

Environmental Statement Non-Technical Summary (incorporating addendum information).

Toton West, Toton, Nottinghamshire.

On behalf of Bloor Homes Limited.

Date: 22/12/2025 | Pegasus Ref: P23-2379



Document Management.

Version	Date	Author	Checked/ Approved by:	Reason for revision
	22/12/25	SD	SD	

Contents.

1. Introduction.....	3
2. Purpose of the Environmental Statement.....	3
3. The Screening and Scoping Process.....	4
4. Assessment Approach.....	6
5. The Application Site and Context.....	7
6. Proposed Development.....	9
7. Consideration of Alternatives.....	9
8. Summary of Environmental Effects	13
9. Summary.....	34
10. Glossary.....	36

1. Introduction

- 1.1. This Non-Technical Summary (“NTS”) summarises the findings of the Environmental Statement (“ES”), including ES Addendum (December 2025), which addresses any likely significant environmental effects as a result of the Proposed Development on Toton West, Toton (“the Site”).
- 1.2. Pegasus Group, acting on behalf of the Applicant, Bloor Homes Ltd, submitted an ES relating to a planning application on the land known as Toton West, Toton, to Broxtowe Borough Council (BBC) in May 2025 (planning application reference 25/00371/OUT). The application sought outline planning permission for:

“up to 420 residential dwellings and associated open space and infrastructure.”

- 1.3. The ES was prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2017 (2017 No. 571) (as amended) and presented the findings of a series of studies that evaluated the potential significant environmental effects of the Proposed Development.
- 1.4. Following this submission, the ES and planning application documentation was circulated to both statutory and non-statutory consultees, with consultees providing formal responses to BBC where desired. Further discussions with stakeholders and BBC resulted in minor amendments to the Proposed Development, redline and updated information in relation to ecology, drainage, transport, air and noise. This resulted in an addendum to the ES being provided in December 2025 which reviewed the updated proposals against each technical discipline included in the original ES May 2025, providing updated assessment or commentary where necessary.
- 1.5. This NTS provides an up-to-date summary of the ES, including Addendum, in more accessible, non-technical language. Full details of the assessments can be found within the main ES document (Volume 1), the associated appendices (Volume 2) and the ES Addendum (December 2025).

Availability and Comments on the Planning Application

- 1.6. The full findings of the EIA are presented in a comprehensive set of documents that can be viewed online on Broxtowe Borough Council (BBC), at their offices (please contact BBC for details). Additional copies of the Non-Technical Summary (“NTS”) (no charge), ES Volume 1 (£100 plus postage) and the Technical Appendices (£150 plus postage) are available from Pegasus Group, 4 The Courtyard Church Street, Lockington, Derbyshire, DE74 2SL. The complete ES can also be obtained in CD or Pen drive format for £10 from the same address.
- 1.7. Comments on the planning application should be sent to BBC.

2. Purpose of the Environmental Statement

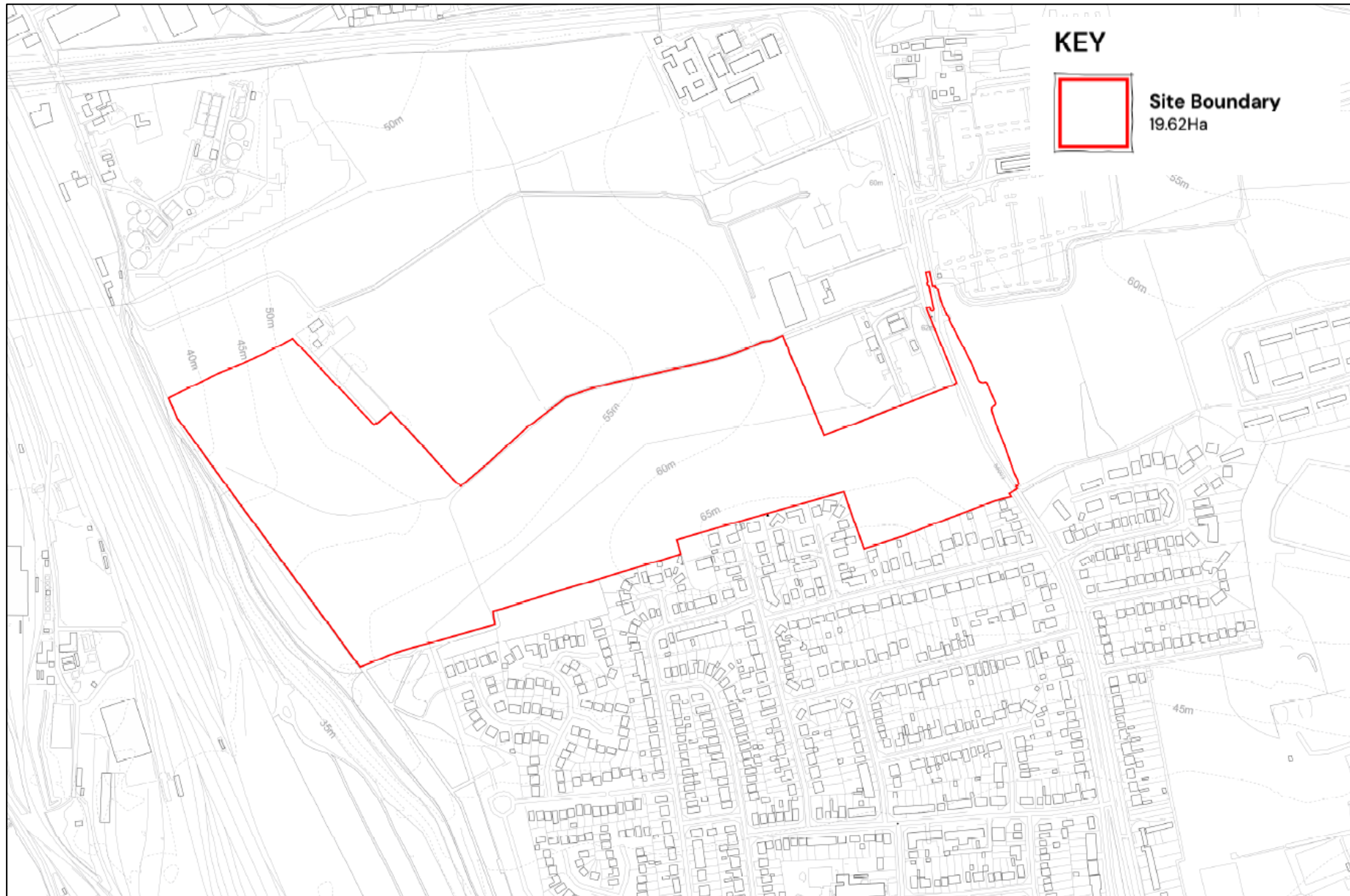
- 2.1. The EIA process is an interdisciplinary and multistep procedure to ensure that environmental considerations are included in decisions regarding projects that may impact the environment.
- 2.2. The ES comprises a series of studies which have been commissioned to address the environmental issues which are considered pertinent to the construction and operational phases of the Proposed Development. The NTS is provided to enable wider public dissemination of the environmental effects of the project (beneficial or adverse).

3. The Need for EIA and the Scoping Process

- 3.1. Whilst a formal request to the Local Planning Authority (LPA) regarding the need for an ES was not made, it is acknowledged there is the potential for significant cumulative effects with surrounding schemes which have the potential to come forward at a similar time to this Proposed Development. For this reason and to ensure a robust assessment, the Applicant has committed the Proposed Development to an EIA, the findings of which are set out within the ES and summarised in this NTS.
- 3.2. In order to determine the content of the EIA, the EIA Regulations make provision for, but do not statutorily require, an applicant to request that the Local Planning Authority (LPA) provide a written opinion as to the information to be provided (i.e. 'scoped') within the ES- in EIA terms, this is referred to as a Scoping Opinion. The Applicant has not requested a formal Scoping Opinion in relation to the Proposed Development, however, has instead followed the scope of that agreed in relation to the larger, separate 'Toton North' scheme, which lies in close proximity to the Site. Given the primary reason for undertaking an EIA is in relation to the potential significant cumulative effects that could occur with Toton North (and other potential schemes), this is considered appropriate and robust.
- 3.3. This has resulted in the ES having separate 'technical' chapters addressing the following topics:
- Socioeconomics and Health
 - Landscape and Visual
 - Biodiversity
 - Cultural Heritage
 - Transport and Access
 - Air Quality
 - Noise and Vibration
 - Flood Risk and Drainage
 - Contaminated Land and Ground Conditions
 - Soils and Agricultural Land
 - Climate Change
 - Lighting
- 3.4. All these chapters, and the ES as a whole, have been prepared by specialists in their respective fields so to ensure the completeness and quality of the ES in accordance with the EIA Regulations. Each one of these disciplines is discussed in turn within this NTS, summarising the work undertaken and the key findings. Further in-depth information is presented in the full ES.
- 3.5. The ES has been coordinated and managed by Pegasus Group. Pegasus Group is one of the founding members of the Institute of Sustainability and Environmental Professionals (ISEP) Quality Mark, which is a mark of excellence in EIA co-ordination and management.



