post Medieval	FINDSPOT	Multi-period finds
59911	MNF65836	Find Spot	Early Bronze Age to Post Medieval	FINDSPOT	Multi-period finds
59912	MNF65837	Find Spot	Lower Palaeolithic to Post Medieval	FINDSPOT	Multi-period finds
59985	MNF66047	Find Spot	Medieval to Post Medieval	FINDSPOT	Medieval and post-medieval pottery
59986	MNF66051	Find Spot	Late Saxon to Post Medieval	FINDSPOT	Multi-period finds
59987	MNF66052	Find Spot	Late Saxon to Post Medieval	FINDSPOT	Multi-period finds
60980	MNF68483	Find Spot	Medieval	FINDSPOT	Medieval harness mount



This is an A4 sized map and should be printed full size at A4 with no page scaling set.

Name: 5, NORTON ROAD

Heritage Category:	Listing
List Entry No :	1169757
Grade:	II

County: Norfolk

District: South Norfolk

Parish: Loddon

For all entries pre-dating 4 April 2011 maps and national grid references do not form part of the official record of a listed building. In such cases the map here and the national grid reference are generated from the list entry in the official record and added later to aid identification of the principal listed building or buildings.

For all list entries made on or after 4 April 2011 the map here and the national grid reference do form part of the official record. In such cases the map and the national grid reference are to aid identification of the principal listed building or buildings only and must be read in conjunction with other information in the record.

Any object or structure fixed to the principal building or buildings and any object or structure within the curtilage of the building, which, although not fixed to the building, forms part of the land and has done so since before 1st July, 1948 is by law to be treated as part of the listed building.

This map was delivered electronically and when printed may not be to scale and may be subject to distortions.

List Entry NGR:	TM 36604 98413
Map Scale:	1:2500
Print Date:	10 July 2019

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5. Transport and Access

REPORT

Beccles Road, Loddon

Transport and Access Strategy

Client: Hopkins Homes

Reference: PB9290-RHD-ZZ-XX-RP-Z-0001

Status: Final/P01.01

Date: 14 June 2019

Royal HaskoningDHV

Enhancing Society Together

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Document title:	Beccles Road, Loddon
Document short title:	Beccles Road, Loddon: Transport and Access Strategy
Reference:	PB9290-RHD-ZZ-XX-RP-Z-0001
Status:	P01.01/Final
Date:	14 June 2019
Project name:	Beccles Road, Loddon
Project number:	PB9290
Author(s):	Sandra Holmes

Drafted by:	Sandra Holmes
Checked by:	Sarah Simpson
Date / initials:	14/06/2019
Approved by:	Sarah Simpson
Date / initials:	14/06/2019

Classification
Project related

Contents

Tables

Appendices

1 Introduction

1.1.1 Royal HaskoningDHV has been commissioned by Hopkins Homes to provide transport planning advice in relation to the proposed allocation of a potential development site located on Beccles Road, Loddon in Norfolk.

1.1.2 The site has been identified to be potentially suitable for development in the Greater Norwich Local Plan (GNLP) under the Housing and Economic Land Availability Assessment (HELAA) published in December 2017. The Constraints Analysis of the HELAA identified that there are potential constraints relating to access to the proposed site which could be overcome by development.

1.1.3 On this basis, this report appraises the proposed development site's accessibility. Subsequently, the feasibility of achieving safe and appropriate means of highway access into the proposed site is tested, in addition to identifying the potential off-site works that may be required. In so doing, this report comprises the following:

- Section 2 details the existing transport infrastructure in the vicinity of the site, as well as the site's current level of accessibility to services;
- Section 3 presents an access strategy for the site, compliant with local guidance and relevant standards;
- Section 4 provides an estimate of the traffic that may be associated with a development at the site; and
- Section 5 concludes the report.

2 Site Context

2.1 Proposed Allocation

2.1.1 The proposed development site consists of an existing agricultural field which is located on an elevated site to the east of Beccles Road, between the junctions of Norton Road and the A146. It is located on the southeast edge of the market town of Loddon, Norfolk. The proposed site is situated opposite an industrial site and housing development with good access to services. The site (GNLP Ref: GNLP0312) is shown in **Figure 1.**

2.1.2 The site considered in the HELAA comprises a land parcel approximately 7.70 ha in size, sufficient to accommodate a residential development of up to 180 dwellings.

2.1.3 The allocation of the land off Beccles Road (GNLP0312) has no significant landscape, historic environment, townscape or biodiversity concerns on the site and according to the "Loddon and Chedgrave Conservation Area Character Appraisal and Management Guidelines" (published in December 2016), the site is situated outside of the Conservation Area. There are therefore no such constraints which need to be taken into account for transport purposes.

2.1.4 The site is bounded by Beccles Road to the southwest, residential properties in Norton Road along the western and northern boundaries, and separated by hedgerows from open agricultural land to the east.

2.1.5 An allocation is sought for a residential development to serve 180 dwellings at this location.

2.2 Existing Transport Infrastructure

Highways Infrastructure

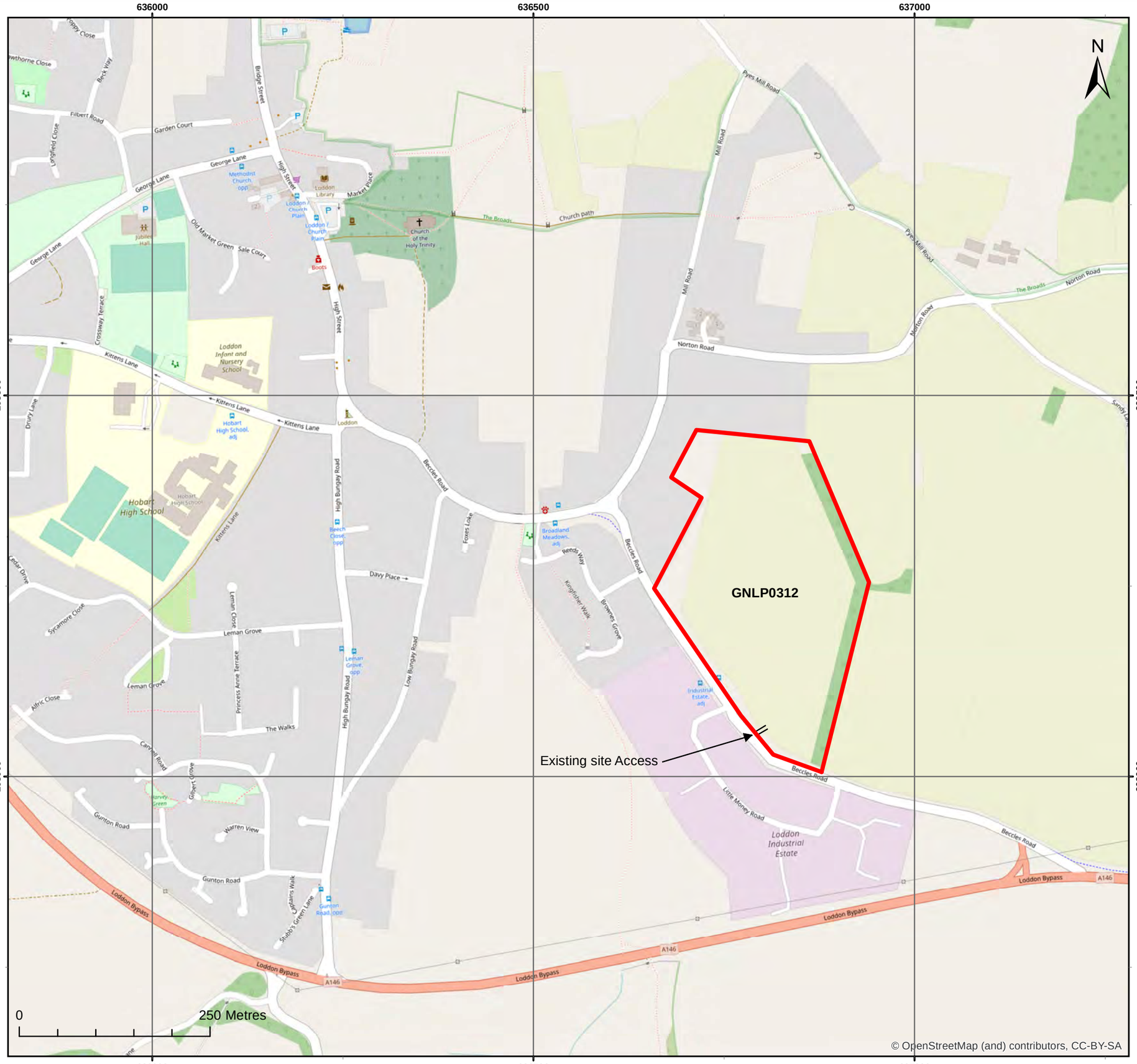
2.2.1 Vehicular access to the site is currently provided by an agricultural track on the southern side of the site, perpendicular to Beccles Road as shown in **Figure 1.**

2.2.2 In the vicinity of GNLP0312, Beccles Road is a two lane, single carriageway access road, with a broadly north-west to south-east alignment. It is subject to a 30mph speed limit along the southern frontage of the site, and this speed limit changes to 20mph along the western frontage of the site close to the junction with Town Farm Drive.

2.2.3 Beccles Road has central line markings and a discontinuous cycleway/footway on the eastern edge, changing to the western edge in the vicinity of the western frontage of the proposed site. Street lighting is present on Beccles Road as it bears north past GNLP0312, towards the existing settlement of Loddon.

2.2.4 Beccles Road links to the A146 to the southeast of the site. The A146 is a primary route that bypasses the market town of Loddon, connecting Norwich in Norfolk to Lowestoft in Suffolk. Close to its junction with Beccles Road, the A146 is subject to the National Speed Limit (60mph).

2.2.5 To the north of the site Beccles Road curves to the west, providing access to the market town of Loddon to the northwest, and residences along Norton Road to the northeast.



Legend

- Site Location
- Existing Site Access (Track)

Client:	Project:
Hopkins Homes	Beccles Road, Loddon

Title: **Site Location Plan**

Figure:	Drawing No:
1	

Revision:	Date:	Drawn:	Checked:	Size:	Scale:
01	14/06/2019	MCP	SS	A3	1:5,000

Co-ordinate system: British National Grid

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Public Transport Infrastructure

2.2.6 There are two bus operators with routes running through the market town of Loddon: First Norfolk and Suffolk; and Our Bus. Both operators offer regular weekday east and westbound services between Norwich, Loddon, Beccles and Lowestoft, with reduced services on Sundays.

2.2.7 First Norfolk and Suffolk operates three services (X2, X21, X22) between Lowestoft and Norwich, all passing through Loddon. These services collectively provide a regular 7-day service along two routes, with a third route offering a regular weekday but reduced weekend service. First Norfolk and Suffolk operates routes through the centre of Loddon, with bus stops along Norwich Road, Bridge Street, Market Plain, High Street and High Bungay Road.

2.2.8 The closest bus stops to the site which are served by the First services are located opposite the Market Place and adjacent to Gunton Road, and are approximately a 12 minutes' walk from the proposed site. The First Norfolk and Suffolk bus stops are demarcated by poles, flags and covered seating and display timetable information.

2.2.9 Our Bus operates a regular weekday predominantly off-peak service (#86) along one route through Loddon. This service has bus stops along George Lane, Church Plain (in the centre of Loddon), and Beccles Road (opposite the industrial area and adjacent to the site) as shown in **Insert 2.1.**

Insert 2.1 Existing Hail Bus Stop, Beccles Road

2.2.10 Other than the bus stop in Church Plain, all other stops for Our Bus service have no poles, flags or designated stops.

2.2.11 The approximate daytime frequencies and routes for these bus services are set out in **Table 2.1,** which shows that Loddon has a good level of daily service by public transport to support the proposed development.

Royal HaskoningDHV

Table 2.1: Summary of Bus Frequencies

Service No Operator	Route	Approximate frequency								
		Monday – Friday			Saturday			Sunday		
		First	Freq	Last	First	Freq	Last	First	Freq	Last
X22 First Norfolk and Suffolk	Lowestoft – Carlton Colville – Beccles – Norwich Bus Station	06h30	Every 30 mins	17h50	07h00	Every 30 mins	17h50	07h45	Every 2 hrs	15h45
X22 First Norfolk and Suffolk	Norwich Bus Station – Beccles – Carlton Colville - Lowestoft	07h15	Every 30 mins	18h30	07h10	Every 30 mins	18h30	09h20	Every 2 hrs	17h20
X21 First Norfolk and Suffolk	Lowestoft – Carlton Colville – Beccles – Norwich Bus Station	05h55	AM and PM peaks, late night service only (7 buses/ day)	21h30	06h30	AM and PM peaks, late night service only (8 buses/ day)	21h30	08h20	Every 60 minutes	17h20
X21 First Norfolk and Suffolk	Norwich Bus Station – Beccles – Carlton Colville - Lowestoft	07h25	AM and PM peaks, late night service only (6 buses/ day)	23h00	08h10	AM and PM peaks, late night service only (8 buses/ day)	23h00	09h00	Every 60 mins	18h50
X2 First Norfolk and Suffolk	Lowestoft – Carlton Colville – Beccles – Norwich Bus Station	06h40	Approx. every 30 mins	16h35	09h00	Approx. every 30 mins	16h35	No service		
X2 First Norfolk and Suffolk	Norwich Bus Station – Beccles – Carlton Colville - Lowestoft	08h20	Approx. every 30 mins	17h50	10h15	Approx. every 30 mins	17h50	No service		
86 Our bus	Beccles – Loddon - Norwich Bus Station	06h58	4 buses/ day every 2/3 hrs	14h03 (term time only)	No service			No Service		
86 Our bus	Norwich Bus Station – Loddon - Beccles	09h00	4 buses/ day every 2/3 hours	18:20	No service			No service		

Pedestrian and Cycling Infrastructure

2.2.12 There is a continuous footway/ cycleway along the eastern side of Beccles Road, adjacent to the site and separated from the carriageway by a 1.5m wide grassed verge. This is part of a rural footway / cycleway that connects Loddon and the village of Hales to the east. To the south of the site this footway/ cycleway is continuous. However, at the point along Beccles Road where Loddon's residential edge begins, the footway/ cycleway changes to the western side of Beccles Road. At the point in Beccles Road at which the cycleway ends, a paved footway continues along both sides of Beccles Road, High Street and Bridge Street into Loddon town centre.

2.2.13 There is an existing dropped kerb crossing on Beccles Road adjacent to the site. This crossing has tactile paving, and associated lining on the footway/ cycleway approaches. Hazard warning signs indicating the presence of cyclists to drivers are located on Beccles Road on the approach to the pedestrian crossing point.

2.2.14 Although there are no Public Rights of Way through or immediately adjacent to the site, there is a public footpath aligned north to south along the drain at the west of the industrial area opposite the site. This footpath winds through the woodland, crosses drains to the west of the industrial area, then passes through fields and provides gated access to Low Bungay Road.

2.2.15 In addition to the footway/ cycleway on Beccles Road, a strategic cycle route is available via the National Cycle Route 1 which passes through Loddon, along Bridge Street and George Lane. Route 1 is a largely on-road cycle route connecting Loddon with Norwich to the north west and Beccles to the south.

2.2.16 A review of the existing sustainable transport options indicates that GNLP0312 is accessible by sustainable transport.

