LAND WEST OF SESSWICK WAY, WREXHAM

EIA SCOPING REPORT

24 March 2026

On behalf of Mauna Kea Limited

Carter Jonas

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1.0 INTRODUCTION

1.01 Mauna Kea Limited (the "Applicant") is preparing to submit an outline planning application for land west of Sesswick Way, Wrexham ("the Site"). The Application Site is shown edged red on the accompanying Location Plan (Drawing No. XXX), a copy of which is provided at **Appendix A**.

1.02 The current description of development (the "Proposed Development") is as follows:

"Outline planning application for the erection of buildings (Use Classes B2, B8, B1(c)) including land for ecological mitigation and associated infrastructure, including means of access, with matters reserved relating to appearance, landscaping, scale and layout reserved for future determination"

1.03 The Application Site is located within the administrative jurisdiction of Wrexham County Borough Council (WCBC). This report comprises a formal request to adopt a Scoping Opinion in respect of the Proposed Development.

1.04 The Applicant has undertaken a range of environmental surveys and technical assessments intended to inform the design evolution of the Proposed Development. While the scheme is still evolving, the current proposals and information obtained to date are considered sufficient for the purpose of adopting a Scoping Opinion.

1.05 The relevant legislation is Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (as amended) - herein referred to as the 'EIA Regulations'.

Screening

1.06 The Applicant considers that the scheme meets the relevant thresholds within Schedule 2 of the EIA Regulations to require an EIA. This position was also advanced by WCBC in email correspondence. Therefore, no screening has taken place.

Scoping

1.07 Scoping is an important, although optional, exercise undertaken during the early stages of the EIA process. Its purpose is to focus the EIA and resultant ES on key issues and to avoid the unnecessarily complicated examination of minor issues.

1.08 This report is a request for a Scoping Opinion submitted under Regulation 14(1) of the EIA Regulations.

1.09 Regulation 4(2) of the EIA Regulations requires the EIA process to identify, describe and assess in an appropriate manner the direct and indirect significant effects of a proposed development on the environment, both during construction and operation. This includes the direct and indirect effects of the proposed development on:

a) population and human health;
b) biodiversity, with particular attention to species and habitats protected under EU-derived domestic legislation which transposed Directive 92/43/EEC(1) and Directive 2009/147/EC as may be amended from time to time
c) land, soil, water, air and climate;
d) material assets, cultural heritage and the landscape; and

e) the interaction between the factors referred to in sub-paragraphs (a) to (d)

1.10 Effects referred to above should include:

a) the operational effects of the proposed development, where the proposed development will have operational effects; and
b) the expected effects deriving from the vulnerability of the proposed development to risks of major accidents and disasters that are relevant to that development.

1.11 Regulation 14 of the EIA Regulations state that a person who is minded to make an EIA application may ask the relevant planning authority or specified person to state their opinion as to the scope and level of detail of the information to be provided in the environmental statement. This is known as a Scoping Opinion.

1.12 The aim of the Scoping Opinion is to allow the local planning to determine which of these topics, or particular aspects of them, can be 'scoped in' and 'scoped out' of the EIA. Issues that are scoped into the EIA are judged likely, without effective mitigation, to have the potential to cause significant effects. Issues that are scoped out of the EIA are those which are not anticipated to result in significant effects. However, it should be noted that as the assessment proceeds, any omitted topics will be reviewed, and their significance may be reevaluated in response to additional information or changes to the Proposed Development.

1.13 In accordance with the Regulation 14(2)(a) of the EIA Regulations, this request for a Scoping Opinion includes the following:

(i) A plan sufficient to identify the land – see Location Plan provided at **Appendix A**.
(ii) A brief description of the nature and purpose of the development, including its location and technical capacity – see Section 2 (Site and Project Description) of this Scoping Report
(iii) An explanation of the likely significant effects of the development on the environment – see Sections 4 and 5 of this Scoping Report (Environmental Topics to be Scoped Out / not requiring a specific chapter and Environmental Topics to be Scoped In respectively).
(iv) Such other information or representations as the person making the request may wish to provide or make – contained within the Scoping Report and its Appendices.

1.14 This Scoping Report contains the required information in respect of the Proposed Development within the following chapters and appendices:

- Chapter 2: Application Site and Project Description
- Chapter 3: EIA methodology
- Chapter 4: Environmental Topics Scoped In or not requiring an individual chapter
- Chapter 5: Environmental Topics Scoped Out

1.15 Appendices:

- Appendix A: Location Plan (Drawing No. 24012-SGP-STE-ST-D-A-111004) [Within document and shared separately]
- Appendix B: Current illustrative masterplan (Drawing No. 24012-SGP-STE-ST-D-A-011035) [Within document and shared separately]
- Appendix C: Current illustrative landscaping drawing (Drawing No. 4751-NLA-3-100) [Within document and shared separately]
- Appendix D: Mineral Safeguarding Assessment [Shared separately]
- Appendix E: Landscape and Visual Impact Assessment Methodology [Shared separately]
- Appendix F: Landscape and Visual Impact Assessment Drawings [Shared separately]