Figure 1 Site Location Plan



4. Assessment Approach

- 4.1. The purpose of an EIA is to identify, describe and assess the likely significant effects of a Proposed Development on the environment. This could be effects caused by impacts from the Proposed Development (e.g. increase in traffic) or existing conditions that could impact a Proposed Development (e.g. existing air quality issues that could harm new users of a scheme).
- 4.2. **'Impact'** can be described as the action taken, and the **'effect'** is the following result of the action. Whilst each environmental discipline has slightly different ways of determining **'significance of effect'**, generally it can be gained by taking the **'sensitivity'** of the resource/receptor and balancing that against the **'magnitude'** (resource/receptor being the 'item' in question for example a residential house or representative viewpoint).

Magnitude	Sensitivity				
		High	Medium	Low	Negligible
	High	Major	Major	Moderate	Negligible
	Medium	Major	Moderate	Minor to Moderate	Negligible
	Low	Moderate	Minor to Moderate	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

- 4.3. **'Significance'** is then gained from balancing these elements. The table below shows an example of how this can be achieved. Significance is often measured as major, moderate, minor and neutral/negligible, with only certain levels of significance being considered 'significant' in EIA terms (generally major).
- 4.4. **'Mitigation'** is something that is put in place to avoid, minimise or manage negative environmental effects, many of which are purposely incorporated into the design of the proposals and are referred to as 'mitigation by design' or 'integral/embedded mitigation'. 'Additional mitigation' measures may also be proposed. **'Residual Impacts/Effects'** are those that remain after any mitigation has been incorporated. Of particular relevance to the proposals is the length of any effects i.e. temporary or permanent; short-term or long-term.
- 4.5. The ES also responds to the requirement in the Regulations to assess the **'Cumulative'/'In Combination'** effects of the Proposed Development. Within EIA, cumulative effects are generally considered to arise from 'Inter-project Cumulative Effects' (the combined effects of development schemes which may, on an individual basis be insignificant but, cumulatively, have significant effects); and 'Intra-project Cumulative Effects' (the combined effect of individual effects on a single receptor where it is deemed potentially significant).
- 4.6. Given the nature and intended longevity of the Proposed Development, decommissioning has not been considered as part of the EIA, as agreed through the scoping process. Accordingly, the EIA has focused on the potential likely significant effects of the Proposed Development during the construction and operational phases only.
- 4.7. The full ES, of which is summarised in this NTS, describes the current environmental conditions (known as the baseline); provides a description of the Proposed Development; and provides data to identify and assess any potential environmental effects which are likely to be of significance. Environmental effects have been evaluated with reference to definitive standards and legislation where available. Where it has not been possible to quantify effects, qualitative assessments have been carried out, based on available knowledge and professional judgement. The iterative design process has sought to avoid significant environmental effects where

possible by the inclusion of 'mitigation by design' or 'embedded mitigation measures'. Where this has not been possible, additional mitigation measures have been suggested so to reduce likely effects as far as possible. Residual effects are then concluded.

4.8. As explained earlier, whilst it is not considered that the Proposed Development in isolation is likely to result in significant effects in EIA terms, it is recognised that a number of other schemes in the vicinity of the Site have the potential to come forward at similar timescales. It has therefore been considered robust to undertake this ES, of which this NTS summarises. A review of potential other schemes has been undertaken; in summary the other schemes considered within the cumulative assessment are:

- Southfields Farm, Common Lane, Bramcote: 24/00066/FUL Construction and operation of two adjacent Battery Energy Storage Systems (BESS) facilities
- Land at Toton North: The construction of up to 880 dwellings, a link road (means of access only), local centre, country park, education provision (forest school) and associated infrastructure
- Land at Toton East: The construction of up to 155 dwellings with associated open space and infrastructure

5. The Site and Context

5.1. The Site extends to approximately 19.62 hectares (ha) and it located to the west of the B6003 Stapleford Lane, which leads northwards, and southwards, towards the suburbs of Stapleford, and Toton, respectively.

5.2. The majority of the northern extent of the Site is bound by hedgerow, beyond which are further field parcels in arable agricultural use. The north-eastern extent of the Site is bound by well-established trees and hedgerow, with an electricity transmission substation beyond. A series of electricity pylons and associated overhead lines cross the Site in an approximate north-east to south-west direction, from the electricity transmission substation. A Public Right of Way (PRoW), Footpath Beston FP17 runs through the centre of the Site and along the northern boundary, where it meets an offsite Bridleway.

5.3. The east of the Site includes a small stretch of the B6003 Stapleford Lane and associated highways land to the east, beyond which is the Land at Toton East site for which a planning application is currently live. The Site is accessed from Stapleford Lane. To the south, the Site is bound by sporadic hedgerow and tree line, beyond which are gardens and existing residential dwellings associated with the suburb of Toton. The south-western most extent of the Site is adjoined by Toton Fields Local Nature Reserve (LNR). The west of the Site is bound by the Toton Sidings Local Wildlife Site (LWS), beyond which lies the DB Toton Cargo Railway Terminus.

5.4. There are no statutory designated sites for nature conservation located within the Site. No sites of international conservation importance are located within a 15km radius and no sites of national conservation importance are located within a 2km radius of the Site; Attenborough Gravel Pits SSSI is located 2.2km south of the Site. One LNR lies within 1km of the Site; Toton Fields sits directly adjacent to the southern boundary of the Site. Twelve non-statutory sites for nature conservation are located within 1km of the Site, the closest of these to the Site is Toton Sidings LWS located adjacent to the western boundary.

- 5.5. There are no heritage assets located within the Site. The closest conservation area is the Sandiacre conservation area, c.500m to the north-west of the Site. The closest Scheduled Monument is 'Lock Up and Pinfold' (National Heritage List for England (NHLE) ref: 1007042), located c.1.6km to the north-west of the Site. There are eleven listed building within 1km of the Site, the closest is Bridge at Sandiacre Lock (HE ref: 1087974) c. 500m to the west.
- 5.6. The Site is located wholly within Flood Zone 1 which has the lowest chance of flooding. There are localised areas across the Site to be at risk of pluvial flooding. The largest areas are situated towards the south-east of the site. There is a field ditch present across the Site, situated in the western half and falling east to west.
- 5.7. The Site is not located within an Air Quality Management Area (AQMA). The nearest AQMA is 'AQMA No.2' 3.4km to the southwest of the Site.
- 5.8. The majority of the Site is Grade 3b land agricultural land (89%), which is not considered to be Best and Most Versatile (BMV) land. The remainder comprises Grade 2 (4%), Grade 3a (5%) and non agricultural land (2%).

6. Proposed Development

6.1. The Applicant seeks outline planning permission for the following description of development:

"The construction of residential development of up to 420 residential dwellings and associated open space and infrastructure"

6.2. The Proposed Development would provide a mix of land uses, as summarised in the below table and is based on the Parameters Assessment Plan at **Figure 2**.

Land Use	Quantum / Description
Built Form (residential 11.97ha; roads 1.03ha)	Up to 420 residential dwellings with varying heights, with the majority categorised 13m maximum height Above Finished Floor Level (AFFL) and then those dwelling proposed along the southern boundary categorised as 9.5m AFF. 69 dwellings are being sought in detail and 351 in outline. The area for built form also includes incidental open space, drainage area,s and infrastructure, streets, lanes and private drives.
Landscape / Green Infrastructure (public open space incl drainage 6.63ha)	Open space including retained vegetation, proposed landscaping, public open space, drainage features and infrastructure, pedestrian and cycle links and play spaces. This does not include incidental spaces within the built form parcel such as pocket park areas, and green areas at the entrance and southern boundary.
Access and Movement	Including one vehicular point of access into the Site. The PRoW crossing the Site will be retained and incorporated as part of the Proposed Development. An indicative pedestrian and cycle connection is shown.

6.3. Not all of the Site is proposed to comprise built form, with residential development parcels being focused within the central and eastern areas of the Site. A large area of public open space that includes a Locally Equipped Area for Play (LEAP) and Sustainable Drainage Systems (SuDS) in the form of an attenuation pond is proposed in the western-most extent of the Site.

6.4. Vehicular access to the Proposed Development would be via a new signal-controlled crossroads junction on the B6003 Stapleford Lane to the east of the Site, leading to a primary street that permeates the west and north of the Site, leading to streets and lanes to access the new development plots.

6.5. For an outline planning application where EIA is required, the description of the Proposed Development must be sufficient to enable the requirements of the EIA Regulations to be fulfilled, and in particular, to enable the potential significant effects of the Proposed Development to be identified. It would not be feasible to make a detailed application at this stage for the whole Site; therefore, to ensure that the Proposed Development evolves with the benefit of further approvals (i.e., reserved matters) 'Development Parameters' have been established and assessed within this ES. The Development Parameters detail all the limits necessary to define and fix those aspects of a development capable of having significant environmental effects. This will enable planning conditions to be drawn up and agreed to control the implementation of the Proposed Development.

6.6. The Parameter Plan shown at **Figure 2** is defined by:

- Land use zones, including areas for 'built form', 'landscape', and 'access and movement' parameters;

- Areas of built form including maximum building heights;
- Proposed points of access and retained Public Right of Way (PRoW) with approximate location of pedestrian and cycle links; and
- Green infrastructure and landscape elements including areas of open space, retained vegetation, indicative location of drainage areas, and play space.