2.3 Access to Services

2.3.1 Walking represents the most sustainable mode of travel and the Chartered Institution of Highways and Transportation (CIHT) document Guidelines for Providing for Journeys on Foot (CIHT, 2000), notes that an average walking speed of three miles per hour can be assumed. By this measure, a pedestrian could walk approximately 1,200m in 15 minutes, and 2,000m in 25 minutes. **Table 2.2** shows the approximate walking distance from the application site to various local amenities and services within Loddon, and it can be observed that all major services in Loddon are within this cordon.

Table 2.2: Distance of local amenities and services from GNLP0312

Services/Amenities	Location	Distance from the Site
Chet Valley Medical Practice	George Lane	1360m
Loddon Junior School	Kittens Lane	1350m
Loddon and Chedgrave Jubilee Hall (Community centre & Gym)	George Lane	1350m
Loddon Marina	Bridge Street	1250m
General shops, restaurants and facilities in town centre	High Street, Church Plain and Bridge Street	1200m
Loddon Parish Council	Library Annexe, Church Plain	1100m
Holy Trinity Church	Church Plain	1070m
Loddon Football Park	Crossway Terrace	990m
Loddon Library	Church Plain	980m
Hobart High School	Kittens Lane	965m
Loddon Nursery School	High Street	920m
Loddon Infant and Nursery School	Kittens Lane	865m
Loddon Post Office	High Street	765m
Broadlands Meadow Playground	Beccles Road	460m
3 Rivers Veterinary Group	Beccles Road	400m

2.3.2 In summary, the site is accessible to central and southern bus stops on all bus routes, footways and cycleways, all local schools and local amenities within the market town of Loddon.

2.4 Road Safety

2.4.1 Recorded highway collision data has been obtained from Norfolk County Council (NCC) for the past available five year period (March 2014 - December 2018) and shows that a total of 36 recorded collisions occurred on the highway network in the vicinity of the site. The study area considers the roads and junctions in the vicinity of the site. The full collision report, including location details, provided by NCC is available in **Appendix A**.

2.4.2 Of the 36 total collisions in the vicinity of the study area, 28 were classed as “slight”, seven were classed as “serious” whilst one accident was “fatal”. All collisions have been analysed for causation and impact, as well as proximity to the proposed site.

2.4.3 Comparing the accident data analysis with the Collision Location Plan, there appears to be a cluster of collisions at the A146 and George Lane junction, on the western edge of Loddon. This junction is approximately 1,300m from the site and due to the extent of this distance these accidents have been disregarded.

2.4.4 There was a cluster of accidents around the A146 and B1136 Yarmouth Road access to Hales. In June 2018 the completion of a roundabout at this junction has reduced the accidents to nil. On this basis, the historic safety record at this location is not considered to be pertinent to the consideration of the application site.

2.4.5 The collision (NCC Accident Ref: 83170) requires further consideration as it occurred at the junction of the A146 and Beccles Road (C554) which is within 430m of GNLP0312. This incident involved a vehicle turning right onto the A146 out of Beccles Road (C554). The driver reportedly allowed insufficient time and space to make this manoeuvre and collided with a vehicle travelling on the A146 eastbound towards Hales.

2.4.6 The site visit identified that on the approach to this junction on the C554, the advanced directional signage on the C554 is obscured by foliage, and therefore driver decision making at the junction may be impaired by lack of visibility of the signage. Furthermore, on the same approach but at the junction itself, there is a lighting column positioned approximately 1m from the edge of the splitter island. Although the lighting column is correctly offset from the kerb, its location sits within the driver's eyeline for vehicles turning right onto the A146. It is possible that this lighting column could impact on driver's visibility when turning right out of this junction onto the A146.

2.4.7 Beccles Road (C554) is subject to a change in the speed limit from 30mph to a 20mph zone for 140m between the pedestrian/cycle crossing and its junction with Norton Road. This change in the speed is denoted by speed signs, line markings and a vehicle activated sign and is associated with the residential development served by Town Farm Drive.

2.4.8 In the review of this collision and personal injury data, there does not appear to be a clear pattern to the collision locations or causal factors which could be exacerbated by a future development at GNLP0312.

2.5 Consented Development

2.5.1 There is a housing development currently under construction on the western edge of Loddon (1.25km to the west of the proposed site). St George's Park (South Norfolk Council Planning Application Ref: 2016/0853) is located on land north of George Lane, within 300m of the junction of George Lane and the A146.

2.5.2 St George's Park is a residential development of up to 200 dwellings, consisting of a selection of 2, 3, 4 and 5 bedroom homes. Phase 1 has been completed, adjacent to the Chet Valley Medical practice.

3 Access Strategy

3.1 Access Arrangements

3.1.1 To ensure that a safe, sustainable and appropriate means of vehicular access can be achieved, the existing road properties including geometry and speed limits have been considered.

3.1.2 Due to the scale of development that may be brought forward at the site, two points of vehicular access would be required, via Beccles Road. As Beccles Road is subject to a 30mph speed limit, the Manual for Streets (DfT, 2007) is applicable. In accordance with Table 7.1 of the Manual for Streets a minimum offset of 43m from all existing and consented accesses and junctions has been incorporated into the potential access locations points for GNLP0312 as shown in **Appendix B**.

3.1.3 The two potential access points for the proposed allocation are feasible as they demonstrate good visibility and are compliant with the applicable standards and guidance. A safe and appropriate means of vehicular access can be achieved at this site as shown in **Appendix B**.

3.1.4 The indicative geometry associated with the vehicular access junctions is based on the Norfolk Residential Design Guide, and has been tested using swept path analysis for a large refuse vehicle, as the largest sized vehicle that is likely to require regular access to the site. The resultant swept path drawing is also provided at **Appendix B.**

3.1.5 The indicative junction layouts also allow for footway/ cycleways to be provided to the desire lines on each junction, tying in with the existing footway/ cycleway on Beccles Road.

3.2 Potential Off-Site Works

3.2.1 As the allocation is to consist of a substantial number of residential units, access to the site by active and sustainable modes of transport will ensure a successful and sustainable development is provided in accordance with the National Planning Policy Framework.

3.2.2 On site measurements note that the verge separating the footway/ cycleway from the carriageway along Beccles Road adjacent to GNLP0312 is approximately 1.5m. The footway/ cycleway is approximately 2m wide, which could potentially be widened further, to a more typical 3.0m width. This would improve the proposed site's integration with the existing sustainable transport infrastructure and improve the continuous connection between Loddon and Hales to the east.

3.2.3 The Institution of Highways and Transportation's (IHT) Guidelines for Planning for Public Transport in Developments advocates that bus stops should ideally be located no more than 400 metres from homes. As the number 86 existing bus stop is within 200 metres from the centre of the site, the bus stop accessibility is appropriate.

3.2.4 However, taking into consideration that this bus stop is currently located directly opposite a junction, is not demarcated, and has no passenger facilities, it is acknowledged that enhancements to this bus stop would promote sustainable travel at the site. Enhancement could include the provision of:

- A bus stop on both sides of Beccles Road with bus border kerbs to provide ease of access;
- Pole with flag and timetable information or real time information at the bus stops; and

- Bus shelter with seating.

3.2.5 Taking into account that the majority of First Norfolk and Suffolk Bus stops and routes are currently more than 600m from the proposed site, further consideration of alternative routing by bus operators may be required to ensure that the proposed site has access to frequent and reliable public transport seven days per week.

4 Trip Generation and Vehicular Impact

4.1 Introduction

4.1.1 The proposed allocation at Beccles Road, Loddon (GNLP0312) would seek 180 dwellings. This section of the report provides an overview of the anticipated trip generation from the proposed development, together with vehicle trip impact.

4.2 Trip Generation

4.2.1 Vehicle trip rates from the TRICS database (V7.6.1) were used to estimate the trip generation from a potential development at the site of 180 dwellings. The trip generation rate can be estimated by comparing trips rates for a range of similar sized and located developments to the proposed development at GNLP0312.

4.2.2 The trip rate selection parameters were as follows:

- In Land Use: 03 Residential and Sub-Land Use: Houses privately owned;
- Regions: South East, South West, East Anglia, East Midlands, West Midlands, Yorkshire & North Lincolnshire, North West, North and Wales;
- Number of dwellings: 90 – 360;
- Survey days: Monday to Saturday; and
- Site Locations: Suburban Area and Edge of town.

4.2.3 The vehicle trip rates extracted for the traditional AM (08:00 – 09:00) and PM (17:00 – 18:00) network peak hours have been summarised in **Table 4.1** along with the vehicle trip generation expected for 180 dwellings (**Appendix C** shows the full TRICS output data).

Table 4.1: Residential Vehicle Trip Rates and Trip Generation

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-Way
C3 Trip Rate: per dwelling	0.122	0.367	0.489	0.327	0.146	0.473
C3 Trip Generation: 180 dwellings	22	66	88	59	26	85

4.2.4 **Table 4.1** shows that the site could be anticipated to generate 22 arrival trips and 66 departure trips, making a total of 88 two-way vehicle trips in the AM peak hour, and 59 arrival trips and 26 departure trips making a total of 85 two-way vehicle trips in the PM peak hour.

4.2.5 The quality of the transport infrastructure in the vicinity of the site, the road safety record, and the opportunities to provide enhanced infrastructure for active and sustainable modes of transport, suggests that the quantum of trips associated with a development at this location could be readily accommodated by the local transport infrastructure.

5 Conclusions

5.1.1 This report has been prepared for Hopkins Homes to provide transport planning advice in relation to the proposed allocation of land for residential development along Beccles Road, Loddon.

5.1.2 A review of the existing transport infrastructure reveals that the proposed allocation site is well served by existing public transport, pedestrian and cycling infrastructure which provides links to the A146 and other settlements to the south and the town of Loddon to the north.

5.1.3 Potential vehicular access points have been identified for the site, which take account of the existing points of access on Beccles Road. Given the level of visibility achievable at the potential access points, it is evident that the proposed sites can be accessed safely without hindering the integrity of the existing highway network.

5.1.4 In addition, it has been demonstrated that it is feasible to provide a package of off-site works which would accommodate the proposed level of development and enhance the provision of sustainable travel within the local community.

5.1.5 On this basis, it is considered that there is no reason relating to highways access and infrastructure provision which should hinder the progression of the proposed allocation.

Appendix A Full STATS19 Collision Report

Royal HaskoningDHV

Norfolk County Council

Tom McCabe
Executive Director of
Community and Environmental Services
Norfolk County Council
County Hall, Martineau Lane
Norwich NR1 2SG

DRAWING TITLE

Accident Data Request
5 Years to end Of February 2019

REV.	DESCRIPTION	DRAWN BY	CHECKED	DATE

	INITIALS	DATE
SURVEYED BY	OS	2019
DESIGNED BY	BJGR	05/2019
DRAWN BY	BJGR	05/2019
CHECKED BY		

DRAWING No. 001

PROJECT TITLE
Accident Data Request
Loddon

SCALE 1: 10000 @A3

FILE No.

ORIGINAL SIZE: A3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Reference Number	1161 37	1387 50	1415 14	1429 85	1499 80	1691 43	1766 48	2148 50	2174 09	2408 38	2481 86	2533 16	2688 41	2748 90	3367 35	3526 33	5201 1	6302 3	6924 4	7465 9
Date / Day	Fr30	Tu29	We07	Th15	Th12	We22	Fr14	We23	Th17	Tu24	We22	Tu12	Th01	Mo26	Fr28	Th20	We02	Fr29	Sa30	Su03
Month	Sep	Nov	Dec	Dec	Jan	Mar	Apr	Aug	Aug	Oct	Nov	Dec	Feb	Feb	Sep	Dec	Mar	Apr	Apr	Apr
Year	2016	2016	2016	2016	2017	2017	2017	2017	2017	2017	2017	2017	2018	2018	2018	2018	2016	2016	2016	2016
Time	1034	1640	1240	1554	0751	1230	1540	1520	1030	0950	1940	0945	0551	0750	0925	1239	1256	1625	1334	0500
Severity	Sl	Sl	Sl	Sl	Sl	Se	Sl	Sl	Sl	Sl	Sl	Sl	Sl	Sl	Se	Se	Se	Se	Sl	Sl
Dark / Lit																				
Weather Conditions																				
Road Surface																				
Special Conditions																				
Carriageway Hazards																				
Vehicle Manoeuvres																				
Vehicle 1 5 e	30	35	85	63	29	17	57	47	64	69	30	28	46	51	72	55	30	42	65	19
Vehicle 2 6 t	58	48	29	54	56			73	35	55	28		77	27		36	37	56	71	
Vehicle 3 7 c					37								27							
Vehicle 4 8					24															
Casualty /age	30	48	29	63 65	56	71	57	73	64	69		42	46 27	27	87	36	30	56	65 71	19
Failed to Give-Way																				
Signal Ignored																				
Loss of Control																				
Hit Object IN C'way																				
Hit Object OFF C'way			NO				O		O											
Vehicle Left C'way																				
Breath Test																				+
Contributory Factors 1/2	V1 ** 408	V1 ** 509	V1 ** 405	V1 ** 405	V1 ** 509	V1 ** 405	V1 ** 409		V1 ** 406	V1 ** 405	V1 * 501	V1 * 405	V1 ** 405	V1 * 308	C1 ** 802	V1 ** 405	V1 ** 405	V1 ** 405		V1 * 109
3/4			V1 ** 602	V1 * 406			V1 ** 410		V1 ** 408	V1 ** 406	508	V1 * 802	V1 ** 406	406			V1 * 703	V1 ** 406		V1 ** 306
5/6									V1 ** 409		V1 * 503			V1 * 408						V1 ** 307
* possible, ** very likely									V1 * 103					V1 * 602						V1 * 408
School No./Ref.									V1 * 108											V1 ** 409
User fields: 1																				503
2																				
3																				
4																				

	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Reference Number	7892 8	8317 0	8360 3	NC78 909	NC79 004	NC79 642	NC81 918	NC82 431	NC83 724	NC86 557	NC88 026	NC89 427	NC89 875	NC95 958	NC96 552	NCT1 40084
Date / Day	We01	Tu28	Su05	We12	Tu18	Th17	Th10	Su27	Fr12	Tu16	Mo16	Tu07	Fr24	Fr04	We23	Tu01
Month	Jun	Jun	Jun	Mar	Mar	Apr	Jul	Jul	Sep	Dec	Feb	Apr	Apr	Dec	Dec	Apr
Year	2016	2016	2016	2014	2014	2014	2014	2014	2014	2014	2015	2015	2015	2015	2015	2014
Time	1748	1745	0540	1749	1720	1640	1550	1540	1130	1641	1755	1138	1555	0740	1059	1611
Severity	Sl	Sl	Sl	Se	Sl	Fa	Sl	Se	Sl	Sl	Sl	Sl	Sl	Sl	Sl	Sl
Dark / Lit																
Weather Conditions					?											
Road Surface																
Special Conditions																
Carriageway Hazards																
Vehicle Manoeuvres																
Vehicle 1 5 e	52	65	20	26	26	65	46	86	84	52	25	79	16	63	75	18
Vehicle 2 6 t	48	58				24		61	48	57	18	63	43	21	22	
Vehicle 3 7 c						29				48						
Vehicle 4 8																
Casualty /age	48	84	20	34	26	65 65 30 +4	9	86 80	48	52	25 18	79 63	16	63	75 22	18
Failed to Give-Way																
Signal Ignored																
Loss of Control																
Hit Object IN C'way																
Hit Object OFF C'way			O		N			OO					N	O		
Vehicle Left C'way																
Breath Test			+													
Contributory Factors 1/2	V1 ** 302		V1 ** 501	C1 ** 802	V1 * 109	V1 * 509	C1 ** 802	V1 ** 403	V1 ** 405	V1 ** 405	V1 ** 405	V1 ** 405	V1 ** 605	V1 ** 405	V1 ** 405	V1 ** 605
3/4	V1 ** 405		V1 ** 602		V1 * 602	V1 * 510		V1 ** 405	V1 ** 406	V1 ** 602		V2 * 406	V1 ** 406		V1 ** 706	V1 ** 410
5/6			V1 * 601			V1 * 505				V1 * 406		V2 * 503				
* possible, ** very likely						V1 * 409						V2 * 108				
School No./Ref.						V1 * 410										
User fields: 1																
2																
3																
4																

Norfolk County Council

Tom McCabe
Executive Director of
Community and Environmental Services
Norfolk County Council
County Hall, Martineau Lane
Norwich NR1 2SG

DRAWING TITLE

Accident Data Request
5 Years to end Of February 2019
Loddon Sticks

REV.	DESCRIPTION	DRAWN BY	CHECKED	DATE

	INITIALS	DATE
SURVEYED BY	OS	2019
DESIGNED BY	BJGR	05/2019
DRAWN BY	BJGR	05/2019
CHECKED BY		

DRAWING No. 001

PROJECT TITLE
Accident Data Request
Loddon Sticks

SCALE 1: 10000 @A3

FILE No.