- Appendix G: Air Quality Report [Shared separately]
- Appendix H: Agricultural Land Classification Report [Shared separately]
- Appendix I: Phase 2 Ground Investigations Report [Shared separately]

1.16 The intention of the scoping process is to agree the following with the LPA (where information is available):

- The environmental topics to be assessed within an ES for the Proposed Development and those to be scoped out.
- The assessment methodology for the individual environmental topics scoped in, including:
    - The study area.
    - The receptors / methodology for identifying the receptors.
    - The approach to the cumulative impact assessment and the list of developments to be considered.

1.17 In accordance with Regulation 14(3), should WCBC consider that they have not been provided with sufficient information to adopt a Scoping Opinion, they should notify Carter Jonas of where they require additional information.

1.18 As per Regulation 14(4), the local authority shall now consult with the Applicant and relevant consultee bodies before adopting their scoping opinion within 5 weeks of receiving this request.

2.0 SITE AND PROJECT DESCRIPTION

Location

2.01 The Site is shown edged red on the accompanying Location Plan, a copy of which is provided at **Appendix A**. The Site is located at the southwest edge of Wrexham Industrial Estate with the nearest settlements being Marchwiel to the south-west and Cross Lanes to the south-east.

Description

2.02 The Site measures approximately 33.61 hectares and comprises two parcels of agricultural land. Five Fords adjoins Wrexham Industrial Estate, where there is a range of employment uses present such as warehouses used for leisure, distribution, manufacturing and storage.

2.03 The wider area around the Site includes a range of other employment uses outside of the Wrexham Industrial Estate (noting the boundary within the de-adopted Wrexham Local Development Plan).

2.04 Immediately to the west lies the Five Fords Wastewater Treatment Plant. An associated Solar Farm is located immediately to the west of the site. The treatment plant is due to go 'off grid' during 2026, after which Five Fords will secure power from a solar farm. To the west, accessed off Cefn Road, are further sewerage / water facilities operated by Hafren Dyfrdwy (a joint venture between Dee Valley Water and Severn Trent).

2.05 To the east, there are a large collection of industrial units in a cluster along Bedwell Road. Beyond this is Maelor Works, a cluster of employment and industrial uses with an additional adjacent solar farm.

2.06 The Site effectively forms two parcels of land, as illustrated below.

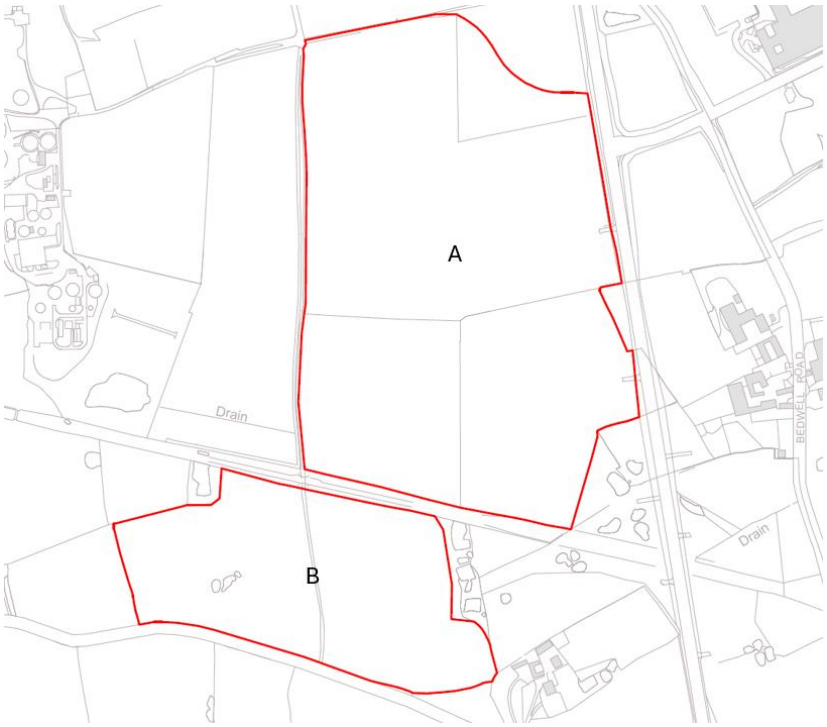


Figure 1 - Site Location Plan (with parcels identified)

Parcel A

2.07 Parcel A comprises c. 23.42 hectares, bounded by Sesswick Way to the east and Cefn Road to the north. The Site can be accessed from Sesswick Way or Cefn Road.

2.08 The Site is made up of arable land bounded by vegetation present along the eastern border of the site close to Sesswick Way, which blocks the land from view of the road. As well as this, there are several mature trees present within the site and along the northern boundary of the land, beyond which lies further agricultural land.