6.7. In addition to the Plans set out, an Illustrative Masterplan forms part of the planning application submission (**see Figure 3**). The Illustrative Masterplan demonstrates one way in which the Proposed Development could be developed, based on the stipulated parameters and provides an indication on the likely form and layout, allowing informed assumptions to be made within the EIA.

Figure 2 Parameters Assessment Plan

KEY



Site Boundary
19.62Ha



Area of Detailed Access Design
0.66Ha

BUILT FORM PARAMETER



Built Form Height
Up to 9.5m
Includes incidental open space, landscaping, drainage areas and infrastructure, streets, lanes and private drives.



Built Form Height
Up to 13m
Includes incidental open space, landscaping, drainage areas and infrastructure, streets, lanes and private drives.



Approximate Location of New Terminal Tower

ACCESS & MOVEMENT PARAMETER



Vehicular Site Access
B6003 Stapleford Lane



Pedestrian & Cycle Connections
Indicative, to be delivered where feasible and where landowner agreement can be secured



Public Right of Way
Bridleway, off-site



Retained Public Right of Way
Footpath, upgraded



Public Right of Way to be Closed



Diverted Route of Public Right of Way
Footpath, upgraded



Potential Tramway Extension
15m easement



LANDSCAPE PARAMETER



Open Space
Except to allow for 'Access & Movement' Parameter.
Includes but not limited to:
- Proposed Landscaping
- Public Open Space
- Drainage Areas & Infrastructure
- Pedestrian & Cycle Links
- Play Spaces
- Services & Utilities
- Plot Access (e.g. shared private drives)



Retained Trees & Hedgerows
Except to allow for 'Access & Movement' Parameter



Trees & Hedgerows to be Removed
To allow for site access



Watercourse Alignment
Retained in-situ



Play Space
Approximate location



Drainage Basin
Approximate location

Figure 3 Illustrative Masterplan



7. Consideration of Alternatives

7.1. In The EIA Regulations (Schedule 4, paragraph 2) require for inclusion in an ES:

"A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects".

7.2. The main alternatives to the Proposed Development which the Applicant has considered include:

- The 'No Development' Alternative;
- Alternative Locations for the Proposed Development;
- Alternative Uses for the Site; and
- Alternative designs.

7.3. The 'No Development' alternative means leaving the Site in its current use as agricultural land. The beneficial and adverse effects outlined in this ES would not occur. There is no indication that in the absence of the Proposed Development, the use of the Site would substantially alter and therefore the environmental conditions of the Site would remain at its baseline level as described in the ES and **Chapter 3: The Site**. The Proposed Development seeks to provide up to 420 residential dwellings contributing to local housing provision. As such, the 'No Development' option was not considered by the Applicant. Further, as the Applicant can deliver the Proposed Development on the Site, and the Site is well placed for the development proposed, no alternative locations or uses were considered.

7.4. As part of the iterative EIA and design process, the design of the Proposed Development has evolved to take account of various environmental constraints and opportunities. In this respect, environmental desktop reviews, interim assessments of the emerging Proposed Development and relevant knowledge gained from environmental baseline surveys and consultation with consultees, have influenced the evolution of the proposals at an early stage in the design process. In adopting this iterative design process has enabled the early identification of mitigation measures which have then become inherent in the design.

7.5. The Design and Access Statement (DAS) that accompanies the planning application describes the design evolution and concepts. However, in essence, over the period of the development of the masterplan and the associated environmental work, the early design of the Proposed Development has been influenced by the key constraints and opportunities, which in turn have helped refine and structure the Proposed Development. The key constraints and opportunities at the Site were identified as:

- The Proximity to the B6003 to the east of The Site;
- The Site's existing topography;
- Proximity to the existing residential dwellings to the south;
- Existing network of PRow;

- Proximity to the Toton Freight Yard to the west;
- Potential development site to the north of the Site;
- Existing power line running from the south-west corner through the centre of the Site;
- Existing watercourse along the northern boundary;
- Water Treatment Plant located beyond the northern boundary;
- Sensitively respond to noise constraints from the B6003;
- Integrate a sustainable urban drainage strategy to improve the existing watercourse;
- The Site's proximity to the existing tram stations; and
- Deliver a variety of play opportunities including equipped play spaces and trim trails.

7.6. The preferred option which forms the Proposed Development conforms to the Development Parameters that have been subject to environmental impact assessment, as reported in this ES.

8. Summary of Environmental Effects

- 8.1. The remainder of this NTS intends to summarise the work undertaken for each 'technical' topic, under the headings of 'baseline', 'likely significant effects', 'mitigation measures' and final 'conclusion'. Further detailed information is presented in the full ES and Addendum ES which should be referred to for the comprehensive assessments.

8.2. Socioeconomics and Health

Introduction

- 8.2.1. This chapter of the ES has assessed the socioeconomic impacts arising from proposals that will deliver up to 420 residential dwellings on land at Toton West.

Baseline Conditions

- 8.2.2. A review of Broxtowe's socioeconomic context reveals the following:
- Between 2013 and 2023, Broxtowe's population has grown at a slower rate than that seen at a regional and national level. In this time the fastest growing age group were those aged 65+. This trend is projected to continue between 2018 and 2038.
 - Employment in Broxtowe increased at a slower rate than the local area, the East Midlands and England between 2015 and 2023.
 - The claimant count rate in Broxtowe is currently below the rate seen at a regional and national level.
 - Economic output in Broxtowe has increased at a slower rate than regional and national averages between 2012 and 2022.
 - The local area and Broxtowe have a higher proportion of its resident working age population with a degree of equivalent when compared to the East Midlands and England.
 - The Proposed Development is located across four Lower Super Output Areas (LSOAs)¹. Broxtowe O15A and O07A are located in the top 10% least deprived LSOAs in the country, Broxtowe O13B is located in the top 40% most deprived LSOAs in the country and Broxtowe O13E is located in the top 20% most deprived in the country.
 - When looking at health indicators in Broxtowe many are better when compared to national averages.

¹ A Lower Super Output Area (LSOA) is a small geographic area used in the UK for statistical purposes in socioeconomics assessments. Each LSOA typically contains around 1,500 people, or 650 households. These areas are used to collect and analyze data on various aspects like health, education, employment, and housing. This helps in understanding and comparing the social and economic conditions of different neighbourhoods.

- Levels of physical activity in Broxtowe amongst adults are higher than average when compared with the East Midlands and England. There was a higher proportion of children in Broxtowe that were active compared to the East Midlands and England.

Likely Significant Effects

8.2.3. With respect of the construction phase, the assessment indicates that the Proposed Development will have the following temporary effects:

- An estimated 169 jobs could be supported on-site and in the wider economy per annum during the build phase.
- Around £10.7million of gross value added per annum is estimated to be generated over the two-year build period, or £68million over the entire build phase (present value).

8.2.4. In EIA terms, this impact is considered to have a **significant beneficial effect**.

8.2.5. With respect to the operational phase, the assessment suggests that the Proposed Development will have the following permanent effects:

- An estimated 438 economically active and employed residents are estimated to live in the Proposed Development.
- The Proposed Development could generate an additional household expenditure of £6.7million per annum once it is complete and fully occupied, of which around £2.1million would be retained within Broxtowe.
- The dwellings could generate additional £1million per annum in Council Tax payments.
- The dwellings could generate an estimated £2.5million in first occupation expenditure.

8.2.6. In EIA terms, overall these impacts are considered to have a **significant beneficial effect** in the long term.

8.2.7. When considered cumulatively with other schemes proposed in the surrounding area the Proposed Development is anticipated to result in a **significant beneficial effect**.

Mitigation and Enhancement

8.2.8. Given the lack of secondary school provision in the area, a financial contribution may be provided, should this be required. This will be discussed as necessary with BBC.

Conclusion

8.2.9. Overall, the Proposed Development is considered to provide **significant beneficial effects** during the construction phase in relation to economic contribution. Once operational, **significant beneficial effects** are expected in relation to wider economic effects and open space.

8.3. Landscape and Visual

Introduction

- 8.3.1. A Landscape and Visual Impact Assessment (LVIA) has been prepared in relation to the Proposed Development.
- 8.3.2. The approach and methodology used in this chapter has been developed in accordance with industry guidance; the 'Guidelines for Landscape and Visual Impact Assessment', published by the Landscape Institute and Institute for Environmental Management and Assessment, 2013.

Baseline Conditions

- 8.3.3. The Site is located on the southwestern edge of Nottingham, close to the Nottinghamshire-Derbyshire border. It consists of arable land, with two main fields and a third field extending to the northwest. The land is mostly flat, with a slight slope towards the west into the Erewash Valley.
- 8.3.4. The Site is surrounded by trees, scrub, and hedgerows, with notable infrastructure nearby, including pylons and overhead powerlines. The wider area includes the settlements of Toton, Stapleford, Long Eaton, and Sandiacre, with open countryside to the north.
- 8.3.5. The Site lies within the Sherwood National Character Area, characterized by a mix of urban and rural features. Public footpaths and bridleways cross or border the site, offering views to the surrounding landscape. Overall, the landscape is shaped by both natural features and urban development, with views into the site being limited due to its location and the surrounding vegetation.