ORIGINAL SIZE: A3

Full Details Report Summary - Loddon Accident Data 5 Years to end Feb '19

Accidents Found Date Range: 12/03/2014 - 20/12/2018

Grid Coordinate Range: 635434,297195 - 637841,299430

Accident Severity

	2014	2015	2016	2017	2018	Total
Fatal	**1**	**0**	**0**	**0**	**0**	**1**
Serious	**2**	**0**	**2**	**1**	**2**	**7**
Slight	**5**	**5**	**9**	**7**	**2**	**28**
Total	**8**	**5**	**11**	**8**	**4**	**36**

Casualty Severity

	2014	2015	2016	2017	2018	Total
Fatal	**1**	**0**	**0**	**0**	**0**	**1**
Serious	**6**	**0**	**2**	**1**	**2**	**11**
Slight	**9**	**8**	**11**	**7**	**3**	**38**
Total	**16**	**8**	**13**	**8**	**5**	**50**

Casualty KSI

	2014	2015	2016	2017	2018	Total
Adult KSI	**7**	**0**	**2**	**1**	**2**	**12**
Slight	**9**	**8**	**11**	**7**	**3**	**38**
Total	**16**	**8**	**13**	**8**	**5**	**50**

1.3 Accident Reference:116137 Slight NORWICH ROAD A146 GEORGE LANE Accident 1 of 36

1.7 Date & 1.9 Time.....Friday 30/09/2016 10:34
1.11 Grid co-ordinates.....635517/298523
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..U
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....T or Staggered junction
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
VEH 2 BRAKED ON MAIN ROAD DUE TO VEH IN FRONT TURNING RIGHT. VEH 1 WENT INTO THE REAR OF VEH 2 HAVING BRAKED TO LATE.

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Approaching or parked on approach
2.9 Restricted location.On main carriageway
2.8 Movement from/to....East West
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....30
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Unknown

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Approaching or parked on approach
2.9 Restricted location.On main carriageway
2.8 Movement from/to....East West
2.7 Manoeuvres.....Stopping
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Back
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....58
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Unknown

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Female
3.8 Age.....30
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:138750 Slight BECCLES ROAD A146 147 METRES SOUTH OF JUNCTION WITH GREEN LANE Accident 2 of 36

1.7 Date & 1.9 Time.....Tuesday 29/11/2016 16:40
1.11 Grid co-ordinates.....637841/297375
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..
1.22 Weather.....Fine
1.21 Light conditions.....Dark/no lights
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Not at or within 20m of junction
1.17 Junction control.....
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
V1 WAS TRAVELLING SOUTHBOUND ON A146 ON HALES IN HEAVY TRAFFIC. THE DRIVER LOOKED AT HIS SAT-NAV & DID NOT SEE THAT V2 HAD SLOWED DOWN. V1 THEN COLLIDED INTO V2.

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North South
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....35
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Unknown

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North South
2.7 Manoeuvres.....Stopping
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Back
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....48
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Unknown

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....48
3.9 Severity.....Slight
3.4 Vehicle no.....2
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Unknown
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:141514 Slight BECCLES ROAD A146 YARMOUTH ROAD B1136 Accident 3 of 36

1.7 Date & 1.9 Time.....Wednesday 07/12/2016 12:40
1.11 Grid co-ordinates.....637828/297433
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..B1136
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....T or Staggered junction
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Wet

Did a police officer attend?
Yes

Accident Description
Driver of vehicle 001 pulled out in front of oncoming vehicles being struck by V002.

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Mid junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....East North
2.7 Manoeuvres.....Turning right
2.11 Skidding.....No
2.13 Left c'way.....Left c'way near-side
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Offside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.Entered ditch
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....85
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Other

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Approaching or parked on approach
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North South
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....Yes
2.13 Left c'way.....Left c'way Offside
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.Tree
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....29
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Commuting to/from work

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....29
3.9 Severity.....Slight
3.4 Vehicle no.....2
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:142985 Slight BECCLES ROAD A146 BP FILLING STATION Accident 4 of 36

1.7 Date & 1.9 Time.....Thursday 15/12/2016 15:54	1.15 Speed limit.....50 Mph
1.11 Grid co-ordinates.....637766/297542	1.14 Road type.....Single c'way
1.10 Local Authority.....South Norfolk	1.16 Junction detail.....T or Staggered junction
1.12/1.13 1st road identity..A146	1.17 Junction control.....Give way sign or uncontrolled
1.18/1.19 2nd road identity..U	1.24 Special conditions...None
1.22 Weather.....Fine	1.25 Carriageway hazards..None
1.21 Light conditions.....Dark/no lights	1.5 Number of vehicles...2
1.20a Crossing(human).....No Human control within 50m	1.6 Number of casualties.2
1.20b Crossing(physical).....No crossing facility within 5	1.23 Surface.....Wet

Did a police officer attend?

Yes

Accident Description

V1 HAS PULLED OUT OF PETROL STATION FORECOURT ONTO THE A146 & PULLED STRAIGHT OUT INTO THE PATH OF V2.

2 Vehicles

2.4 Veh ref no.....1	
2.17 Other vehicle.....0	2.16 First impact.....Front
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Mid junction	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....East West	2.21 Driver gender.....Male
2.7 Manoeuvres.....Starting	2.22 Driver age.....63
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Negative
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Unknown

2.4 Veh ref no.....2	
2.17 Other vehicle.....0	2.16 First impact.....Front
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Mid junction	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....North South	2.21 Driver gender.....Male
2.7 Manoeuvres.....Going ahead other	2.22 Driver age.....54
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Negative
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Unknown

2 Casualties

3.5 Cas ref no.....1	3.15 Car passenger.....No
3.6 Casualty class.....Driver or Rider	3.16 PSV passenger.....No
3.7 Gender.....Male	3.14 Seat belt usage.....Unknown
3.8 Age.....63	3.13 School pupil.....Other
	(3.19 School .....)
3.9 Severity.....Slight	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....1	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

3.5 Cas ref no.....2	3.15 Car passenger.....Front
3.6 Casualty class.....Passenger	3.16 PSV passenger.....No
3.7 Gender.....Female	3.14 Seat belt usage.....Unknown
3.8 Age.....65	3.13 School pupil.....Other
	(3.19 School .....)
3.9 Severity.....Slight	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....1	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

1.3 Accident Reference:149980 Slight NORWICH ROAD A146 Accident 5 of 36

1.7 Date & 1.9 Time.....Thursday 12/01/2017 07:51
1.11 Grid co-ordinates.....635434/298630
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Not at or within 20m of junction
1.17 Junction control.....
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...4
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
Vh002 / 003 / 004 were sat in stationary traffic in the Norwich bound carriageway. VH001 has gone into the rear of VH002 which has in turn going into VH003. VH003 then went into the back of VH004.

4 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South east North west
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....29
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Commuting to/from work

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South east North west
2.7 Manoeuvres.....Stopping
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Back
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....56
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Commuting to/from work

2.4 Veh ref no.....3
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South east North west
2.7 Manoeuvres.....Stopping
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Back
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....37
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Commuting to/from work

2.4 Veh ref no.....4
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South east North west
2.7 Manoeuvres.....Stopping
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Back
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....24
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Commuting to/from work

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Female
3.8 Age.....56
3.9 Severity.....Slight
3.4 Vehicle no.....2
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:169143 Serious CHURCH PLAIN UNSPECIFIED ROAD OR LOCATION Accident 6 of 36

1.7 Date & 1.9 Time.....Wednesday 22/03/2017 12:30
1.11 Grid co-ordinates.....636202/298743
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..U
1.18/1.19 2nd road identity..
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....30 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Not at or within 20m of junction
1.17 Junction control.....
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...1
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?

No - reported over the counter

Accident Description

FOOT PEDESTRIAN WAS WALKING ON CAR PARK WHEN VEH 1 CAME ROUND THE CORNER. ACCIDENTALLY MADE CONTACT WITH FEMALE WITH HER WING MIRROR. FEMALE LOST BALANCE FELL TO THE FLOOR AND SUSTAINED BROKEN WRIST AS A RESULT.

1 Vehicle

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North South
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Did not impact
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....-1
2.24 Hit and Run.....No
2.23 Breath test.....Not contacted
2.29 Journey purpose.....Unknown

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Pedestrian
3.7 Gender.....Female
3.8 Age.....71
3.9 Severity.....Serious
3.4 Vehicle no.....1
3.12 Ped Direction.....Unknown
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Unknown or other
3.11 Pedestrian movement..Unknown or other
3.19 Roadworker injured...Unknown

1.3 Accident Reference:176648 Slight 3 HIGH BUNGAY ROAD C395 Accident 7 of 36

1.7 Date & 1.9 Time.....Friday 14/04/2017 15:40
1.11 Grid co-ordinates.....636256/298279
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..C395
1.18/1.19 2nd road identity..
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....30 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Not at or within 20m of junction
1.17 Junction control.....
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...1
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
V1 travelled along single carriageway road and lost control by unknown means and collided into a brick wall. The driver of V1 failed to stop and has not reported it to police.

1 Vehicle

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South North
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Left c'way Offside
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Offside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.Wall or fence
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....57
2.24 Hit and Run.....Non-stop vehicle, not hit
2.23 Breath test.....Not contacted
2.29 Journey purpose.....Other

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....57
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:214850 Slight BRIDGE STREET Accident 8 of 36

1.7 Date & 1.9 Time.....Wednesday 23/08/2017 15:20
1.11 Grid co-ordinates.....636139/299012
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..U
1.18/1.19 2nd road identity..
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....20 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Not at or within 20m of junction
1.17 Junction control.....
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?

No - reported over the counter

Accident Description

CYCLIST WAS RIDING HIS BIKE THROUGH THE TOWN HEADING NORTH. THERE WAS A VAN TRAVELLING IN THE SAME DIRECTION. THE VAN STOPPED IN THE ROAD, JUST PAST THE TEA ROOMS. C1 ASSUMED THIS WAS TO GIVE WAY TO AN ONCOMING VEHICLE (AS A VEHICLE WAS PARKED IN THE CARRIAGEWAY). C1 STOPPED BEHIND THE VAN (PROBABLY 10+ YARDS AWAY). HE THEN REALISED V1 WAS REVERSING - THERE WERE NO REVERSING LIGHTS. C1 TRIED TO BACK AWAY FROM THE VAN AND TRIED TO GET THE VAN DRIVER'S ATTENTION. HOWEVER THE REAR OF THE VAN COLLIDED WITH THE FRONT OF C1'S BIKE, CAUSING DAMAGE AND A CUT TO C1'S LEG. THE VAN DRIVER GOT OUT AND ASKED IF C1 WAS ALRIGHT AND, WHEN ASKED, ADMITTED THAT HE WAS ACTUALLY REVERSING BACK TO GO INTO A CAR PARK ON THE OPPOSITE SIDE OF THE ROAD. C1 SAT DOWN O/S THE TEA ROOMS AS HE WAS HURT. D1 GOT TOOLS OUT OF HIS VAN AND TRIED TO MAKE SOME 'REPAIRS' TO C1'S BIKE BEFORE GIVING IT BACK AND DRIVING AWAY WITHOUT LEAVING HIS DETAILS. NEEDLESS TO SAY, THE BIKE REMAINS DAMAGED.

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South North
2.7 Manoeuvres.....Reversing
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Back
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....47
2.24 Hit and Run.....No
2.23 Breath test.....Not contacted
2.29 Journey purpose.....Unknown

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Pedal Cycle
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....Parked Parked
2.7 Manoeuvres.....Waiting to go ahead but held up
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....73
2.24 Hit and Run.....No
2.23 Breath test.....Not applicable
2.29 Journey purpose.....Other

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....73
3.9 Severity.....Slight
3.4 Vehicle no.....2
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:217409 Slight A146 AT JN WITH YARMOUTH ROAD B1136 Accident 9 of 36

1.7 Date & 1.9 Time.....Thursday 17/08/2017 10:30
1.11 Grid co-ordinates.....637835/297382
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..B1136
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....T or Staggered junction
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Wet

Did a police officer attend?
Yes

Accident Description
V2 waiting at junction, V1 has braked hard as thought V2 was going to pull out. Harsh braking caused V1 to spin on damp road.

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Approaching or parked on approach
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North South
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....Yes
2.13 Left c'way.....Left c'way Offside
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Did not impact
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....64
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Other

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Agric Veh
2.10 Junction location...Approaching or parked on approach
2.9 Restricted location.On main carriageway
2.8 Movement from/to....East North
2.7 Manoeuvres.....Waiting to turn right
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....Single Trailer
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Did not impact
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....35
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Journey as part of work

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Female
3.8 Age.....64
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:240838 Slight LODDON ROAD A146 AT JN WITH HIGH BUNGAY ROAD Accident 10 of 36

1.7 Date & 1.9 Time.....Tuesday 24/10/2017 09:50
1.11 Grid co-ordinates.....635434/298630
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..U
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....T or Staggered junction
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
V1 WAS AT JUNCTION WAITING TO TURN RIGHT ONTO MAIN CARRIAGEWAY. V2 HAS BEEN TRAVELLING ON THE MAIN CARRIAGEWAY.V1 HAS PROCEEDED TO TURN RIGHT INTO THE PATH OF V2.

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Entering main road
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North West
2.7 Manoeuvres.....Turning right
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Offside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....69
2.24 Hit and Run.....No
2.23 Breath test.....Not requested
2.29 Journey purpose.....Other

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Approaching or parked on approach
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North west East
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....55
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Journey as part of work

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Female
3.8 Age.....69
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:248186 Slight CHURCH PLAIN AT JN WITH MARKET PLACE Accident 11 of 36

1.7 Date & 1.9 Time.....Wednesday 22/11/2017 19:40
1.11 Grid co-ordinates.....636197/298765
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..U
1.18/1.19 2nd road identity..U
1.22 Weather.....Fine
1.21 Light conditions.....Dark/lights lit
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....20 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Other Junction
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
VEHICLE 1 TRAVELLING ON CARRIAGEWAY WHEN IT COLLIDES WITH VEHICLE 2 TRAVELLING IN THE OPPOSITE DIRECTION

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Approaching or parked on approach
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South North
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....30
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Journey as part of work

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Approaching or parked on approach
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North South
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....28
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Other

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Passenger
3.7 Gender.....Female
3.8 Age.....17
3.9 Severity.....Slight
3.4 Vehicle no.....2
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....Front
3.16 PSV passenger.....No
3.14 Seat belt usage.....
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:253316 Slight QUEENS ROAD Accident 12 of 36

1.7 Date & 1.9 Time.....Tuesday 12/12/2017 09:45
1.11 Grid co-ordinates.....636631/298460
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..U
1.18/1.19 2nd road identity..
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....30 Mph
1.14 Road type.....Dual c'way
1.16 Junction detail.....Not at or within 20m of junction
1.17 Junction control.....
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...1
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?

No - reported over the counter

Accident Description

PEDESTRIAN WAS WALKING ON THE PAVEMENT TO WORK, PEDESTRIAN STOPPED AND WENT TO WALK ACROSS THE ROAD. THE ROAD HAD TWO LANES WITH AN ISLAND WITH TWO BOLLARDS INBETWEEN. A VEHICLE IN LANE 1 STOPPED TO LET THE PEDESTRIAN CROSS. THE PEDESTRIAN CROSSED AND WALKED INFRONT OF THE CAR IN LANE 1, JUST AS SHE WENT AND WALKED ACROSS THE ROAD V2 DROVE IN LANE 2 AND COLLIDED WITH THE PEDESTRAIN.

1 Vehicle

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North South
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Nearside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....28
2.24 Hit and Run.....No
2.23 Breath test.....Not contacted
2.29 Journey purpose.....Journey as part of work

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Pedestrian
3.7 Gender.....Female
3.8 Age.....42
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....Unknown
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Unknown or other
3.11 Pedestrian movement..Crossing from drivers nearside
3.19 Roadworker injured...Unknown

1.3 Accident Reference:268841 Slight A146 AT JN WITH GEORGE LANE Accident 13 of 36

1.7 Date & 1.9 Time.....Thursday 01/02/2018 05:51	1.15 Speed limit.....60 Mph
1.11 Grid co-ordinates.....635518/298524	1.14 Road type.....Single c'way
1.10 Local Authority.....South Norfolk	1.16 Junction detail.....T or Staggered junction
1.12/1.13 1st road identity..A146	1.17 Junction control.....Give way sign or uncontrolled
1.18/1.19 2nd road identity..U	1.24 Special conditions...None
1.22 Weather.....Fine	1.25 Carriageway hazards..None
1.21 Light conditions.....Daylight	1.5 Number of vehicles...3
1.20a Crossing(human).....No Human control within 50m	1.6 Number of casualties.2
1.20b Crossing(physical).....No crossing facility within 5	1.23 Surface.....Wet

Did a police officer attend?

Yes

Accident Description

VEHICLE 1 TRAVELLING ON CARRIAGEWAY BEHIND VEHICLE 2 WHICH HAS SLOWED DOWN ON THE APPROACH TO A JUNCTION. VEHICLE 1 HAS OVERTAKEN VEHICLE 2 ON THE WRONG SIDE OF THE CARRIAGEWAY FAILING TO SEE VEHICLE 3 WAS TURNING FROM THE OPPOSITE DIRECTION. VEHICLE 1 HAS COLLIDED WITH VEHICLE 3 ON THE OFFSIDE PUSHING IT OFF THE ROAD.

3 Vehicles

2.4 Veh ref no.....1	
2.17 Other vehicle.....0	2.16 First impact.....Front
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Approaching or parked on approach	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....South east North west	2.21 Driver gender.....Male
2.7 Manoeuvres.....Overtaking on nearside	2.22 Driver age.....46
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Negative
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Commuting to/from work

2.4 Veh ref no.....2	
2.17 Other vehicle.....0	2.16 First impact.....Did not impact
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Approaching or parked on approach	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....South east North east	2.21 Driver gender.....Not known
2.7 Manoeuvres.....Stopping	2.22 Driver age.....-1
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Not contacted
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Unknown

2.4 Veh ref no.....3	
2.17 Other vehicle.....0	2.16 First impact.....Nearside
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Approaching or parked on approach	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....South east North west	2.21 Driver gender.....Female
2.7 Manoeuvres.....Turning right	2.22 Driver age.....27
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Negative
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Unknown

2 Casualties

3.5 Cas ref no.....1	3.15 Car passenger.....No
3.6 Casualty class.....Driver or Rider	3.16 PSV passenger.....No
3.7 Gender.....Male	3.14 Seat belt usage.....Unknown
3.8 Age.....46	3.13 School pupil.....Other
	(3.19 School .....)
3.9 Severity.....Slight	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....1	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

3.5 Cas ref no.....2	3.15 Car passenger.....No
3.6 Casualty class.....Driver or Rider	3.16 PSV passenger.....No
3.7 Gender.....Female	3.14 Seat belt usage.....Unknown
3.8 Age.....27	3.13 School pupil.....Other
	(3.19 School .....)
3.9 Severity.....Slight	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....3	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

1.3 Accident Reference:274890 Slight A146 Accident 14 of 36

1.7 Date & 1.9 Time.....Monday 26/02/2018 07:50
1.11 Grid co-ordinates.....635548/298461
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Not at or within 20m of junction
1.17 Junction control.....
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
VEHICLE 1 AND VEHICLE 2 TRAVELLING IN SAME DIRECTION WHEN VEHICLE 1 HAS COLLIDED WITH THE REAR OF VEHICLE 2.

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South North
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....51
2.24 Hit and Run.....No
2.23 Breath test.....Not requested
2.29 Journey purpose.....Other

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South North
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Back
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....27
2.24 Hit and Run.....No
2.23 Breath test.....Not requested
2.29 Journey purpose.....Other

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Female
3.8 Age.....27
3.9 Severity.....Slight
3.4 Vehicle no.....2
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:336735 Serious 18 LANGLEY ROAD Accident 15 of 36

1.7 Date & 1.9 Time.....Friday 28/09/2018 09:25
1.11 Grid co-ordinates.....636162/299215
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..U
1.18/1.19 2nd road identity..
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....30 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Not at or within 20m of junction
1.17 Junction control.....
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...1
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
V1 RIDING DOWN ROAD AND PEDESTRIAN HAS STEPPED OUT FROM BETWEEN TWO VEHICLES INTO THE PATH OF V1.

1 Vehicle

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Pedal Cycle
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North South
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....72
2.24 Hit and Run.....No
2.23 Breath test.....Not applicable
2.29 Journey purpose.....Unknown

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Pedestrian
3.7 Gender.....Female
3.8 Age.....87
3.9 Severity.....Serious
3.4 Vehicle no.....1
3.12 Ped Direction.....Unknown
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..In c'way crossing elsewhere
3.11 Pedestrian movement..Crossing from drivers nearside
3.19 Roadworker injured...No

1.3 Accident Reference:352633 Serious HALES ROUNDABOUT A146 Accident 16 of 36

1.7 Date & 1.9 Time.....Thursday 20/12/2018 12:39
1.11 Grid co-ordinates.....637822/297431
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Not at or within 20m of junction
1.17 Junction control.....
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
VEHICLE 1 HAS PULLED OUT OF LAYBY INTO VEHICLE 2.

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South North east
2.7 Manoeuvres.....Starting
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Offside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....55
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Journey as part of work

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South North east
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Offside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....36
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Commuting to/from work

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Female
3.8 Age.....36
3.9 Severity.....Serious
3.4 Vehicle no.....2
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:52011 Serious BECCLES ROAD A146 B1136 Accident 17 of 36

1.7 Date & 1.9 Time.....Wednesday 02/03/2016 12:56
1.11 Grid co-ordinates.....637819/297439
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..B1136
1.22 Weather.....Rain
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....T or Staggered junction
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Wet

Did a police officer attend?
Yes

Accident Description
V001 IS JOINING THE A146 FROM THE B1136. V002 IS TRAVELLING TOWARDS LOWESTOFT. THE UNKNOWN VEHICLE IN FRONT OF V002 TURNED OFF THE A148 ON TO THE B1136. V001 HAS PULLED ON TO THE A146 DIRECTLY INTO THE PATH OF V002. THE FRONT OF V002 COLLIDES WITH THE OFFSIDE OF V001. IT SEEMS LIKELY THAT THE VEHICLE IN FRONT OF V002 OBSTRUCTED V001'S VIEW OF V002 AND V001 HAS PULLED OUT NOT REALISING THAT V002 WAS APPROACHING THEM.

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Entering main road
2.9 Restricted location.On main carriageway
2.8 Movement from/to....West North
2.7 Manoeuvres.....Starting
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Offside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....30
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Unknown

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Goods unknown weight
2.10 Junction location...Leaving main road
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North North east
2.7 Manoeuvres.....Turning left
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....37
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Unknown

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....30
3.9 Severity.....Serious
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:63023 Serious BRIDGE STREET C554 GEORGE LANE C203 Accident 18 of 36

1.7 Date & 1.9 Time.....Friday 29/04/2016 16:25	1.15 Speed limit.....60 Mph
1.11 Grid co-ordinates.....636161/298819	1.14 Road type.....Single c'way
1.10 Local Authority.....South Norfolk	1.16 Junction detail.....T or Staggered junction
1.12/1.13 1st road identity..C554	1.17 Junction control.....Give way sign or uncontrolled
1.18/1.19 2nd road identity..C203	1.24 Special conditions...None
1.22 Weather.....Fine	1.25 Carriageway hazards..None
1.21 Light conditions.....Daylight	1.5 Number of vehicles...2
1.20a Crossing(human).....No Human control within 50m	1.6 Number of casualties.1
1.20b Crossing(physical).....No crossing facility within 5	1.23 Surface.....Dry

Did a police officer attend?

Yes

Accident Description

V1 WAS TRAVELLING SOUTH ON BRIDGE STREET AND CAME TO STOP AT THE JUNCTION OF GEORGE LANE. V2 WAS TRAVELLING NORTH ON HIGH STREET TOWARDS ITS NATURAL INCEPTION WITH BRIDGE STREET. V1 STARTED TO TURN RIGHT AS V2 WAS CLOSE, CAUSING V2 TO BRAKE SUDDENLY AND THE RIDER CATAPULT OVER THE HANDLEBARS AND COLLIDE WITH V1 CAUSING INJURIES. SUBSEQUENT ENQUIRIES REVEAL RIDER OF V2 HAS SUSTAINED 4-5 SPINAL FRACTURES, FRACTURED TOP JAW, FRACTURED NECK, AND 6 FRACTURED RIBS. HE HAS HAD SURGREY TODAY (1/5/16) TO HAVE RODS PUT IN TO STABILISE WORSE 2 SPINAL FRACTURES. HE REMAINS IN INTENSIVE CARE WITH WHAT HIS WIFE DESCIBES AS LIFE CHANGING INJURIES.

2 Vehicles

2.4 Veh ref no.....1	
2.17 Other vehicle.....0	2.16 First impact.....Back
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Mid junction	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....North West	2.21 Driver gender.....Female
2.7 Manoeuvres.....Turning right	2.22 Driver age.....42
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Negative
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Unknown

2.4 Veh ref no.....2	
2.17 Other vehicle.....0	2.16 First impact.....Front
2.5 Vehicle class.....Pedal Cycle	2.12 Hit object in c'way..None
2.10 Junction location...Approaching or parked on approach	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....South North	2.21 Driver gender.....Male
2.7 Manoeuvres.....Going ahead other	2.22 Driver age.....56
2.11 Skidding.....Yes & Overturned	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Not applicable
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Unknown

1 Casualty

3.5 Cas ref no.....1	3.15 Car passenger.....No
3.6 Casualty class.....Driver or Rider	3.16 PSV passenger.....No
3.7 Gender.....Male	3.14 Seat belt usage.....Not applicable
3.8 Age.....56	3.13 School pupil.....Other
	(3.19 School .....)
3.9 Severity.....Serious	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....2	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

1.3 Accident Reference:69244 Slight BECCLES ROAD A146 Accident 19 of 36

1.7 Date & 1.9 Time.....Saturday 30/04/2016 13:34	1.15 Speed limit.....60 Mph
1.11 Grid co-ordinates.....637783/297511	1.14 Road type.....Single c'way
1.10 Local Authority.....South Norfolk	1.16 Junction detail.....Not at or within 20m of junction
1.12/1.13 1st road identity..A146	1.17 Junction control.....
1.18/1.19 2nd road identity..	1.24 Special conditions...None
1.22 Weather.....Fine	1.25 Carriageway hazards..None
1.21 Light conditions.....Daylight	1.5 Number of vehicles...2
1.20a Crossing(human).....No Human control within 50m	1.6 Number of casualties.2
1.20b Crossing(physical).....No crossing facility within 5	1.23 Surface.....Dry

Did a police officer attend?

Yes

Accident Description

V001 HAS TRAVELLED ALONG A146 FROM LOWESTOFT DIRECTION TOWARDS NORWICH, AS ITS GONE ALONG CARRIAGEWAY ITS DRIFTED ACROSS THE WHITE LINES AND HIT V002 IN THE OPPOSITE CARRIAGEWAY.

2 Vehicles

2.4 Veh ref no.....1	
2.17 Other vehicle.....0	2.16 First impact.....Offside
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Not at junction	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....South North	2.21 Driver gender.....Male
2.7 Manoeuvres.....Going ahead other	2.22 Driver age.....65
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Negative
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Unknown

2.4 Veh ref no.....2	
2.17 Other vehicle.....0	2.16 First impact.....Offside
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Not at junction	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....North South	2.21 Driver gender.....Male
2.7 Manoeuvres.....Going ahead other	2.22 Driver age.....71
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Negative
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Unknown

2 Casualties

3.5 Cas ref no.....1	3.15 Car passenger.....No
3.6 Casualty class.....Driver or Rider	3.16 PSV passenger.....No
3.7 Gender.....Male	3.14 Seat belt usage.....Not applicable
3.8 Age.....65	3.13 School pupil.....Other
	(3.19 School .....)
3.9 Severity.....Slight	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....1	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

3.5 Cas ref no.....2	3.15 Car passenger.....No
3.6 Casualty class.....Driver or Rider	3.16 PSV passenger.....No
3.7 Gender.....Male	3.14 Seat belt usage.....Not applicable
3.8 Age.....71	3.13 School pupil.....Other
	(3.19 School .....)
3.9 Severity.....Slight	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....2	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

1.3 Accident Reference:74659 Slight RECTORY LANE UNSPECIFIED ROAD OR LOCATION Accident 20 of 36

1.7 Date & 1.9 Time.....Sunday 03/04/2016 05:00
1.11 Grid co-ordinates.....635990/299430
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..U
1.18/1.19 2nd road identity..
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....Zebra crossing
1.15 Speed limit.....30 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Not at or within 20m of junction
1.17 Junction control.....
1.24 Special conditions...ATS out
1.25 Carriageway hazards..Dislodged load
1.5 Number of vehicles...1
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?