Likely Significant Effects

- 8.3.6. The Proposed Development is unlikely to cause significant long-term changes to the landscape character of the site or its immediate surroundings, as it is situated on the edge of an existing urban area. The design includes green spaces and open areas, which helps to blend it into the existing environment.
- 8.3.7. The most significant visual effects are expected to occur for people who are directly near or within the Site, such as users of public rights of way (PRoWs), local residents, and road users along the B6003. These effects are localized, mainly affecting those passing through or in close proximity to the Site.
- 8.3.8. The Site is not expected to impact the nearby Bramcote Conservation Area, as it is well-screened by trees and is not visually connected to the area. In terms of cumulative impacts, there may be a combined visual effect along the B6003, where both the Proposed Development and a nearby development (Toton East) could be visible together from the road.
- 8.3.9. Considering cumulative impacts, in general significant effects upon either the landscape or visual resource are not predicted, with the exception of receptors along the B6003 passing both Toton East and the Site simultaneously. From along this section of the route along the road, both the Proposed Development and Toton East would be experienced, either in combination or sequentially, at short / immediate distance and altering the existing views from open farmland to enclosed residential development with replacement roadside tree planting and hedgerow.

Mitigation and Enhancement

- 8.3.10. The mitigation strategy for the Proposed Development focuses on integrating the Proposed Development into the surrounding landscape through a robust landscape and green infrastructure strategy. The design process has been influenced by landscape and visual constraints to ensure that the Proposed Development respects the local context, with careful attention to scale, character, and vegetation retention.
- 8.3.11. Key mitigation measures include conserving the landscape character, retaining and enhancing existing vegetation, and incorporating substantial green infrastructure such as tree planting and enhancement proposals to strengthen tree belt, reinforce existing hedgerow and improve species diversity.
- 8.3.12. Sustainable drainage strategies and compatible ecological enhancements are also integral to the design. During construction, a phased approach will minimise vegetation loss, and construction lighting will be managed to avoid intrusion. Post-construction, long-term landscape management will ensure the success of mitigation measures, with a flexible management plan focusing on enhancing biodiversity, visual quality, and environmental sustainability.
- 8.3.13. A Code of Construction Practice (CoCP) included within a CEMP will be developed prior to the commencement of construction. The content of this document will aim to promote good Site management and ensure that environmental commitments are adhered to. Example measures that could be incorporated into the CoCP to avoid or reduce landscape and visual effects during construction are:
- Site clearance and removal of vegetation on a phased basis to limit the duration of impacts associated with losses of vegetation;
 - Maximising the retention of existing trees and vegetation in the design where possible, including any hedgerow sections along peripheral boundaries;
 - Protection of all existing vegetation proposed for retention for the duration of the construction period (including accommodation works and Site demobilisation) to ensure no vegetation is lost due to poor Site management or construction operations;
 - Replacement of any trees intended to be retained which may be lost unintentionally as a consequence of construction works;
 - A phased programme of planting and early implementation of planting and other landscape measures where there is no conflict with construction activities or other requirements of the Proposed Development;
 - Appropriate maintenance of planting and seeding works and implementation of management measures, to continue through the construction period as landscape works are completed;
 - Strict adherence to the Site boundaries of construction and storage compounds and construction access roads, including the use of well-maintained hoardings and fencing; and
 - Designing construction lighting to avoid unnecessary intrusion onto adjacent buildings and other land uses.

Conclusion

- 8.3.14. There would be an inherent degree of landscape and visual impact for any largely undeveloped settlement edge site seeking to deliver new residential development of this nature, although given the extent of influence from the settled edge and urbanising elements in the landscape, such impacts would be less than those relating to a site that has no existing urban influences.
- 8.3.15. The mitigation measures delivered as part of the design of the Proposed Development and described within this report have sought to address the likely effects in order to avoid, reduce or offset adverse impacts wherever possible.
- 8.3.16. The Proposed Development would give rise to some significant residual visual effects, however, these would be localized and principally focused within and adjoining the Site upon receptors of higher sensitivity. This is often the case with any proposed development on greenfield land.

8.4. Ecology and Nature Conservation

Introduction

- 8.4.1. This chapter assesses the likely significant effects of the Proposed Development on ecology and biodiversity during both the construction and operational phases. The assessment is based on baseline information gathered from desk-based resources and field surveys to understand the existing ecological conditions of the Site.

Baseline Conditions

- 8.4.2. The Site does not contain any areas of international or national conservation importance. The nearest sites are ecological and conservation importance are Attenborough Gravel Pits SSSI located 2.2km south, and the Toton Fields Local Nature Reserve (LNR) and Toton Sidings Local Wildlife Site (LWS), located adjacent to the Site.
- 8.4.3. The Site is predominantly arable with hedgerows with trees at the boundaries of the existing field compartments which represent features of greater ecological value within the Site. A small area of other neutral grassland, a dry ditch, a very small area of woodland, some scrub and a cluster of young trees also occur within the Site, which were are of lower ecological value. The trees do however offer intrinsic conservation value as they represent mature structural vegetation and potential value to fauna.
- 8.4.4. Bat and bird species within the Site are typical of the habitats present; intensively managed arable, urban edge land. No bat roosts or features suitable to support roosting bats were identified on Site. Five species of bat were recorded utilising the Site for commuting and foraging, given this they are considered to be of local level significance. Overall, the bird species present on Site are considered less than local significant, with arable specialist species considered locally significant due to limited extent of arable habitat locally. The Site supports moderate numbers of foraging woodpigeon, though these are an adaptable species. The Site also offers limited habitat for species like badgers, hedgehogs, and reptiles, but no evidence of their presence was found, and they are considered to be of less than local significance to the development.

Likely Significant Effects

- 8.4.5. During construction given the proximity of Toton Sidings LWS and Toton Fields LNR there is the potential for an adverse effect through accidental incursion and effects arising from

construction activities just as noise and dust. This is considered to have a **moderate adverse** effect. The effects on all other sites for ecology and conservation in the surrounding area are **negligible**. The Proposed Development has the potential to remove or damage habitat features on Site and to disturb local wildlife through construction activities. These are considered to have a **minor adverse effect (not significant)** prior to the implementation of mitigation measures.

- 8.4.6. Once operational there is the potential for Toton Sidings LWS and Toton Fields LNR to experience an increase in foot traffic and the effect on retained hedgerow, scrub, ditch and trees and wildlife using the Site could also result in **minor adverse (not significant)** effects due to some level of habitat loss as a result of the proposals. The creation of gardens and other green infrastructure through the Site would however change the resources available to local wildlife, offering greater diversity than the current arable land.
- 8.4.7. The cumulative effects of Southfields Farm BESS, Toton North and Toton East schemes have also been considered. Given the nature of the effects and the mitigation proposed on all of the identified sites in isolation no in combination effects are identified. With the exception of Toton North and Toton East for which there is the potential for a cumulative minor adverse in combination effect on specialist farmland birds, which is not considered significant.

Mitigation and Enhancement

- 8.4.8. The design of the Proposed Development prioritises minimising ecological impacts by focusing the majority of the development footprint on the existing arable land, which has lower ecological value, and preserving higher-value habitat features such as hedgerows, trees and woodland assets. The design of the development involves the creation of green space, most notably in the west of the Site which provides a buffer and separation from the built form from the more sensitive designated sites to the west. This green space will include creation of complementary habitats to those offsite habitats and will include grassland, woody planting and a SuDS feature.
- 8.4.9. By maximising hedgerow, tree and woodland retention and designing the green infrastructure of the Proposed Development to buffer and complement the adjacent designated sites of nature conservation interest, this will serve to buffer the offsite LWS / LNR, maintain habitat diversity and offer new permanent grassland, wetland and scrub habitats providing opportunities for bats, birds and other wildlife.
- 8.4.10. A detailed Construction Environmental Management Plan (CEMP) will ensure habitat protection during construction, and a long-term Landscape Environmental Management Plan (LEMP) will maintain and seek to enhance habitat diversity. Measures like bat roost and bird nesting features will be included, and sensitive landscape designs will protect the ditch and reduce littering. A lighting strategy will minimise impacts on sensitive habitats and species by using directional and low-level lighting, shielding luminaires, and creating dark corridors for bats. These measures aim to reduce the overall disturbance from construction and operation, ensuring a minimal adverse impact on local wildlife. These measures will result in an overall **Negligible – Minor Beneficial** impact upon the habitats and faunal assemblages in the long-term.

Conclusion

- 8.4.11. Through a combination of maximising retention of existing habitats of value and creation of green space, the provision of habitats including medium or greater distinctiveness habitat that will improve upon the existing network of habitats to support and improve connectivity for local wildlife having a **minor beneficial** effect on many receptors. **No significant effects** on Ecology and Biodiversity are predicted as a result of the Proposed Development.

8.5. Cultural Heritage

Introduction

- 8.5.1. This Chapter has considered potential effects upon the significance of archaeological and built heritage receptors. Specifically, it considers potential direct and indirect effects of the Proposed Development on the potential archaeological resource of the Site and relevant built heritage assets within its environs.

Baseline Conditions

- 8.5.2. A geophysical survey has been undertaken across the Site which recorded some anomalies adjacent to the southern boundary that are interpreted as forming a possible partially truncated Iron Age to Romano-British enclosure system. However, no further anomalies possibly dating to this period were recorded during the Geophysical Survey. The residual, archaeological potential for undiscovered Prehistoric to Romano-British remains within the wider Site is considered to be low to moderate.
- 8.5.3. The Site appears to have comprised part of the agricultural hinterland associated with the settlements of Toton and Stapleford from the Medieval period onwards and thus has some potential for artefacts and deposits associated with agricultural activities from the Medieval to Modern periods.
- 8.5.4. Desk-based research has also identified potential evidence of post-Medieval mining activities within the southern section of the Site, which takes the form of five small, slightly raised features interpreted as possible capped shaft-heads. Due to the presence of mature crops at the time of the site walkover, it was not possible to determine the presence of such remains, while the Geophysical Survey did not identify any possible below-ground remains associated with these features. However, as the land has subsequently been used for arable agricultural cultivation, including the use of modern farming machinery, it is likely that any such remains would have been disturbed or truncated.
- 8.5.5. There are no designated heritage assets located within the Site, while eleven Grade II Listed Buildings and one Conservation Area are located within the 1km study area.
- 8.5.6. By virtue of spatial and visual separation, including large-scale infrastructure associated with the intervening railway, intervisibility between the Proposed Development and all assets within the 1km study area would be wholly screened. Taken alongside the lack of any known historic or functional relationship with the Site, beyond forming part of the wider agricultural landscape to the east, it is considered that the Proposed Development would not alter any aspect of the setting of any of the assets that contribute towards their overall significance. No harm would therefore be anticipated to result via a change in setting. All designated heritage assets within the 1km study area have therefore been excluded from any detailed assessment.

Likely Significant Effects

- 8.5.7. Two potentially significant effects have been identified as resulting from the Proposed Development, if considered in isolation and unmitigated. This comprises the removal of buried remains associated with the possible Iron Age to Romano-British enclosure system and other previously undiscovered Pre-historic to Romano-British remains which have the potential to be of up to Moderate Value in EIA terms.

- 8.5.8. Consideration has also been given to the potential cumulative impacts with Southfield BESS scheme, Toton North and Toton East proposed schemes. There is no evidence to suggest that significant buried remains exist within these sites, with neither sites nor the Proposed Development anticipated to result in Significant Effects with respect to archaeology. While it is acknowledged that previously undiscovered buried remains may extend beyond the requisite application boundaries, it is reasonable to assume that, if planning permission were to be approved, appropriate mitigation measures would be carried out in line with national and local planning policy requirements, including evaluation and recording (as required). The individual effects of each scheme would not therefore result in additional impacts to the buried archaeological resource when considered in combination. With regard to direct and indirect effects during the construction and operational stages, no built heritage receptors have been identified as being sensitive to the Proposed Development. As such, no cumulative effects would be anticipated in combination with any of the identified cumulative developments.

Mitigation and Enhancement

- 8.5.9. Further archaeological investigations will be required before the development proceeds. These investigations will help determine the presence, extent, and significance of any buried archaeological remains. Based on these findings, specific mitigation strategies will be developed to manage any identified impacts on the archaeological resource.

Conclusion

- 8.5.10. This Chapter has identified **no significant** effects in EIA terms with the implementation of mitigation with respect to Cultural Heritage.

8.6. Transport and Access

Introduction

- 8.6.1. The Transport and Access chapter of the ES assesses the potential likely significant effects of the Proposed Development on vehicular traffic flows, severance, pedestrian delay, driver delay, pedestrian amenity, accidents and safety, fear and intimidation, hazardous loads and dust and dirt arising from vehicles associated with the Proposed Development travelling along the road network. The assessment has been carried out in accordance with the Institute of Environment and Assessment (IEMA) guidance 'Environmental Assessment of Traffic and Movement' (herein referred to as 'the IEMA Traffic Guidance'). The IEMA Traffic Guidance recommends that the competent traffic and movement expert applies two broad 'rules of thumb' as criteria to determine what 'links' (i.e., where two or more roads meet) are incorporated into the assessment:

- Rule 1: Include highway links where traffic flows will increase by 30% (or the number of HGVs will increase by 30%); and
- Rule 2: Include highways links of high sensitivity (e.g., in proximity to a school, or a hospital) where traffic flows have increased by 10% or more.

Baseline Conditions

- 8.6.2. The Site is located to the west of the B6003 Stapleford Lane, with existing public footpath connections and links to nearby foot/cycle routes in all directions (north, south, east, and west). The Site is well-served by public transport, with nearby bus stops and tram stops, including the Toton Lane tram Park and Ride site, providing good access to public transport options.

8.6.3. To the north of the Site the B6003 forms the northern and southern arms of a signal-controlled roundabout junction with the A52, known locally as the A52 Bardills roundabout. The A52 Brian Clough Way forms part of the Strategic Route Network (SRN), managed by National Highways. Regionally, the A52 runs west from the Bardills roundabout to Derby (15km to west) and east to the edge of Nottingham city centre (approx. 11km), before forming a ring road around the west and south of Nottingham and continuing east towards Grantham. There are a number of major highway junctions along the A52 corridor in the vicinity of the Site, including M1 Junction 25 to the west of the Site and the A52 Bramcote roundabout to the east.

8.6.4. The existing footway network along Stapleford Lane provides walk routes to existing facilities and amenities in Toton, to the south, and controlled pedestrian/cycle crossing facilities are provided at the B6003/Park and Ride junction and A52 Bardills roundabout to the north.

8.6.5. The Toton Lane Park and Ride site and tram line is situated less than 500m to the north-east of the Site. The Park and Ride site is served by a car park with over 1,400 car parking spaces.

Likely Significant Effects

8.6.6. During the construction phase, it is expected that construction traffic will be routed via the B6003 and A52. The additional traffic is anticipated to increase traffic volume by less than 10%, which is considered a **negligible** impact. Once the Proposed Development is completed, none of the transport links will experience an increase in traffic greater than the 10% threshold. Therefore, the impacts on issues such as severance (disconnection of communities), driver delay, pedestrian delay, fear and intimidation, and safety are all considered **negligible** and below the level that would require further detailed assessment.

8.6.7. The cumulative impact of committed developments and wider strategic growth at Toton & Chetwynd has been taken into account within the model used in the assessment and no cumulative issues have been identified. All committed developments are contained within the model and as such, the cumulative assessment is inherent in the above conclusions. Cumulative effects as a result of the construction and operation phases are negligible and not significant.

Mitigation and Enhancement

8.6.8. A CEMP and a Construction Traffic Management Plan (CTMP) will be produced. The CEMP will address the potential adverse effects of the construction on the local surrounding highway network in advance of construction. This will encompass all the necessary measures required to ensure that works potentially affecting the highway are adequately addressed. The CTMP will be prepared to establish how traffic flows on the B6003 will be managed during construction of the new access junction, including signage, temporary speed limits etc.

8.6.9. The Proposed Development will provide a set of mitigation measures which are:

- Provision of a new highway route and access junction to the B6003 Stapleford Lane;
- Diversion of, and improvements to, an existing PROW route that runs along the northern and western boundaries of the Site;
- Mitigation scheme at the B6003 Toton Lane/A52 Brian Clough Way/Toton Lane roundabout (Bardills roundabout);
- Mitigation scheme at the B6003 Stapleford Lane/Swiney Way/Banks Road traffic signal-controlled junction; and,

- Travel Plan.

Conclusion

- 8.6.10. **No significant** effects are anticipated as a result of the Proposed Development in combination with other existing or approved schemes in the locality of the Site.

8.7. Air Quality

Introduction

- 8.7.1. This assessment has considered the impacts of the Proposed Development on local air quality in terms of dust and particulate matter emissions during construction and emissions from road traffic generated by the completed and occupied development.

Baseline Conditions

- 8.7.2. The Site is not located within an AQMA and is approximately 3.4km southwest from the nearest AQMA, named 'AQMA No.2', which is located in the neighbouring Nottingham City Council's (NCC's) administrative area.
- 8.7.3. Monitored concentrations in the vicinity of the Proposed Development show pollutant concentrations have been below the national Air Quality Objectives in 2023, the most recently available year of monitoring data.

Likely Significant Effects

- 8.7.4. During construction, traffic emissions are expected to be below the Environmental Protection UK (EPUK) and Institute of Air Quality Management (IAQM) screening criteria. All construction traffic movements will be managed through a Construction Traffic Management Plan (CTMP). As such, the residual effect for construction traffic emissions can be considered **Negligible** and therefore, **Not Significant**.
- 8.7.5. A qualitative assessment of dust and particulate matter (PM10) effects on human health and ecology indicated a high risk without mitigation. However, with the implementation of a Construction Environmental Management Plan (CEMP) and good site practices, the residual effect from construction dust is reduced to **Negligible**, meaning it is **Not Significant**.
- 8.7.6. Once operational, the assessment has also demonstrated that pollutant concentrations will be well below the Air Quality Objectives at all existing receptors in 2030, which serves as a worst-case assumption of the Proposed Development opening year in 2041. The results from the detailed assessment of operational transport emissions show that the impact on all existing sensitive receptors is anticipated to be **Negligible** for all pollutants, and therefore **Not Significant**.
- 8.7.7. There are not expected to be any significant cumulative and in combination effects from the construction or operational phases when considering the cumulative schemes of 'Land at Toton East', 'Land at Toton North' (operational and construction phase) and the Southfields Farm BESS facility (construction phase only; the operational phase hasn't been assessed due to the nature of the Southfields Farm BESS scheme).