Yes

Accident Description

IT IS BELIEVED THAT THE DRIVER HAD EXCESS ALCOHOL IN HIS SYSTEM AT THE TIME OF TEH INCIDENT (ROADSIDE BREATHE TEST WAS POSITIVE AT 59UG). IT IS BELIEVED THE DRIVER OF V1 THEREFORE HAD DELAYED REACTIONS. THE DRIVER HAS LOST CONTROL FOR UNKNOWN REASON AND FAILED TO REGAIN CONTROL, CAUSING EXTENSIVE DAMAGE TO HIS CAR, STREET FURNITURE NAD HEDGEROW BELONGING TO A LOCAL RESIDENT.

1 Vehicle

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South North
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....19
2.24 Hit and Run.....No
2.23 Breath test.....Positive
2.29 Journey purpose.....Unknown

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....19
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:78928 Slight A146 GREEN LANE Accident 21 of 36

1.7 Date & 1.9 Time.....Wednesday 01/06/2016 17:48
1.11 Grid co-ordinates.....637822/297431
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..U
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....T or Staggered junction
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
VEHICLE 1 PULLS OUT OF JUNCTION OVER GIVE WAY LINES, INTO PATH OF VEHUCLE 2 WHICH IS APPROACHING FROM RIGHT HAND SIDE ON MAIN CARRIAGEWAY

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Cleared junction or parked at junc
2.9 Restricted location.On main carriageway
2.8 Movement from/to....East West
2.7 Manoeuvres.....Turning left
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Offside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....52
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Unknown

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Approaching or parked on approach
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North South
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....48
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Commuting to/from work

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....48
3.9 Severity.....Slight
3.4 Vehicle no.....2
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:83170 Slight LODDON BYPASS A146 BECCLES ROAD C554 Accident 22 of 36

1.7 Date & 1.9 Time.....Tuesday 28/06/2016 17:45
1.11 Grid co-ordinates.....637145/297864
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..C554
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....T or Staggered junction
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Wet

Did a police officer attend?

No - reported over the counter

Accident Description

V001 Peugeot 208 at junction pulls out of junction turning right onto A146, Norwich bound. On pulling out the V002 Ford fiesta cannot stop and collides with side of V001. V002travelling Hales bound on A146. V001 pulls out with insufficient room to complete manouvre, causing collision to occur.passenger of V002 cut out of vehicle due to neck pain

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Entering main road
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North South
2.7 Manoeuvres.....Turning right
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Offside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....65
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Unknown

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Mid junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....West East
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Offside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....58
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Unknown

1 Casualty

3.5 Cas ref no.....2
3.6 Casualty class.....Passenger
3.7 Gender.....Female
3.8 Age.....84
3.9 Severity.....Slight
3.4 Vehicle no.....2
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....Front
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:83603 Slight BECCLES ROAD A146 Accident 23 of 36

1.7 Date & 1.9 Time.....Sunday 05/06/2016 05:40
1.11 Grid co-ordinates.....636754/297793
1.10 Local Authority.....Norwich
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Not at or within 20m of junction
1.17 Junction control.....
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...1
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
No - reported over the counter

Accident Description
V1 TRAVELLING TOWARD NORWICH ON A146. V1 HAS LOST CONTROL AND COLLIDED WITH A TRAFFIC SIGN AND TREE. DRIVER OF V1 FAILED ROADSIDE BREATH TEST

1 Vehicle

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....East West
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Left c'way offside and rebounded
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..Other object
2.14 Hit object off c'way.Road sign or signal
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....20
2.24 Hit and Run.....No
2.23 Breath test.....Positive
2.29 Journey purpose.....Unknown

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....20
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:NC78909 Serious LODDON BRIDGE STREET 24MTRS NORTH OF GEORGE LANE Accident 24 of 36

1.7 Date & 1.9 Time.....Wednesday 12/03/2014 17:49
1.11 Grid co-ordinates.....636155/298841
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..C554
1.18/1.19 2nd road identity..
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....20 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Not at or within 20m of junction
1.17 Junction control.....
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...1
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
V1 WAS TRAVELLING NORTH ON BRIDGE ST. WHEN PEDESTRIAN STEPPED OUT FROM DRIVERS N/SIDE COLLISION OCCURRED

1 Vehicle

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South North
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....26
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Journey as part of work

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Pedestrian
3.7 Gender.....Female
3.8 Age.....34
3.9 Severity.....Serious
3.4 Vehicle no.....1
3.12 Ped Direction.....East
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..In c'way crossing elsewhere
3.11 Pedestrian movement..Crossing from drivers nearside
3.19 Roadworker injured...No

1.3 Accident Reference:NC79004 Slight LODDON BUNGAY ROAD OUTSIDE STUBBS FARM Accident 25 of 36

1.7 Date & 1.9 Time.....Tuesday 18/03/2014 17:20
1.11 Grid co-ordinates.....636242/297426
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..C395
1.18/1.19 2nd road identity..
1.22 Weather.....Other
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Not at or within 20m of junction
1.17 Junction control.....
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...1
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
V1 TRAVELLING NORTH TOWARDS LODDON ON BUNGAY ROAD WHEN IT LOST CONTROL TO N/SIDE AND HIT HEDGE

1 Vehicle

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South North
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Left c'way near-side
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.Other permanent object
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....26
2.24 Hit and Run.....No
2.23 Breath test.....Not contacted
2.29 Journey purpose.....Commuting to/from work

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....26
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Unknown
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:NC79642 Fatal LODDON A146 394MTRS EAST OF HIGH BUNGAY ROAD Accident 26 of 36

1.7 Date & 1.9 Time.....Thursday 17/04/2014 16:40	1.15 Speed limit.....60 Mph
1.11 Grid co-ordinates.....636623/297761	1.14 Road type.....Single c'way
1.10 Local Authority.....South Norfolk	1.16 Junction detail.....Not at or within 20m of junction
1.12/1.13 1st road identity..A146	1.17 Junction control.....
1.18/1.19 2nd road identity..	1.24 Special conditions...None
1.22 Weather.....Fine	1.25 Carriageway hazards..None
1.21 Light conditions.....Daylight	1.5 Number of vehicles...3
1.20a Crossing(human).....No Human control within 50m	1.6 Number of casualties.7
1.20b Crossing(physical).....No crossing facility within 5	1.23 Surface.....Wet

Did a police officer attend?

Yes

Accident Description

V1 ON A146 TOWARDS HALES WHEN IT DRIFTED INTO THE OPPOSITE CARRIAGEWAY AND COLLIDES WITH V2 TRAVELLING TOWARDS NORWICH. V3 WHO WAS ALSO TRAVELLING TOWARDS NORWICH BEHIND VEHICLE 2 COLLIDES WITH V1 WHICH IS SIDEWAYS ACROSS BOTH C/WAYS

3 Vehicles

2.4 Veh ref no.....1	
2.17 Other vehicle.....0	2.16 First impact.....Front
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Not at junction	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....South west North east	2.21 Driver gender.....Female
2.7 Manoeuvres.....Going ahead other	2.22 Driver age.....65
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Not provided
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Unknown

2.4 Veh ref no.....2	
2.17 Other vehicle.....0	2.16 First impact.....Front
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Not at junction	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....North east South west	2.21 Driver gender.....Female
2.7 Manoeuvres.....Going ahead other	2.22 Driver age.....24
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Not provided
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Unknown

2.4 Veh ref no.....3	
2.17 Other vehicle.....0	2.16 First impact.....Front
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Not at junction	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....North east South west	2.21 Driver gender.....Female
2.7 Manoeuvres.....Going ahead other	2.22 Driver age.....29
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Negative
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Unknown

7 Casualties

3.5 Cas ref no.....1	3.15 Car passenger.....Front
3.6 Casualty class.....Passenger	3.16 PSV passenger.....No
3.7 Gender.....Female	3.14 Seat belt usage.....Unknown
3.8 Age.....61	3.13 School pupil.....Other
	(3.19 School .....)
3.9 Severity.....Fatal	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....2	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

3.5 Cas ref no.....2	3.15 Car passenger.....No
3.6 Casualty class.....Driver or Rider	3.16 PSV passenger.....No
3.7 Gender.....Female	3.14 Seat belt usage.....Unknown
3.8 Age.....24	3.13 School pupil.....Other
	(3.19 School .....)
3.9 Severity.....Serious	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....2	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

3.5 Cas ref no.....3	3.15 Car passenger.....No
3.6 Casualty class.....Driver or Rider	3.16 PSV passenger.....No
3.7 Gender.....Female	3.14 Seat belt usage.....Unknown
3.8 Age.....65	3.13 School pupil.....Other
	(3.19 School .....)
3.9 Severity.....Serious	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....1	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

3.5 Cas ref no.....4	3.15 Car passenger.....Front
3.6 Casualty class.....Passenger	3.16 PSV passenger.....No
3.7 Gender.....Male	3.14 Seat belt usage.....Unknown
3.8 Age.....65	3.13 School pupil.....Other
	(3.19 School .....)
3.9 Severity.....Serious	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....1	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

3.5 Cas ref no.....5	3.15 Car passenger.....Rear
3.6 Casualty class.....Passenger	3.16 PSV passenger.....No
3.7 Gender.....Female	3.14 Seat belt usage.....Unknown
3.8 Age.....30	3.13 School pupil.....Other
	(3.19 School .....)
3.9 Severity.....Serious	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....1	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

3.5 Cas ref no.....6	3.15 Car passenger.....No
3.6 Casualty class.....Driver or Rider	3.16 PSV passenger.....No
3.7 Gender.....Female	3.14 Seat belt usage.....Unknown
3.8 Age.....29	3.13 School pupil.....Other
	(3.19 School .....)
3.9 Severity.....Slight	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....3	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

3.5 Cas ref no.....7	3.15 Car passenger.....Front
3.6 Casualty class.....Passenger	3.16 PSV passenger.....No
3.7 Gender.....Female	3.14 Seat belt usage.....Unknown
3.8 Age.....59	3.13 School pupil.....Other
	(3.19 School .....)
3.9 Severity.....Slight	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....3	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

1.3 Accident Reference:NC81918 Slight LODDON HIGH BUNGAY ROAD 12 MTRS SOUTH OF BEECH CLOSE Accident 27 of 36

1.7 Date & 1.9 Time.....Thursday 10/07/2014 15:50
1.11 Grid co-ordinates.....636243/298306
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..C395
1.18/1.19 2nd road identity..U71241
1.22 Weather.....Rain
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....30 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....T or Staggered junction
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...1
1.6 Number of casualties.1
1.23 Surface.....Wet

Did a police officer attend?
Yes

Accident Description
V1 OVERTAKING STATIONARY BUS WHEN PEDESTRIANS STEPS OUT FROM OFFSIDE COLLISION OCCURS

1 Vehicle

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Cleared junction or parked at junc
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North South
2.7 Manoeuvres.....O/T stat.vehicle on its O/S
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Offside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....46
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Commuting to/from work

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Pedestrian
3.7 Gender.....Male
3.8 Age.....9
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....East
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..In c'way crossing elsewhere
3.11 Pedestrian movement..Crossing from drivers offside
3.19 Roadworker injured...No

1.3 Accident Reference:NC82431 Serious LODDON A146 J/W GEORGE LANE Accident 28 of 36

1.7 Date & 1.9 Time.....Sunday 27/07/2014 15:40
1.11 Grid co-ordinates.....635515/298517
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..C203
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....T or Staggered junction
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.3
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
V1 ON GEORGE LANE TURNED RIGHT ONTO MAIN A146 COLLIDED WITH V2 ON A146 TOWARDS LOWESTOFT

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Entering main road
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North east North west
2.7 Manoeuvres.....Turning right
2.11 Skidding.....No
2.13 Left c'way.....Left c'way Offside
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Offside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....86
2.24 Hit and Run.....No
2.23 Breath test.....Not provided
2.29 Journey purpose.....Other

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Mid junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North west South east
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Left c'way Offside
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....41
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Other

3 Casualties

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....86
3.9 Severity.....Serious
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Worn and independently
3.17 Sch ol pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

3.5 Cas ref no.....2
3.6 Casualty class.....Passenger
3.7 Gender.....Female
3.8 Age.....80
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....Front
3.16 PSV passenger.....No
3.14 Seat belt usage.....Worn and independently
3.17 Sch ol pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

3.5 Cas ref no.....3
3.6 Casualty class.....Passenger
3.7 Gender.....Male
3.8 Age.....4
3.9 Severity.....Slight
3.4 Vehicle no.....2
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....Rear
3.16 PSV passenger.....No
3.14 Seat belt usage.....Worn and independently
3.17 Sch ol pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:NC83724 Slight LODDONG A146 J/W GEORGE LANE Accident 29 of 36

1.7 Date & 1.9 Time.....Friday 12/09/2014 11:30
1.11 Grid co-ordinates.....635518/298518
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..C203
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....T or Staggered junction
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
V1 TURNED RIGHT ONTO A146 FROM GEORGE LANE INTO PATH OF V2 ON A146 TRAVELLING SOUTH COLLISION OCCURRED

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Entering main road
2.9 Restricted location.On main carriageway
2.8 Movement from/to....East North
2.7 Manoeuvres.....Turning right
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Offside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....84
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Other

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Mid junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North South
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....48
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Other

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Female
3.8 Age.....48
3.9 Severity.....Slight
3.4 Vehicle no.....2
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Worn but not independently
3.17 Sch
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:NC86557 Slight HALES A146 J/W B1136 Accident 30 of 36

1.7 Date & 1.9 Time.....Tuesday 16/12/2014 16:41
1.11 Grid co-ordinates.....637822/297434
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..B1136
1.22 Weather.....Fine
1.21 Light conditions.....Dark/no lights
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....T or Staggered junction
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...3
1.6 Number of casualties.1
1.23 Surface.....Wet

Did a police officer attend?
Yes

Accident Description
V1 ON A146 HEADING TOWARDS NORWICH AT THE JUNCTION WITH B1136 TURNED RIGHT ACROSS PATH OF V2 ON A146 HEADING IN OPPOSITE DIRECTION. V1 & V2 COLLIDED V2 THEN HIT V3 WHICH WAS WAITING ON B1136 TO TURN RIGHT ONTO THE A146

3 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Leaving main road
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South east East
2.7 Manoeuvres.....Turning right
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....52
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Unknown

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Mid junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North west South east
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....57
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Unknown

2.4 Veh ref no.....3
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Approaching or parked on approach
2.9 Restricted location.On main carriageway
2.8 Movement from/to....East North west
2.7 Manoeuvres.....Waiting to turn right
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....48
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Unknown

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....52
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Worn and independently
3.17 Schl pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:NC88026 Slight HALES, A146 J/W B1136 Accident 31 of 36

1.7 Date & 1.9 Time.....Monday 16/02/2015 17:55	1.15 Speed limit.....60 Mph
1.11 Grid co-ordinates.....637823/297432	1.14 Road type.....Single c'way
1.10 Local Authority.....South Norfolk	1.16 Junction detail.....T or Staggered junction
1.12/1.13 1st road identity..A146	1.17 Junction control.....Give way sign or uncontrolled
1.18/1.19 2nd road identity..B1136	1.24 Special conditions...None
1.22 Weather.....Fine	1.25 Carriageway hazards..None
1.21 Light conditions.....Dark/no lights	1.5 Number of vehicles...2
1.20a Crossing(human).....No Human control within 50m	1.6 Number of casualties.2
1.20b Crossing(physical).....No crossing facility within 5	1.23 Surface.....Wet

Did a police officer attend?