Mitigation and Enhancement

- 8.7.8. Construction phase emissions to air will be controlled by a CEMP and CTMP. The CEMP will contain a variety of measures such as ensuring that engines aren't left to idle. The CTMP will form part of the CEMP and will contain measures to avoid unnecessary emissions to air, for example by phasing deliveries to the Site to avoid a potential build up of traffic on the road network.
- 8.7.9. No mitigation measures for the operational phase are required, as no significant effects have been identified.

Conclusion

- 8.7.10. The overall construction and operational air quality effects of the Proposed Development are judged to be **'Not Significant'**. It is concluded that the proposed package of mitigation will ensure that the Proposed Development is acceptable and that there will be no adverse significant effects to air quality.

8.8. Noise and Vibration

Introduction

- 8.8.1. An acoustic survey has been carried out to quantify the existing baseline sound climate. Traffic data has been used to predict the change in noise levels from the existing road network on existing receptors.

Baseline Conditions

- 8.8.2. Environmental noise surveys conducted in December 2023 show the main source of noise on the Site comes from road traffic on nearby roads, with localised noise from train pass-bys, trains idling, and occasional train horns along the western Site boundary. No audible noise was detected from the park and ride, electrical sub-station, or water treatment works during the survey.
- 8.8.3. Traffic data indicates that road traffic in the area has increased slightly in recent years, with projections showing small increases in the future. However, any changes in noise levels due to traffic are expected to be minimal and not significant enough to cause major disturbances.
- 8.8.4. Overall, the baseline environmental conditions, including noise, are influenced mainly by road traffic.

Likely Significant Effects

- 8.8.5. Noise and vibration generated during the construction phase of the Proposed Development are likely to occur only for short periods of time, and would be highly dependent on the construction activities and location of these at the time; as such, this is considered to equate to a potentially moderate adverse temporary effect, when activities are taking place in close proximity to these receptors. For the remainder of the time when activities occur at greater distances from the high sensitive receptors, lower levels would be anticipated.
- 8.8.6. For the operational phase of the Proposed Development, when looking at traffic increases cumulatively, and allowing for general growth, increases in road traffic noise levels are, at worst,

a negligible magnitude of impact on high sensitivity receptors, corresponding to a **negligible effect**.

- 8.8.7. Site suitability in terms of noise is based on providing suitable internal noise levels in dwellings/apartments. Achieving suitable internal noise levels is considered feasible. Further, the detailed design of the Proposed Development should ensure that gardens are located (where possible) behind dwellings where they will benefit from noise attenuation. The Site is suitable for the Proposed Development in noise and vibration terms.
- 8.8.8. The Proposed Development has been assessed cumulatively with the Southfields Farm BESS scheme, Toton North and Toton East. The assessment of construction and operational phase road traffic noise concluded cumulative effects with the identified schemes would be **negligible** and **not significant**. Site suitability in terms of noise and vibration when considered cumulatively would remain as assessed in isolation which is **not considered to result in significant effects**.

Mitigation and Enhancement

- 8.9. Prior to construction, a CEMP will be implemented on the Site which will contain measures to address construction effects relating to noise and vibration. To reduce levels of noise and vibration on the nearest sensitive dwellings during the construction phase, measures such as those set out below will be contained within the CEMP to minimise the potential for significant effects:
- Noisy-construction work associated with the Proposed Development is to be restricted to the following hours:
 - Monday to Friday 08:00. to 18:00;
 - Saturday 8:00. to 13:00; and
 - No working or noisy activities during Sundays and Bank Holidays.
 - Night-time or 24-hour working is to be agreed with BBC if required.
 - The Site would be surrounded by fencing or hoarding, where possible. These are to be to the required height and density appropriate to the noise sensitivity of the location in order to reduce noise breakout from the Site. All gates into the Site are to be controlled to give the minimum amount of time open for passage of vehicles in order to minimise stray noise to external surrounding areas;
 - Fixed items of construction plant are to be electrically powered rather than diesel or petrol driven, wherever possible. Where this is not practicable suitable attenuation measures are to be provided, such as acoustic enclosures;
 - Machines that are in intermittent use are to be shut down when not in use. Where machinery is in continuous use consideration is to be given to housing it in a suitable acoustic enclosure;
 - Noisy plant and equipment are to be sited as far away as is possible from residential or other noise sensitive properties. Barriers such as soil banks, materials stockpiles, Site portacabins, and proprietary acoustic barriers are to be employed to ensure that the impact of Site activities on noise sensitive premises is kept to a minimum;

- Care is to be taken when loading and unloading vehicles, dismantling scaffolding, or moving materials to reduce noise impact;
- All deliveries of materials, plant and machinery to the Site, and any removals of waste or other material is to take place within the permitted hours; and
- Employees, sub-contractors, or other persons employed on the Site are not to cause unnecessary noise from their activities. Excessive revving of engines, music from radios, shouting and noisy behaviour should all be avoided.

8.10. With regard to the operational phase, no specific embedded mitigation for operational road traffic noise is considered to be necessary, as no significant effects were identified for the operational phase.

Conclusion

8.10.1. The Site is suitable for development, and significant noise and vibration effects during the operational phase are unlikely. Temporary and transient adverse effects may occur during the construction phase, particularly for receptors located very close to the Site. However, these effects can be mitigated through the CEMP, which will minimise noise and vibration impacts as much as possible. The Proposed Development is not expected to result in significant noise or vibration effects during its operation.

8.11. Flood Risk and Drainage

Introduction

8.11.1. This section of the NTS considers the effects of the Proposed Development on water resources, flood risk and drainage during both the construction and operation phases.

8.11.2. The potential for flood risk is also examined in accordance with national guidance and the requirements of the Environment Agency (EA). More technical aspects of the drainage strategy for the Proposed Development are covered in the Flood Risk Assessment and Drainage Strategy, accompanying the planning application.

Baseline Conditions

8.11.3. The Site is located entirely within Flood Zone 1, which comprises the lowest risk of flooding from rivers or sea.

8.11.4. The Site is currently in agricultural use, there is a field ditch present across the Site, situated in the western half and falling east to west. This field ditch follows the natural topography of the Site and conveys surface water flows westwards to a Severn Trent Water (STW) sewer, which culverts beneath Toton Sidings to the west.

8.11.5. The Site is not situated within a Source Protection Zone, which are designated for the purposes of safeguarding drinking water quality.

8.11.6. There are no Main Rivers located on Site. The River Erewash (Main River) flows approximately 600m west of the Site, located at a significantly lower elevation, circa 36m AOD (4.58m lower than the lowest level of the Site). The Erewash canal is located west of the main river.

- 8.11.7. There are no recorded instances of sewer, fluvial, pluvial or groundwater flooding on Site. There are also no records of pollution incidents present on the Site.
- 8.11.8. There are no public foul sewers located within the Site boundary.

Likely Significant Effects

- 8.11.9. During construction, without mitigation, onsite flood risk could be affected as a result of an increase in vehicles present which could lead to soil compaction, change in flow routes and potential pollution entering the ground. Prior to mitigation these effects could be potentially significant.
- 8.11.10. During construction, existing foul water sewers could be subject to local increases in foul flows within the existing system which could lead to sewer flooding. The presence of construction workers and welfare facilities would generate additional foul flows on top of what is already present. Prior to mitigation this could potentially lead to significant effects.
- 8.11.11. During operation, the onsite field ditch and culverted watercourse adjacent to the Site could be subjected to an increased flood risk as a result of the Proposed Development. Developing the Site would increase the impervious areas, which prior to mitigation would likely overwhelm the existing ditch and culverted watercourse as they would not have sufficient capacity to attenuate the additional runoff. The onsite field ditch and culverted watercourse could also be subject to an increase in pollutant given the increase of impervious surfaces and the usage of road vehicles as a result of development. Prior to mitigation these effects could be potentially significant.
- 8.11.12. During operation, existing foul water sewers could be negatively impacted due to the increased flows within the existing system. Exceeding sewer capacity with additional foul flows could cause sewer flooding in connected properties.
- 8.11.13. The cumulative assessment has considered the Southfields Farm BESS scheme, Toton North and Toton East. In regard to Toton North and Toton East similar mitigation measures are proposed for these schemes result in a negligible impact on the existing surface water systems, therefore no cumulative effects have been identified. With regard to Southfield BESS the proposed drainage would not discharge any surface water runoff into the surrounding drainage system. Therefore, would not provide a cumulative impact on the surrounding water receptors with the Proposed Development.

Mitigation and Enhancement

- 8.11.14. A suitable CEMP/Construction Surface Water Management Plan (CSWMP) would be prepared and adhered to which will ensure that any impacts from construction will be minimised to a satisfactory level, as any spillages or similar that would affect the local receptors would be contained.
- 8.11.15. Pollution mitigation can be achieved by including specific features in the drainage strategy that can remove pollutants and sediment from runoff, which in turn would protect the water quality of the field ditch and culverted watercourse.
- 8.11.16. SuDS are also proposed to be sized to be able to hold runoff sufficiently during large rainfall events. These features would discharge attenuated water at a rate that is agreeable with the Lead Local Flood Authority (LLFA), or the EA.

- 8.11.17. The topography of the Proposed Development would be regraded to convey flows naturally towards the drainage attenuation basin, and features such as gullies would be positioned to ensure surface water runoff is retained within the Site and does not pool in any location.
- 8.11.18. Seven Trent Water (STW) have confirmed that would look to upgrade the existing public foul water sewers to accommodate the Proposed Development. The Proposed Development would also be constructed with a sufficient foul water sewer system in order to provide the required capacity from flows generated by the Proposed Development.
- 8.11.19. Following the implementation of these mitigation measure, the Proposed Development would **not result in any significant effects** on water receptors and is anticipated to provide either **negligible or minor beneficial effects** (not significant).

Conclusion

- 8.11.20. Following the implementation of suitable mitigation measures, the Proposed Development would **not result in any significant effects** on water receptors and is anticipated to provide either **negligible or minor beneficial effects (not significant)**. Aspects of the Proposed Development would provide betterment in comparison to the existing Site conditions.

8.12. Contaminated Land and Ground Conditions

Introduction

- 8.12.1. The Contaminated Land and Ground Conditions chapter of the ES has assessed the likely significant effects of the Proposed Development with respect to ground conditions and contamination during the construction and operational phases of the development and any necessary mitigation measures.
- 8.12.2. This assessment has been carried out taking account of contaminated land legislation and guidance following a risk-based approach; taking account of the developed Conceptual Site Model (CSM)², which considers reasonable source (contaminant)–pathway–receptor linkages. Contamination is only considered to be a potential risk to the receptors if there is a reasonable Source–Pathway–Receptor³ linkage.

Baseline Conditions

- 8.12.3. The following summary of the baseline conditions at the Site is based on a site walkover and review of published geological mapping, historical mapping and site-specific Landmark environmental data.
- 8.12.4. The Site currently comprises a large portion of an agricultural field. A former structure was present in the northeastern area of the Site; this has been removed; however, the hard standing associated with the structure remains on the Site. A drainage ditch passes through the

² A 'Conceptual Site Model' (CSM) is a structured representation of the environmental conditions of a construction site, including the relationships between the potential sources of contamination, pathways, and receptors. It is a fundamental tool used to understand and communicate the potential environmental and human health risks associated with a construction site.

³ An example of a source would be the origin of a spill, for example a broken pipe, or failed storage container. The 'pathway' is the cause or route that a spill may travel, such as soaking through soil, or entering a drain. Finally, the receptor is where the spill may end.

northwestern area of the Site. Two electricity pylons and a series of wooden electricity poles are present on Site; these are connected by overhead cables which cross the Site. A public footpath passes through the Site.

- 8.12.5. Geological information has been reviewed, which indicates the presence of superficial deposits⁴ beneath the Site; however, deposits of Alluvium are indicated to the west of the Site, these may encroach the western area of the Site. The geological information indicates the majority of the Site to be underlain by bedrock comprising the Mercia Mudstone Group. No man-made deposits are indicated to be present at the Site, however, a significant area of Made Ground is indicated to the immediate west and northwest of the Site; this incorporates an area of Infilled Land associated with a former section of river channel. Potential sources of contamination may be present at the Site associated with any localised Made Ground; the former on-Site building and the agricultural use of the Site.
- 8.12.6. Potential sensitive receptors have been identified at the Site, these comprise human health (e.g., the health of construction personnel, future residents, visitors, employees and occupants of neighbouring properties), controlled waters (i.e., surface watercourses, the underlying aquifer) and new built form associated with the Proposed Development. These sensitive receptors are common in all such developments.

Likely Significant Effects

- 8.12.7. The work undertaken to date has not identified anything which cannot be mitigated against or would result in likely significant effects.
- 8.13. During the construction phase, as with any proposed development on similar site conditions, there is the potential for construction activities to effect human health, this includes potential contamination present in soils, the use of machinery, ground gases and risk of pollution to controlled waters. However with implementation of standard best practice construction methods this risk can be effectively managed and on review of the baseline data, nothing has been identified of concern.
- 8.13.1. A comprehensive programme of further exploratory works would be carried out on Site which is a standard approach for this type of Site. The findings of the intrusive works would recommend any mitigation / remediation measures (if required). Any remediation measures would be implemented prior to the operation of the built form.
- 8.13.2. When considering the Proposed Development in combination with identified cumulative schemes within the surrounding area the cumulative effects are considered to be negligible, following the implementation of any required mitigation measures.

Mitigation and Enhancement

- 8.13.3. A comprehensive programme of further exploratory works would be carried out at the Site to establish the ground conditions and the presence and extent of any contamination, which is standard for this type of Site. The findings of the intrusive works would recommend any mitigation / remediation measures (if required). The further exploratory investigation works

⁴ Superficial deposits (or surficial deposits) refer to geological deposits typically of less than 2.6 million years old for the Earth.

would also include a detailed assessment of the ground to inform foundation and infrastructure designs.

Conclusion

- 8.13.4. The residual effects with respect to ground conditions and contamination are considered **negligible** as a result of the Proposed Development, following implementation of any required mitigation measures.

8.14. Soils and Agricultural Land

Introduction

- 8.14.1. The Soils and Agricultural Land Chapter of the ES focuses on the agricultural land quality of the Site and the potential effects of the Proposed Development upon agricultural resources during the construction and operational phases of the Proposed Development. The grade (quality) of the agricultural resources and a description of the associated soil resources are reported.
- 8.14.2. Agricultural land quality is assessed by use of Natural England's Agricultural Land Classification (ALC) system. The ALC system divides land into grades 1-to-5, with grade 3 divided into subgrades of 3a and 3b. The National Planning Policy Framework (NPPF) (2024) places Grades 1, 2, and subgrade 3a within the definition of the 'Best and Most Versatile' (BMV) agricultural land.

Baseline Conditions

- 8.14.3. The Site is made up of a mixture of permeable loams and slowly permeable soils. They give BMV land of Grade 2 (0.8 ha), Subgrade 3a (0.9 ha) and Subgrade 3b (16.8 ha) quality. The remainder of the Site comprises non-agricultural land.

Likely Significant Effects

- 8.14.4. The Proposed Development has the potential to cause the loss of all topsoil within the development area and compaction of the subsoil within landscaping areas of the Site. This has the potential to result in a major adverse effect prior to mitigation.
- 8.14.5. The Proposed Development is estimated to result in the negligible magnitude loss of BMV Grade 2 (0.8 ha) and Subgrade 3a (0.9 ha) agricultural land. This is considered to result in a permanent **minor adverse** impact that is not significant.
- 8.14.6. Soil and agricultural land loss from an individual site should be considered on a site-by-site basis (against the benefits of the scheme being assessed) and therefore it is not considered there are any relevant cumulative effects to the Proposed Development.

Mitigation and Enhancement

- 8.14.7. The soil resources can be protected through adherence to a Site-specific Soil Management Plan (SMP) that can form part of a wider CEMP. This will reduce the potential effect of the Proposed Development to **negligible**.
- 8.14.8. There is no possible mitigation for the permanent loss of agricultural land, however given the limited amount that will be lost is considered **minor adverse**.

Conclusion

- 8.14.9. The Proposed Development will have a **negligible** effect to soil resources and a **minor adverse** effect to agricultural land quality, therefore the proposals will not result in significant effects to agricultural land quality.

8.15. Climate Change

Introduction

- 8.15.1. This chapter of the ES has assessed the effects that may arise as a result of Climate Change on the Proposed Development (referred to as the Climate Change Resilience (CCR) Assessment') and the effects of Greenhouse Gas (GHG) emissions associated with the Proposed Development (referred to as the 'GHG emissions assessment').

Baseline Conditions

- 8.15.2. For the CCR Assessment, a baseline survey has been undertaken to include the regional climatic conditions for the Midlands, covering temperature, precipitation, sunshine and snowfall. Local climatic conditions and historical weather data were also considered, along with recent weather data.
- 8.15.3. For the GHG Emissions Assessment, local, regional and national emissions have been compared for relevant sectors, including vehicular emissions from road.
- 8.15.4. A Future Baseline / 'Do Nothing' Scenario was also considered.

Likely Significant Effects

- 8.15.5. The significance of potential impacts on receptors as a result of climate change depends on the likelihood of them occurring and the consequence if they do occur.

Resilience of the Proposed Development to Climate Change

- 8.15.6. No significant effects are expected during the construction phase. Furthermore, mitigation measures would be incorporated into a CEMP for each phase of the construction of the Proposed Development, which would greatly reduce potential impacts. Additional mitigation measures have been recommended to bolster resilience in the operational phase, however most measures are embedded into the scheme design.

Influence of the Proposed Development on Climate Change

- 8.15.7. For the construction phase of the Proposed Development, an indicative assessment of embodied carbon was undertaken. The total amount of GHG emissions anticipated to be emitted during the construction periods is considered to have a permanent moderate adverse effect prior to the implementation of mitigation. However, with the incorporation of mitigation measures such as the selection of low-carbon material and targeting more stringent embodied carbon target, are expected to reduce this effect to minor adverse which is not considered significant.
- 8.15.8. For the operational phase of the development a quantitative assessment of vehicular emissions and energy production has been undertaken. The total yearly amount of GHG emissions is considered to have a permanent moderate adverse effect prior to mitigation. However, with the

implementation of mitigation measures such as sustainable transport options, solar energy systems, and air-source heat pumps this effect is reduced to minor adverse which is not considered significant in EIA terms.