Yes

Accident Description

V1 ON THE B1136 AT THE J/W A146 PULLS OUT TURNED RIGHT INTO PATH OF V2 ON A146 HEADING SOUTH COLLISION OCCURRED

2 Vehicles

2.4 Veh ref no.....1	
2.17 Other vehicle.....0	2.16 First impact.....Offside
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Entering main road	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....East North	2.21 Driver gender.....Female
2.7 Manoeuvres.....Turning right	2.22 Driver age.....25
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Negative
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Commuting to/from work

2.4 Veh ref no.....2	
2.17 Other vehicle.....0	2.16 First impact.....Front
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Mid junction	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....North South	2.21 Driver gender.....Male
2.7 Manoeuvres.....Going ahead other	2.22 Driver age.....18
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Negative
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Other

2 Casualties

3.5 Cas ref no.....1	3.15 Car passenger.....Front
3.6 Casualty class.....Passenger	3.16 PSV passenger.....No
3.7 Gender.....Female	3.14 Seat belt usage.....Worn and independently
3.8 Age.....18	3.17 School pupil.....Other (3.19 School .....)
3.9 Severity.....Slight	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....2	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

3.5 Cas ref no.....2	3.15 Car passenger.....No
3.6 Casualty class.....Driver or Rider	3.16 PSV passenger.....No
3.7 Gender.....Female	3.14 Seat belt usage.....Worn and independently
3.8 Age.....25	3.17 School pupil.....Other (3.19 School .....)
3.9 Severity.....Slight	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....1	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

1.3 Accident Reference:NC89427 Slight HALES, A146 BECCLES ROAD J/W B1136 YARMOUTH ROAD Accident 32 of 36

1.7 Date & 1.9 Time.....Tuesday 07/04/2015 11:38
1.11 Grid co-ordinates.....637823/297431
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..B1136
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....T or Staggered junction
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.2
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
V1 ON B1136 TOWARDS THE A146 AT THE JUNCTION V1 PULLED OUT TO TURN RIGHT TOWARDS NORWICH INTO PATH OF V2 ON A146 TOWARDS BECCLES COLLISION OCCURRED

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Entering main road
2.9 Restricted location.On main carriageway
2.8 Movement from/to....East North
2.7 Manoeuvres.....Turning right
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Offside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....79
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Other

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Mid junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North South
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....63
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Other

2 Casualties

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....79
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Worn but not independently
3.17 Sch
3.18 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

3.5 Cas ref no.....2
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....63
3.9 Severity.....Slight
3.4 Vehicle no.....2
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Worn but not independently
3.17 Sch
3.18 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:NC89875 Slight HALES, A146 J/W BP GARAGE Accident 33 of 36

1.7 Date & 1.9 Time.....Friday 24/04/2015 15:55
1.11 Grid co-ordinates.....637765/297539
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..U
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Using private drive or entrance
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
BOTH V1 & V2 ON A146 HEADED TOWARDS NORWICH AT BP GARAGE V2 STOPPED TO TURN RIGHT V1 FAILED TO SEE V2 STOPPED AND HIT REAR OF V2

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....M/cycle <= 50cc
2.10 Junction location...Approaching or parked on approach
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South east North west
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Left c'way near-side
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....16
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Other

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Van/Goods < 3.5t
2.10 Junction location...Mid junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South east South east
2.7 Manoeuvres.....Waiting to turn right
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Back
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....43
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Journey as part of work

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....16
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Not applicable
3.13 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:NC95958 Slight HALES, A146 J/W B1136 Accident 34 of 36

1.7 Date & 1.9 Time.....Friday 04/12/2015 07:40
1.11 Grid co-ordinates.....637822/297433
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..A146
1.18/1.19 2nd road identity..B1136
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....T or Staggered junction
1.17 Junction control.....Give way sign or uncontrolled
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...2
1.6 Number of casualties.1
1.23 Surface.....Wet

Did a police officer attend?
Yes

Accident Description
V1 ON B1136 AT J/W A146 PULLED OUT TURNED RIGHT INTO PATH OF V2 ON A146 TRAVELLING SOUTH COLLISION OCCURRED

2 Vehicles

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Van/Goods < 3.5t
2.10 Junction location...Entering main road
2.9 Restricted location.On main carriageway
2.8 Movement from/to....East North
2.7 Manoeuvres.....Turning right
2.11 Skidding.....No
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Offside
2.12 Hit object in c'way..None
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....63
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Journey as part of work

2.4 Veh ref no.....2
2.17 Other vehicle.....0
2.5 Vehicle class.....Goods 3.5 - 7.5t
2.10 Junction location...Mid junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....North South
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....No
2.13 Left c'way.....Left c'way Offside
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Front
2.12 Hit object in c'way..None
2.14 Hit object off c'way.Other permanent object
2.18 Parts damaged..... / /
2.21 Driver gender.....Male
2.22 Driver age.....21
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Journey as part of work

1 Casualty

3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Male
3.8 Age.....63
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Worn but not independently
3.17 Sch ped pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

1.3 Accident Reference:NC96552 Slight LODDON, A146 J/W GEORGE LANE Accident 35 of 36

1.7 Date & 1.9 Time.....Wednesday 23/12/2015 10:59	1.15 Speed limit.....60 Mph
1.11 Grid co-ordinates.....635518/298519	1.14 Road type.....Single c'way
1.10 Local Authority.....South Norfolk	1.16 Junction detail.....T or Staggered junction
1.12/1.13 1st road identity..A146	1.17 Junction control.....Give way sign or uncontrolled
1.18/1.19 2nd road identity..C203	1.24 Special conditions...None
1.22 Weather.....Fine	1.25 Carriageway hazards..None
1.21 Light conditions.....Daylight	1.5 Number of vehicles...2
1.20a Crossing(human).....No Human control within 50m	1.6 Number of casualties.2
1.20b Crossing(physical).....No crossing facility within 5	1.23 Surface.....Dry

Did a police officer attend?

Yes

Accident Description

V1 ON GEORGE LANE AT J/W A146 PULLED OUT TURNED RIGHT TOWARDS NORWICH AND HIT V2 ON A146 HEADED AWAY FROM NORWICH

2 Vehicles

2.4 Veh ref no.....1	
2.17 Other vehicle.....0	2.16 First impact.....Offside
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Entering main road	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....North east North west	2.21 Driver gender.....Male
2.7 Manoeuvres.....Turning right	2.22 Driver age.....75
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Negative
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Other

2.4 Veh ref no.....2	
2.17 Other vehicle.....0	2.16 First impact.....Nearside
2.5 Vehicle class.....Car	2.12 Hit object in c'way..None
2.10 Junction location...Mid junction	2.14 Hit object off c'way.None
2.9 Restricted location.On main carriageway	2.18 Parts damaged..... / /
2.8 Movement from/to....North west South east	2.21 Driver gender.....Male
2.7 Manoeuvres.....Going ahead other	2.22 Driver age.....22
2.11 Skidding.....No	
2.13 Left c'way.....Did not leave c'way	2.24 Hit and Run.....No
2.6 Towing.....No	2.23 Breath test.....Negative
2.28 Foreign vehicle.....Not foreign	2.29 Journey purpose.....Other

2 Casualties

3.5 Cas ref no.....1	3.15 Car passenger.....No
3.6 Casualty class.....Driver or Rider	3.16 PSV passenger.....No
3.7 Gender.....Male	3.14 Seat belt usage.....Worn but not independently
3.8 Age.....75	3.17 Sch[illegible]ol pupil.....Other (3.19 School .....)
3.9 Severity.....Slight	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....1	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

3.5 Cas ref no.....2	3.15 Car passenger.....No
3.6 Casualty class.....Driver or Rider	3.16 PSV passenger.....No
3.7 Gender.....Male	3.14 Seat belt usage.....Worn but not independently
3.8 Age.....22	3.17 Sch[illegible]ol pupil.....Other (3.19 School .....)
3.9 Severity.....Slight	3.10 Pedestrian location..Not a pedestrian
3.4 Vehicle no.....2	3.11 Pedestrian movement..Not a pedestrian
3.12 Ped Direction.....Not a pedestrian	3.19 Roadworker injured...No

1.3 Accident Reference:NCT140084 Slight LODDON BUNGAY ROAD 600MTRS SOUTH OF THE A146 Accident 36 of 36

1.7 Date & 1.9 Time.....Tuesday 01/04/2014 16:11
1.11 Grid co-ordinates.....636163/297195
1.10 Local Authority.....South Norfolk
1.12/1.13 1st road identity..C395
1.18/1.19 2nd road identity..
1.22 Weather.....Fine
1.21 Light conditions.....Daylight
1.20a Crossing(human).....No Human control within 50m
1.20b Crossing(physical).....No crossing facility within 5
1.15 Speed limit.....60 Mph
1.14 Road type.....Single c'way
1.16 Junction detail.....Not at or within 20m of junction
1.17 Junction control.....
1.24 Special conditions...None
1.25 Carriageway hazards..None
1.5 Number of vehicles...1
1.6 Number of casualties.1
1.23 Surface.....Dry

Did a police officer attend?
Yes

Accident Description
V1 ON BUNGAY ROAD HEADING NORTH TOWARDS A146 WHEN IT HIT THE VERGE AND LOST CONTROL

1 Vehicle

2.4 Veh ref no.....1
2.17 Other vehicle.....0
2.5 Vehicle class.....Car
2.10 Junction location...Not at junction
2.9 Restricted location.On main carriageway
2.8 Movement from/to....South west North east
2.7 Manoeuvres.....Going ahead other
2.11 Skidding.....Overturned
2.13 Left c'way.....Did not leave c'way
2.6 Towing.....No
2.28 Foreign vehicle.....Not foreign
2.16 First impact.....Nearside
2.12 Hit object in c'way..Kerb
2.14 Hit object off c'way.None
2.18 Parts damaged..... / /
2.21 Driver gender.....Female
2.22 Driver age.....18
2.24 Hit and Run.....No
2.23 Breath test.....Negative
2.29 Journey purpose.....Other

1 Casualty

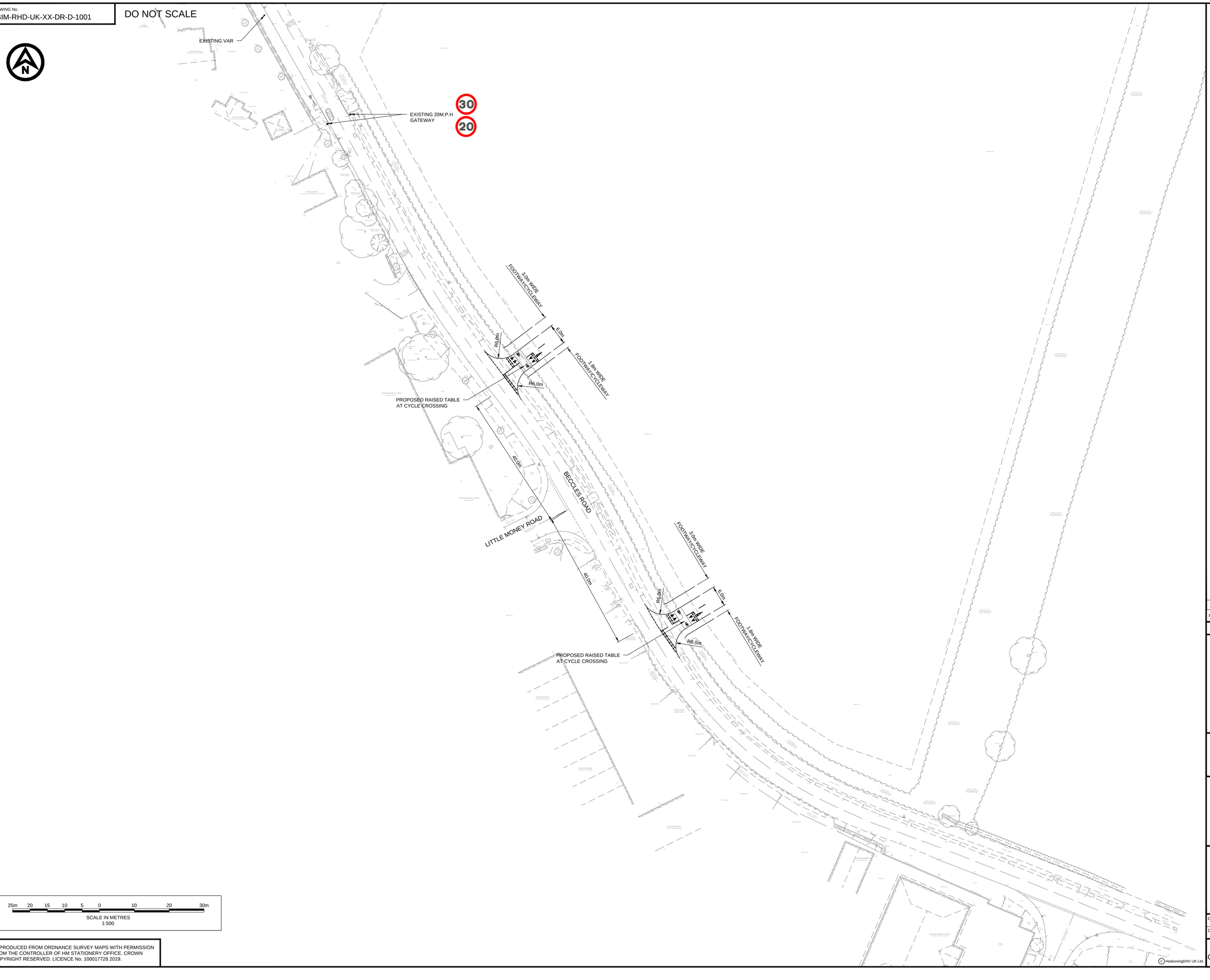
3.5 Cas ref no.....1
3.6 Casualty class.....Driver or Rider
3.7 Gender.....Female
3.8 Age.....18
3.9 Severity.....Slight
3.4 Vehicle no.....1
3.12 Ped Direction.....Not a pedestrian
3.15 Car passenger.....No
3.16 PSV passenger.....No
3.14 Seat belt usage.....Worn but not independently confirmed
3.17 School pupil.....Other
(3.19 School .....)
3.10 Pedestrian location..Not a pedestrian
3.11 Pedestrian movement..Not a pedestrian
3.19 Roadworker injured...No

Appendix B Access Strategy

Royal HaskoningDHV

DRAWING No.
GBIM-RHD-UK-XX-DR-D-1001

DO NOT SCALE



25m 20 15 10 5 0 10 20 30m
SCALE IN METRES
1:500

NOTES

1. Do not scale from this drawing. All dimensions are in metres unless noted otherwise.
2. All levels are in metres relative to Ordnance Datum Newlyn unless noted otherwise.
3. This drawing has been based upon survey information supplied by Survey Solutions, and Royal HaskoningDHV cannot guarantee the accuracy of data.
4. Indicative access proposals in accordance with Norfolk Residential Design Guide.