Cumulative Assessment

- 8.15.9. No significant cumulative effects are anticipated as it is expected that any committed developments which gain planning approval would need to demonstrate that national and local policies related to flood risk and drainage, including accounting for climate change, are met prior to planning permission being granted.

Mitigation and Enhancement

- 8.15.10. Mitigation measures have been embedded into the design of the Proposed Development, these include retaining trees and hedgerows, helping with flood alleviation and a drainage strategy which is designed to account for climate change. Sustainable transport options, such as walking and cycling, are also incorporated to the design of the development.
- 8.15.11. The impacts of climate change on the Proposed Development during the construction phase would be managed through a CEMP which would contain detailed procedures to minimise any potential impacts associated with extreme weather events, such as the appropriate storage of materials and provision of appropriate equipment and shelter for construction workers. Other measures such as using fuel efficient vehicles and turning equipment off overnight would also be incorporated to reduce GHG emissions.
- 8.15.12. Additional mitigations including a selective procurement of materials to reduce embodied carbon, with a Site Waste Management Plan, Travel Plan, Operational Waste Management Plan and the implementation of low carbon technologies proposed for operation. This would involve the procurement of high quality, durable, ethical and sustainable materials (from local sources where appropriate).

Conclusion

- 8.15.13. During both the construction and operational phases of the development with the incorporation of mitigation measures **no significant effects are anticipated on either climate change resilience or Greenhouse Gas emissions.**

8.16. Lighting

Introduction

- 8.16.1. This assessment assessed the potential significant effects of the artificial lighting for the Proposed Development on the environment.

Baseline Conditions

- 8.16.2. The area surrounding the Site is a broad mixture of commercial uses and suburban settlement interspersed with agricultural land. There is a large amount of existing artificial lighting in the area for commercial, residential and highway network purposes. This existing lighting is visible across the landscape and is contributing to the brightness of the surrounding area.
- 8.16.3. Although there is a large presence of existing lighting surrounding the Site, there are large areas of relative darkness also within the Site, therefore although several of the receptors to

lighting identified (e.g., human and ecological receptors) are subjected to levels of existing lighting, they will not all be experiencing significant existing direct effects of lighting.

Likely Significant Effects

- 8.16.4. The Proposed Development is unlikely to result in significant effects both in isolation and cumulatively with other schemes in the surrounding area. There may be isolated instances where the lighting levels on retained hedgerows exceeds 0.4 Lux (e.g. a level that could affect bats temporarily during those instances), however this will only be where they are directly adjacent to roadways with the vast majority of these areas will be maintained in darkness.
- 8.16.5. The area surrounding the Site is an existing suburban location with sky quality typical of the location, and the introduction of the Proposed Development and other schemes in the surrounding area will not significantly change this. As such no significant effects are anticipated as a result of the Proposed Development.
- 8.16.6. Consideration has also been given to potential cumulative effects alongside Toton North and Toton East, with reference to direct effects (light spill and light intrusion) and indirect effects (upward light and sky glow) on the identified sensitive receptors. It is accepted that there will be an increase in the volume of lighting within and surrounding the Application Site due to the Proposed Development and the cumulative sites. These are not likely to cause significant effects of lighting (or statutory nuisance) onto the identified receptors. This increase in lighting is also not going to result in a change in the environmental zone of the area which will remain E3. No significant cumulative effects are anticipated in combination with either of the Toton North or Toton East schemes.

Mitigation and Enhancement

- 8.16.7. Both embedded mitigation and additional mitigation measures are proposed, all of which can be secured through planning conditions. The embedded mitigation with respect to lighting is detailed within the Lighting Strategy, which will ensure that lighting is fit for purpose and sensitive to nearby human and ecological receptors. These measures include no upward facing light and areas being lit using the lowest practicable lighting levels as defined in the relevant British Standard.

Conclusion

- 8.16.8. The Proposed Development will inevitably result in an increase in the visibility of lighting within the Site but there **will not be significant** effects relating to lighting. Receptors in the vicinity of the Site will not experience any statutory nuisance from the proposed lighting.

9. Summary

- 9.1. This document has provided a non-technical summary (NTS) of the Environmental Statement (ES) which has been submitted as part of a planning application by the Applicant, Bloor Homes Limited, in support of an outline planning application for a residential development of up to 420 residential dwellings and associated open space and infrastructure on the Site ('the Proposed Development').
- 9.2. The aim of the ES, of which this NTS summarises, has been to assess the 'likely significant effects' of the Proposed Development in accordance with *The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations)*. Detailed assessments with respect to pertinent environmental topics have therefore been undertaken in accordance with definitive standards and legislation where available. The ES (and this summary) forms part of the planning application documentation submitted to BBC and will inform their decision-making process.
- 9.3. As summarised in this NTS, the design process has been informed by the detailed environmental assessments so to ensure that key design measures are integral to the Proposed Development (and its construction), so to limit any significant adverse effects. As a result of this process, there is a relatively small number of potential residual adverse significant effects, particularly when considering the scale of the Proposed Development and its location. These are limited to visual effects from within or adjoining the Site, which is often the case with any development on greenfield land. These would be localised and principally focused within and adjoining the Site upon receptors of high sensitivity. Significant beneficial effects are identified for socio-economic effects in relation to increased housing provision, and economic benefits during both the construction and operation of the Proposed Development. All other effects with the inclusion of relevant mitigation identified within the ES are considered not significant as a result of the Proposed Development.
- 9.4. In conclusion, the ES demonstrates that the design of the Proposed Development and its construction has taken into account the potential environmental effects and where necessary mitigation measures form an integral part of the scheme so to ensure that the environment is suitably protected and any impacts from the Proposed Development are minimised.

10. Glossary

Abbreviation / Term	Description
ALC	Agricultural Land Classification
AOD	Above Ordnance Datum
AQMA	Air Quality Management Area
AQO	Air Quality Objectives
Baseline conditions	The existing environmental conditions
BBC	Broxtowe Borough Council
BESS	Battery Energy Storage System
BMV	Best and Most Versatile
CCR	Climate Change Resilience
CD	Compact Disc
CEMP	Construction Environmental Management Plan
CSWMP	Construction Surface Water Management Plan
CTMP	Construction Traffic Management Plan
DAS	Design and Access Statement
EA	Environment Agency
Effect	The following result of the action
EIA	Environmental Impact Assessment – Process for identifying the likely significance of environmental effects (beneficial or adverse) arising from a Proposed Development, by comparing the existing environmental conditions prior to development (the baseline) with the environmental conditions during/following the construction and operation phases of a development should it proceed.
Embedded mitigation	Mitigation measures which are purposely incorporated into the design of the proposals
EPUK	Environmental Protection UK
ES	Environmental Statement – Document setting out the findings of an Environmental Impact Assessment
GHG	Greenhouse Gasses
HE	Historic England
IAQM	Institute of Air Quality Management
IEMA	Institute of Environmental Management and Assessment
LEAP	Local Equipped Area for Play
LEMP	Landscape and Ecology Management Plan
LLFA	Lead Local Flood Authority
LNR	Local Nature Reserve
LPA	Local Planning Authority

Abbreviation / Term	Description
LSOA	Lower Super Output Area – small statistical areas used for data collection and analysis
Lux	Unit of illuminance
LVIA	Landscape and Visual Impact
LWS	Local Wildlife Site
MAFF	Ministry of Agriculture, Fisheries and Food
Mitigation	Something that is put in place to avoid, minimise or manage negative environmental effects
NHLE	National Heritage List England
NTS	Non-Technical Statement (this document which summarises the ES)
PRoW	Public Right of Way
Residual Impacts/Effects	Impacts/effects that remain after any mitigation has been incorporated.
RPG	Registered Park and Garden
Scoping	Determining the extent of issues to be considered in the assessment and reported in the Environmental Statement.
Significance	Often, but not always, determined by the sensitivity of the resource/receptor balanced against the magnitude of the effect.
SMP	Soil Management Plan
SPZ	Source Protection Zone
SSSI	Site of Special Scientific Interest
STW	Severn Trent Water
SuDS	Sustainable Urban Drainage Systems
SWMP	Site Waste Management Plan
TPO	Tree Protection Order
UK	United Kingdom
UXO	Unexploded Ordnance
WHS	World Heritage Site

Town & Country Planning (Environmental Impact Assessment) Regulations 2017

Pegasus (Lichfield)

Central House | Queen Street | Lichfield | WS13 6QD

T 0121 308 9570

Offices throughout the UK.

Expertly Done.

DESIGN | ECONOMICS | ENVIRONMENT | HERITAGE | LAND & PROPERTY | PLANNING | TRANSPORT & INFRASTRUCTURE



All paper sources from sustainably managed forests

Pegasus Group is a trading name of Pegasus Planning Group Limited (07277000) registered in England and Wales.

Registered office: Querns Business Centre, Whitworth Road, Cirencester, Gloucestershire, GL7 1RT
We are ISO certified 9001, 14001, 45001



Pegasus_Group



pegasusgroup



Pegasus_Group

PEGASUSGROUP.CO.UK