KEY

PROPOSED KERBLINE

EXISTING SIGN POST

NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	BY	CHK	APP
-	-	-	-	-	-

REVISIONS

CLIENT

HOPKINS HOMES

PROJECT

BECCLES ROAD, LODDON

TITLE

PROPOSED SITE ACCESS ARRANGEMENT

2 Abbey Gardens,
Great College Street, Westminster,
London. SW1P 3NL
Tel +44(0)207 222 2115
www.royalhaskoningdhv.com

Royal HaskoningDHV
Enhancing Society Together

DRAWN	CHECKED	APPROVED
SMc	SS	SS

DATE	SCALE AT A1	AUTOCAD REF.
JUN'19	1:500	

DRAWING No.	SUITABILITY	REVISION
GBIM-RHD-UK-XX-DR-D-1001	S0	-

DRAWING No.
GBIM-RHD-UK-XX-DR-D-1002

DO NOT SCALE

25m 20 15 10 5 0 10 20 30m
SCALE IN METRES
1:500

NOTES

1. Do not scale from this drawing. All dimensions are in metres unless noted otherwise.
2. All levels are in metres relative to Ordnance Datum Newlyn unless noted otherwise.
3. This drawing has been based upon survey information supplied by Survey Solutions, and Royal HaskoningDHV cannot guarantee the accuracy of data.
4. Indicative access proposals in accordance with Norfolk Residential Design Guide.

KEY

EXTENT OF VISIBILITY SPLAY

NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	BY	CHK	APP
-	-	-	-	-	-

REVISIONS

CLIENT

HOPKINS HOMES

PROJECT

BECCLES ROAD, LODDON

TITLE

ACCESS VISIBILITY

2 Abbey Gardens,
Great College Street, Westminster,
London. SW1P 3NL
Tel +44(0)207 222 2115
www.royalhaskoningdhv.com

Royal HaskoningDHV
Enhancing Society Together

DRAWN	CHECKED	APPROVED
SMc	SS	SS

DATE	SCALE AT A1	AUTOCAD REF.
JUN'19	1:500	

DRAWING No.	SUITABILITY	REVISION
GBIM-RHD-UK-XX-DR-D-1002	S0	-

DRAWING No.
GBIM-RHD-UK-XX-DR-D-1003

DO NOT SCALE

5m 4 3 2 1 0 2 4 6m
SCALE IN METRES
1:100

NOTES

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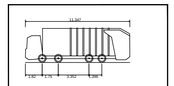
2. All levels are in metres relative to Ordnance Datum Newlyn unless noted otherwise.
3. This drawing has been based upon survey information supplied by Survey Solutions, and Royal HaskoningDHV cannot guarantee the accuracy of data.
4. Indicative access proposals in accordance with Norfolk Residential Design Guide.



Large Refuse Vehicle (4 axle)

Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to Lock Time	6.00s
Wall to Wall Turning Radius	11.330m

NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	BY	CHK	APP
-	-	-	-	-	-

REVISIONS

CLIENT

HOPKINS HOMES

PROJECT

BECCLES ROAD, LODDON

TITLE

SWEPT PATH ANALYSIS

2 Abbey Gardens,
Great College Street, Westminster,
London. SW1P 3NL
Tel +44(0)207 222 2115
www.royalhaskoningdhv.com

Royal HaskoningDHV
Enhancing Society Together

DRAWN	CHECKED	APPROVED
SMc	SS	SS

DATE	SCALE AT A1	AUTOCAD REF.
JUN'19	1:500	

DRAWING No.	SUITABILITY	REVISION
GBIM-RHD-UK-XX-DR-D-1003	S0	-

Appendix C TRICS data

Royal HaskoningDHV

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	3 days
	EX	ESSEX	1 days
	HC	HAMPSHIRE	3 days
	KC	KENT	4 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	6 days
03	SOUTH WEST		
	DC	DORSET	1 days
	DV	DEVON	3 days
	SM	SOMERSET	1 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	2 days
	NF	NORFOLK	3 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LN	LINCOLNSHIRE	1 days
	NR	NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	2 days
	ST	STAFFORDSHIRE	2 days
	WK	WARWICKSHIRE	2 days
	WO	WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	7 days
	SY	SOUTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	2 days
	GM	GREATER MANCHESTER	1 days
	LC	LANCASHIRE	1 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	DH	DURHAM	1 days
	TW	TYNE & WEAR	1 days
10	WALES		
	PS	POWYS	1 days
	VG	VALE OF GLAMORGAN	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Number of dwellings
Actual Range:	6 to 805 (units:)
Range Selected by User:	90 to 360 (units:)

Parking Spaces Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 20/11/18

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	13 days
Tuesday	12 days
Wednesday	14 days
Thursday	11 days
Friday	8 days
Saturday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	59 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	27
Edge of Town	32

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	56
No Sub Category	3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3	59 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	7 days
5,001 to 10,000	11 days
10,001 to 15,000	17 days
15,001 to 20,000	10 days
20,001 to 25,000	8 days
25,001 to 50,000	5 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Secondary Filtering selection (Cont.):

Population within 5 miles:

5,001 to 25,000	7 days
25,001 to 50,000	3 days
50,001 to 75,000	7 days
75,001 to 100,000	14 days
100,001 to 125,000	2 days
125,001 to 250,000	19 days
250,001 to 500,000	6 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	17 days
1.1 to 1.5	42 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	10 days
No	49 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	58 days
2 Poor	1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 CA-03-A-04 DETACHED CAMBRIDGESHIRE

PETERBOROUGH
THORPE PARK ROAD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: TUESDAY *18/10/11* *Survey Type: MANUAL*

2 CA-03-A-05 DETACHED HOUSES CAMBRIDGESHIRE
EASTFIELD ROAD
PETERBOROUGH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY *17/10/16* *Survey Type: MANUAL*

3 CH-03-A-08 DETACHED CHESHIRE
WHITCHURCH ROAD
CHESTER
BOUGHTON HEATH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY *22/05/12* *Survey Type: MANUAL*

4 CH-03-A-09 TERRACED HOUSES CHESHIRE
GREYSTOKE ROAD
MACCLESFIELD
HURDSFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 24
Survey date: MONDAY *24/11/14* *Survey Type: MANUAL*

5 DC-03-A-08 BUNGALOWS DORSET
HURSTDENE ROAD
BOURNEMOUTH
CASTLE LANE WEST
Edge of Town
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY *24/03/14* *Survey Type: MANUAL*

6 DH-03-A-01 SEMI DETACHED DURHAM
GREENFIELDS ROAD
BISHOP AUCKLAND

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 50
Survey date: TUESDAY *28/03/17* *Survey Type: MANUAL*

7 DS-03-A-02 MIXED HOUSES DERBYSHIRE
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total Number of dwellings: 371
Survey date: TUESDAY *10/07/18* *Survey Type: MANUAL*

8 DV-03-A-01 TERRACED HOUSES DEVON
BRONSHILL ROAD
TORQUAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 37
Survey date: WEDNESDAY *30/09/15* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 DV-03-A-02 HOUSES & BUNGALOWS DEVON
MILLHEAD ROAD
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 116
Survey date: FRIDAY *25/09/15* *Survey Type: MANUAL*

10 DV-03-A-03 TERRACED & SEMI DETACHED DEVON
LOWER BRAND LANE
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 70
Survey date: MONDAY *28/09/15* *Survey Type: MANUAL*

11 ES-03-A-02 PRIVATE HOUSING EAST SUSSEX
SOUTH COAST ROAD
PEACEHAVEN

Edge of Town
Residential Zone
Total Number of dwellings: 37
Survey date: FRIDAY *18/11/11* *Survey Type: MANUAL*

12 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total Number of dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

13 ES-03-A-04 MIXED HOUSES & FLATS EAST SUSSEX
NEW LYDD ROAD
CAMBER

Edge of Town
Residential Zone
Total Number of dwellings: 134
Survey date: FRIDAY *15/07/16* *Survey Type: MANUAL*

14 EX-03-A-02 DETACHED & SEMI-DETACHED ESSEX
MANOR ROAD
CHIGWELL
GRANGE HILL
Edge of Town
Residential Zone
Total Number of dwellings: 97
Survey date: MONDAY *27/11/17* *Survey Type: MANUAL*

15 GM-03-A-10 DETACHED/SEMI GREATER MANCHESTER
BUTT HILL DRIVE
MANCHESTER
PRESTWICH
Edge of Town
Residential Zone
Total Number of dwellings: 29
Survey date: WEDNESDAY *12/10/11* *Survey Type: MANUAL*

16 HC-03-A-20 HOUSES & FLATS HAMPSHIRE
CANADA WAY
LIPHOOK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 62
Survey date: TUESDAY *20/11/18* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

17 HC-03-A-21 TERRACED & SEMI-DETACHED HAMPSHIRE
PRIESTLEY ROAD
BASINGSTOKE
HOUNDMILLS
Edge of Town
Residential Zone
Total Number of dwellings: 39
Survey date: TUESDAY *13/11/18* *Survey Type: MANUAL*

18 HC-03-A-22 MIXED HOUSES HAMPSHIRE
BOW LAKE GARDENS
NEAR EASTLEIGH
BISHOPSTOKE
Edge of Town
Residential Zone
Total Number of dwellings: 40
Survey date: WEDNESDAY *31/10/18* *Survey Type: MANUAL*

19 KC-03-A-03 MIXED HOUSES & FLATS KENT
HYTHE ROAD
ASHFORD
WILLESBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 51
Survey date: THURSDAY *14/07/16* *Survey Type: MANUAL*

20 KC-03-A-04 SEMI-DETACHED & TERRACED KENT
KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total Number of dwellings: 110
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

21 KC-03-A-06 MIXED HOUSES & FLATS KENT
MARGATE ROAD
HERNE BAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 363
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

22 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total Number of dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

23 LC-03-A-31 DETACHED HOUSES LANCASHIRE
GREENSIDE
PRESTON
COTTAM
Edge of Town
Residential Zone
Total Number of dwellings: 32
Survey date: FRIDAY *17/11/17* *Survey Type: MANUAL*

24 LN-03-A-03 SEMI DETACHED LINCOLNSHIRE
ROOKERY LANE
LINCOLN
BOULTHAM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 22
Survey date: TUESDAY *18/09/12* *Survey Type: MANUAL*

25 MS-03-A-03 DETACHED MERSEYSIDE
BEMPTON ROAD
LIVERPOOL
OTTERSPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 15
Survey date: FRIDAY *21/06/13* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

26 NE-03-A-02 SEMI DETACHED & DETACHED NORTH EAST LINCOLNSHIRE
HANOVER WALK
SCUNTHORPE

Edge of Town
No Sub Category
Total Number of dwellings: 432
Survey date: MONDAY *12/05/14* *Survey Type: MANUAL*

27 NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK
YARMOUTH ROAD
CAISTER-ON-SEA

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: TUESDAY *16/10/12* *Survey Type: MANUAL*

28 NF-03-A-02 HOUSES & FLATS NORFOLK
DEREHAM ROAD
NORWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 98
Survey date: MONDAY *22/10/12* *Survey Type: MANUAL*

29 NF-03-A-03 DETACHED HOUSES NORFOLK
HALING WAY
THETFORD

Edge of Town
Residential Zone
Total Number of dwellings: 10
Survey date: WEDNESDAY *16/09/15* *Survey Type: MANUAL*

30 NR-03-A-01 HOUSES NORTHAMPTONSHIRE
BOUGHTON GREEN ROAD
NORTHAMPTON
KINGSTHORPE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 102
Survey date: SATURDAY *22/09/12* *Survey Type: MANUAL*

31 NY-03-A-06 BUNGALOWS & SEMI DET. NORTH YORKSHIRE
HORSEFAIR
BOROUGHBRIDGE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY *14/10/11* *Survey Type: MANUAL*

32 NY-03-A-07 DETACHED & SEMI DET. NORTH YORKSHIRE
CRAVEN WAY
BOROUGHBRIDGE

Edge of Town
No Sub Category
Total Number of dwellings: 23
Survey date: TUESDAY *18/10/11* *Survey Type: MANUAL*

33 NY-03-A-08 TERRACED HOUSES NORTH YORKSHIRE
NICHOLAS STREET
YORK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 21
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

34 NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE
GRAMMAR SCHOOL LANE
NORTHALLERTON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

35 NY-03-A-10 HOUSES AND FLATS NORTH YORKSHIRE
BOROUGHBRIDGE ROAD
RIPON

Edge of Town
No Sub Category
Total Number of dwellings: 71
Survey date: TUESDAY *17/09/13* *Survey Type: MANUAL*

36 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE
HORSEFAIR
BOROUGHBRIDGE

Edge of Town
Residential Zone
Total Number of dwellings: 23
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

37 NY-03-A-13 TERRACED HOUSES NORTH YORKSHIRE
CATTERICK ROAD
CATTERICK GARRISON
OLD HOSPITAL COMPOUND
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 10
Survey date: WEDNESDAY *10/05/17* *Survey Type: MANUAL*

38 PS-03-A-02 DETACHED/SEMI-DETACHED POWYS
GUNROG ROAD
WELSHPOOL

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY *11/05/15* *Survey Type: MANUAL*

39 SC-03-A-04 DETACHED & TERRACED SURREY
HIGH ROAD
BYFLEET

Edge of Town
Residential Zone
Total Number of dwellings: 71
Survey date: THURSDAY *23/01/14* *Survey Type: MANUAL*

40 SF-03-A-04 DETACHED & BUNGALOWS SUFFOLK
NORMANSTON DRIVE
LOWESTOFT

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 7
Survey date: TUESDAY *23/10/12* *Survey Type: MANUAL*

41 SF-03-A-05 DETACHED HOUSES SUFFOLK
VALE LANE
BURY ST EDMUNDS

Edge of Town
Residential Zone
Total Number of dwellings: 18
Survey date: WEDNESDAY *09/09/15* *Survey Type: MANUAL*

42 SH-03-A-05 SEMI-DETACHED/TERRACED SHROPSHIRE
SANDCROFT
TELFORD
SUTTON HILL
Edge of Town
Residential Zone
Total Number of dwellings: 54
Survey date: THURSDAY *24/10/13* *Survey Type: MANUAL*

43 SH-03-A-06 BUNGALOWS SHROPSHIRE
ELLESMERE ROAD
SHREWSBURY

Edge of Town
Residential Zone
Total Number of dwellings: 16
Survey date: THURSDAY *22/05/14* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

44 SM-03-A-01 DETACHED & SEMI SOMERSET
WEMBDON ROAD
BRIDGWATER
NORTHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 33
Survey date: THURSDAY *24/09/15* *Survey Type: MANUAL*

45 ST-03-A-07 DETACHED & SEMI-DETACHED STAFFORDSHIRE
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total Number of dwellings: 248
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

46 ST-03-A-08 DETACHED HOUSES STAFFORDSHIRE
SILKMORE CRESCENT
STAFFORD
MEADOWCROFT PARK
Edge of Town
Residential Zone
Total Number of dwellings: 26
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

47 SY-03-A-01 SEMI DETACHED HOUSES SOUTH YORKSHIRE
A19 BENTLEY ROAD
DONCASTER
BENTLEY RISE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 54
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

48 TW-03-A-02 SEMI-DETACHED TYNE & WEAR
WEST PARK ROAD
GATESHEAD

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 16
Survey date: MONDAY *07/10/13* *Survey Type: MANUAL*

49 VG-03-A-01 SEMI-DETACHED & TERRACED VALE OF GLAMORGAN
ARTHUR STREET
BARRY

Edge of Town
Residential Zone
Total Number of dwellings: 12
Survey date: MONDAY *08/05/17* *Survey Type: MANUAL*

50 WK-03-A-01 TERRACED/SEMI/DET. WARWICKSHIRE
ARLINGTON AVENUE
LEAMINGTON SPA

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 6
Survey date: FRIDAY *21/10/11* *Survey Type: MANUAL*

51 WK-03-A-02 BUNGALOWS WARWICKSHIRE
NARBERTH WAY
COVENTRY
POTTERS GREEN
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: THURSDAY *17/10/13* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

52 WL-03-A-02 SEMI DETACHED WILTSHIRE
HEADLANDS GROVE
SWINDON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: THURSDAY *22/09/16* *Survey Type: MANUAL*

53 WO-03-A-07 MIXED HOUSES WORCESTERSHIRE
TEASEL WAY
WORCESTER
CLAINES
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 146
Survey date: TUESDAY *26/06/18* *Survey Type: MANUAL*

54 WS-03-A-04 MIXED HOUSES WEST SUSSEX
HILLS FARM LANE
HORSHAM
BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total Number of dwellings: 151
Survey date: THURSDAY *11/12/14* *Survey Type: MANUAL*

55 WS-03-A-05 TERRACED & FLATS WEST SUSSEX
UPPER SHOREHAM ROAD
SHOREHAM BY SEA

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 48
Survey date: WEDNESDAY *18/04/12* *Survey Type: MANUAL*

56 WS-03-A-06 MIXED HOUSES WEST SUSSEX
ELLIS ROAD
WEST HORSHAM
S BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total Number of dwellings: 805
Survey date: THURSDAY *02/03/17* *Survey Type: MANUAL*

57 WS-03-A-08 MIXED HOUSES WEST SUSSEX
ROUNDSTONE LANE
ANGMERING

Edge of Town
Residential Zone
Total Number of dwellings: 180
Survey date: THURSDAY *19/04/18* *Survey Type: MANUAL*

58 WS-03-A-09 MIXED HOUSES & FLATS WEST SUSSEX
LITTLEHAMPTON ROAD
WORTHING
WEST DURRINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 197
Survey date: THURSDAY *05/07/18* *Survey Type: MANUAL*

59 WS-03-A-10 MIXED HOUSES WEST SUSSEX
TODDINGTON LANE
LITTLEHAMPTON
WICK
Edge of Town
Residential Zone
Total Number of dwellings: 79
Survey date: WEDNESDAY *07/11/18* *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES
Calculation factor: 1 DWELLS
Estimated TRIP rate value per 180 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	59	93	0.074	13.358	59	93	0.294	53.005	59	93	0.368	66.363
08:00 - 09:00	59	93	0.122	22.001	59	93	0.367	66.068	59	93	0.489	88.069
09:00 - 10:00	59	93	0.140	25.209	59	93	0.162	29.171	59	93	0.302	54.380
10:00 - 11:00	59	93	0.125	22.426	59	93	0.151	27.108	59	93	0.276	49.534
11:00 - 12:00	59	93	0.133	23.965	59	93	0.146	26.355	59	93	0.279	50.320
12:00 - 13:00	59	93	0.154	27.763	59	93	0.147	26.453	59	93	0.301	54.216
13:00 - 14:00	59	93	0.159	28.549	59	93	0.152	27.403	59	93	0.311	55.952
14:00 - 15:00	59	93	0.154	27.632	59	93	0.178	31.953	59	93	0.332	59.585
15:00 - 16:00	59	93	0.248	44.558	59	93	0.170	30.677	59	93	0.418	75.235
16:00 - 17:00	59	93	0.269	48.421	59	93	0.161	29.007	59	93	0.430	77.428
17:00 - 18:00	59	93	0.327	58.800	59	93	0.146	26.257	59	93	0.473	85.057
18:00 - 19:00	59	93	0.279	50.287	59	93	0.162	29.236	59	93	0.441	79.523
19:00 - 20:00	1	97	0.062	11.134	1	97	0.052	9.278	1	97	0.114	20.412
20:00 - 21:00	1	97	0.031	5.567	1	97	0.021	3.711	1	97	0.052	9.278
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			2.277	409.670			2.309	415.682			4.586	825.352

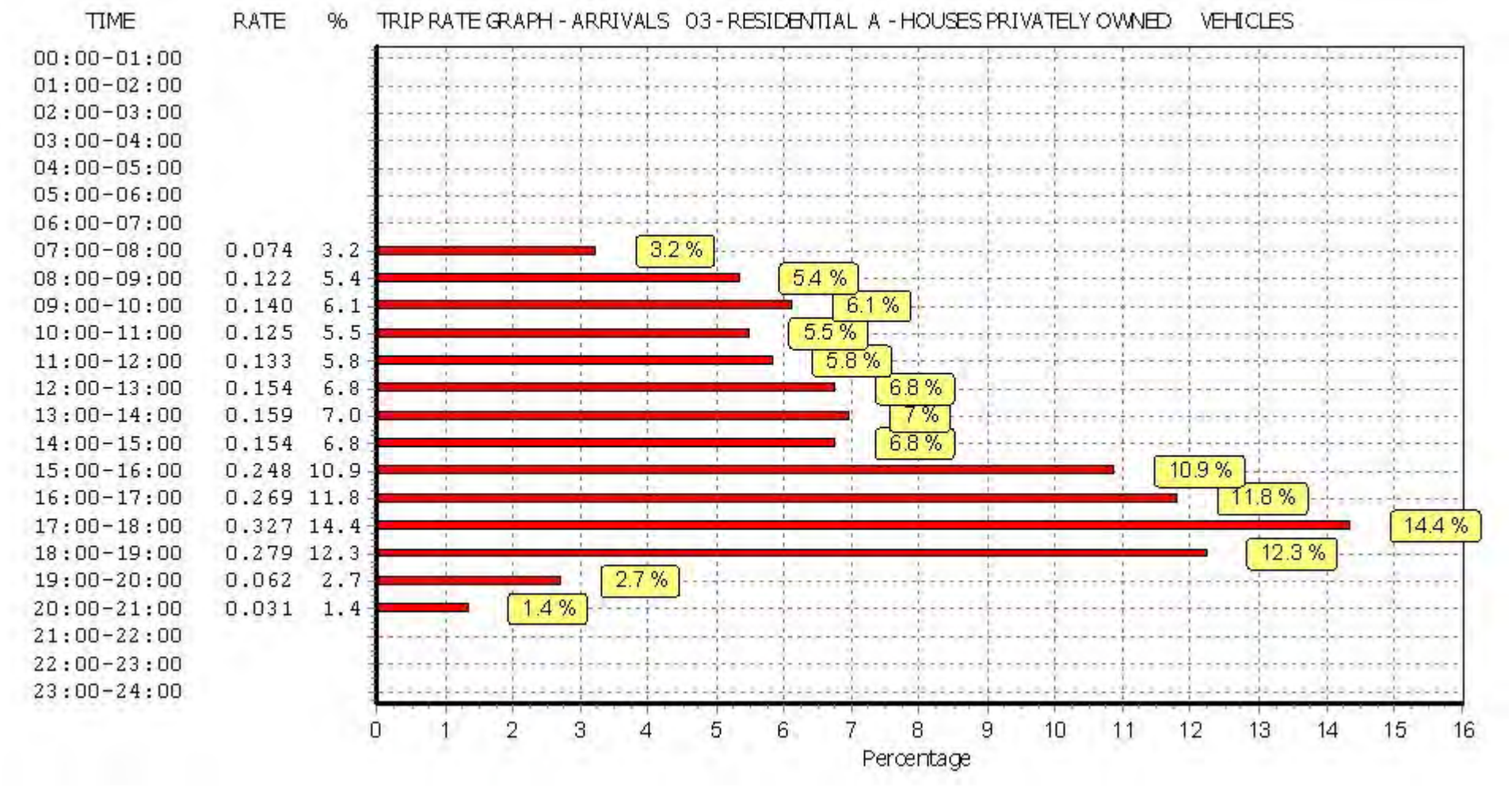
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

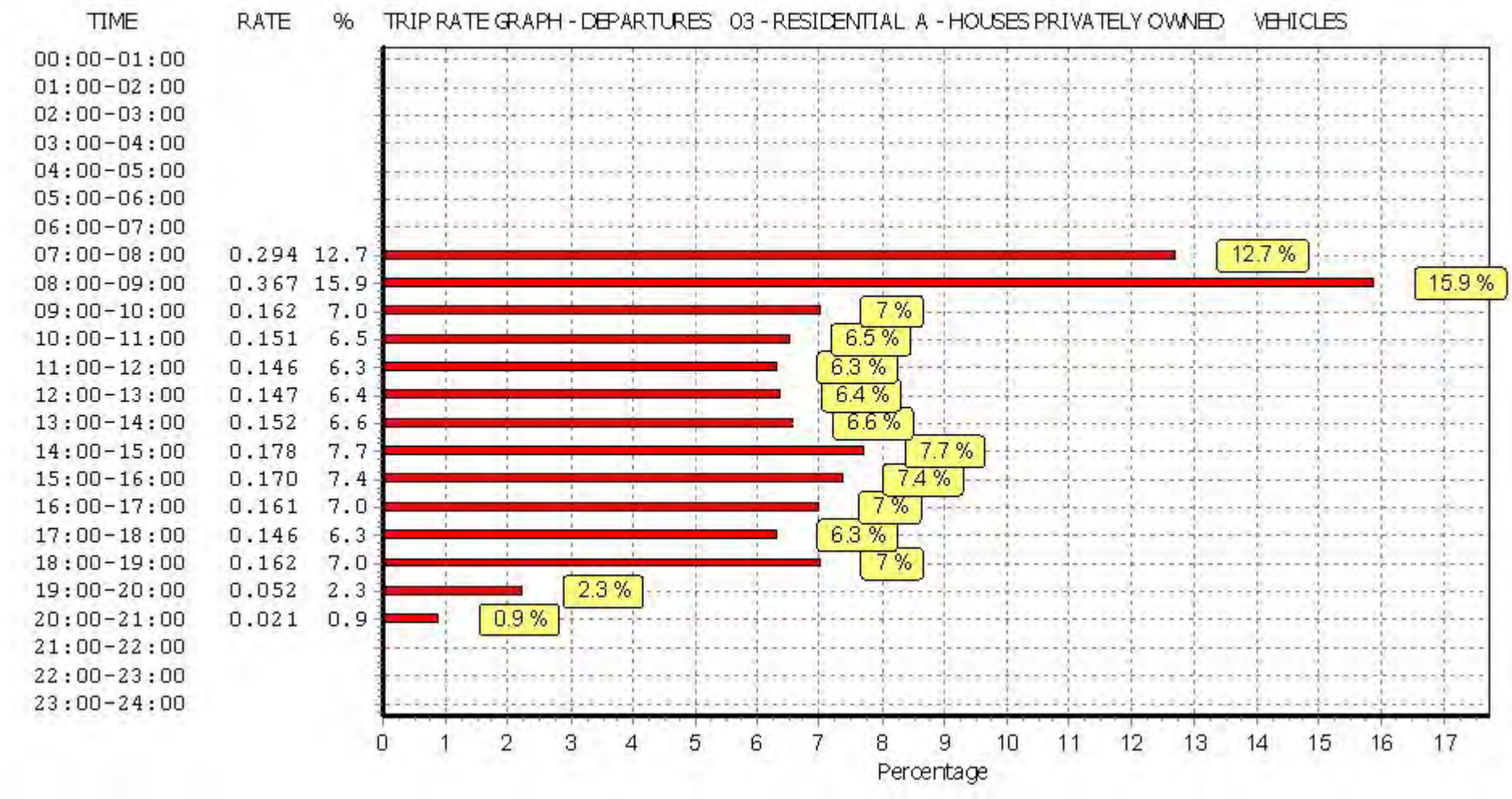
Parameter summary

Trip rate parameter range selected:	6 - 805 (units:)
Survey date date range:	01/01/11 - 20/11/18
Number of weekdays (Monday-Friday):	58
Number of Saturdays:	1
Number of Sundays:	0
Surveys automatically removed from selection:	3
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



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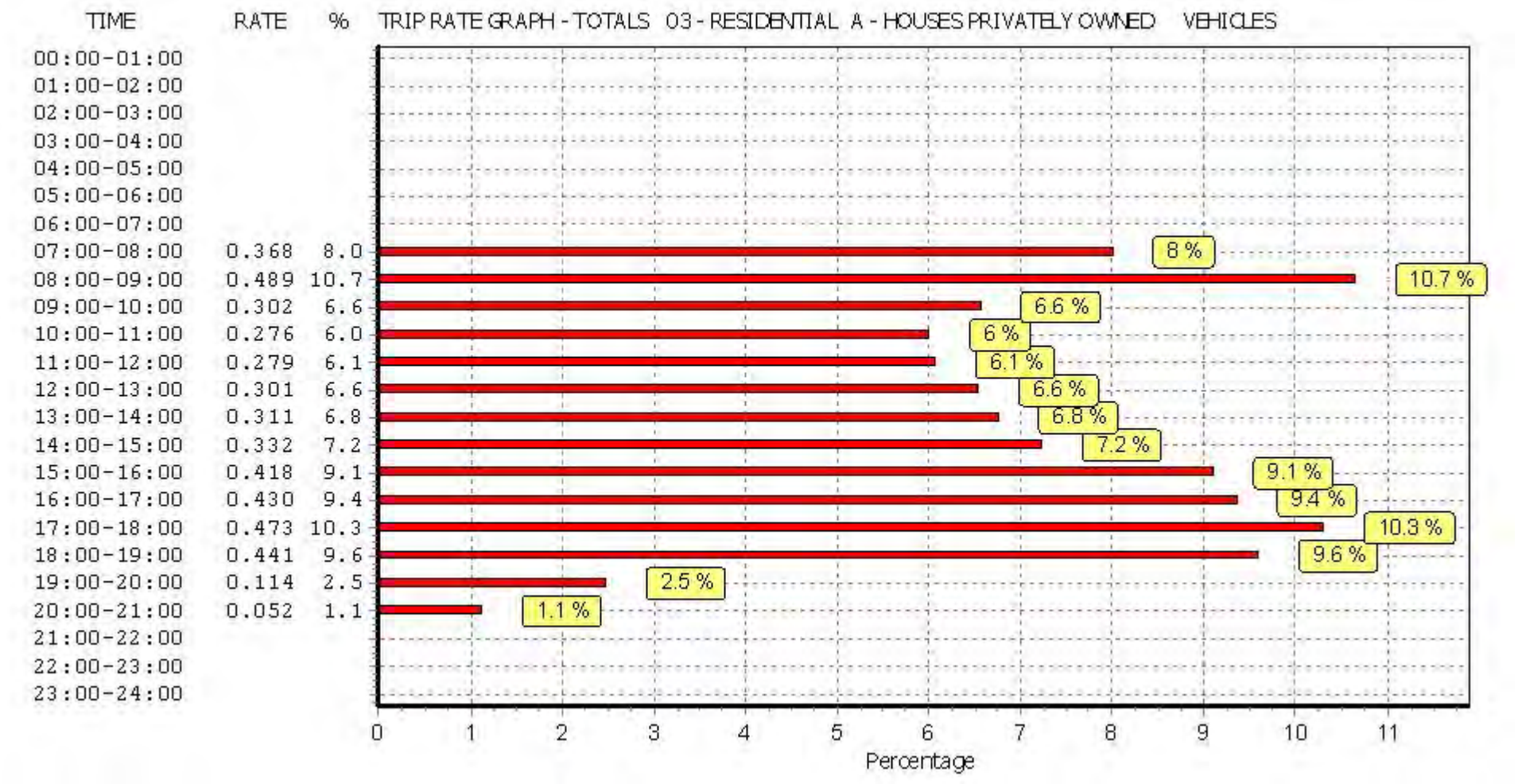

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