2.09 The Site's western boundary is a Public Right of Way with a disused railway line to the south. To the south-east is an ecological mitigation area managed by WCBC.

Parcel B

2.10 Parcel B comprises c. 9.29 hectares, bounded by Marchwiel Road / A525 to the south and a disused railway line to the north. The site is accessed from the A525.

2.11 The Site is made up of arable land bounded by vegetation at all sides, with further individual trees and hedgerow within the site boundary. To east lies the aforementioned ecological mitigation area managed by WCBC and further agricultural land. To the west lie further fields, with the edge of the settlement of Marchwiel beyond.

2.12 The majority of the other parcels of land located to the south are farms and agricultural fields.

Planning History

2.13 A planning history search identified several relevant applications submitted in respect of the Application Site, as summary of which is provided in table below.

REFERENCE NUMBER	DATE OF DECISION	PROPOSAL	DECISION
WCBC: P/2020/0363 PEDW: APP/ H6955/A/21/3271810 WELSH GOVERNMENT: qA1476481	19 August 2022	Full planning permission for a commercial glasshouse with packing facilities and office space, energy centre and associated infrastructure, carbon dioxide recovery plant, reservoirs, car parking and landscaping.	Approved at appeal via final decision by Welsh Ministers

2.14 The above application covered a larger area of than the Proposed Development. This was recommended for approval by Planning Environment Decision Wales (PEDW) and, subsequently following call-in, approved by Welsh Ministers. The final decision was issued on 19 August 2022 and Condition 1 set a period of five years to commence. No works have been undertaken to implement the planning permission; however, at time of writing it remains extant.

Proposed Development

2.15 The current description of development (the "Proposed Development") is as follows:

"Outline planning application for the erection of buildings (Use Classes B2 and B8) including land for ecological mitigation and associated infrastructure, including means of access, with matters reserved relating to appearance, landscaping, scale and layout reserved for future determination"

2.16 The Planning Application for the Proposed Development will be supported by a comprehensive package of drawings, reports, surveys and assessments. This is anticipated to include the following, in addition to the Environmental Statement:

- Application forms
- Site Location Plan
- Planning Statement
- Pre-application Consultation Report
- Illustrative Masterplan, alongside other indicative drawings identifying – for example - lower and upper length, with and heights for all proposed buildings.
- Parameter Plans
- Design and Access Statement
- Ecology Report
- Arboricultural Impact Assessment
- Heritage Statement
- Contaminated Land Assessment / Ground Conditions Report
- Shadow Habitats Regulations Assessment
- Energy & Sustainability Assessment.
- Phosphates Report
- Utilities Statement

3.0 EIA METHODOLOGY

3.01 EIA is a process that should be focused on the likely significant environmental effects of a proposed development. It is not intended to be a process to address all of the possible environmental effects.

Approach to assessment

3.02 Planning permission is being sought via an outline application, with all matters, with the exception of access, reserved for future determination at the reserved matters stage. In accordance with the 'Rochdale Envelope' approach, the EIA will be undertaken based on a number of fixed and outline maximum parameters.

3.03 At this stage, the EIA parameters to inform the EIA Scoping were as follows (designed to build in flexibility above what might be sought for planning permission).

Parameter	**Quantum of development**
Site Area	33.61ha
Proposed Use Class	Use Classes B2, B8, B1(c.)
Proposed floorspace	1,200,000 sq. ft (GIA)
Proposed Development Heights	Two zones of height up to 20.35m and 23.65m
Land for ecological mitigation	11.29ha on-site and off-site

3.04 An indicative construction programme will be developed and presented as part of the ES.

3.05 The ES will clearly state appropriate management and monitoring activities that will be undertaken to both mitigate any potential adverse significant effects and to review the efficacy of any recommended enhancement measures, where relevant. These will also be reviewed at the reserved matters stage to ensure that they remain effective and appropriate, with the potential for revision if required.

Assessment of significance

3.06 A standardised approach to describing impacts on receptors will be adopted through the ES. Where methodologies have been adapted from specific industry recognised guidelines, an explanation as to the chosen methodology will be provided within the relevant chapter. Key concepts are outlined below.

Receptor and sensitivity

3.07 Receptors are defined as the physical resources or user groups that are subject to impacts. They will be identified through a combination of desk-top studies and site visits undertaken by the various members of the EIA team. Technical chapters will expand but sensitivity may depend on factors such as: rarity; quality; importance in an international, national, regional or local context and/or replaceability etc.

3.08 The sensitivity of receptors is considered as being 'very high', 'high', 'medium', 'low' or 'negligible'. A table shall be included within the methodology section of each chapter explaining the rationale for each of these criteria.

Impact and magnitude

3.09 The magnitude of an impact is generally considered to be 'large', 'medium', 'small' or 'negligible'. As with sensitivity, a table will be included in each technical chapter of the ES alongside an explanation of the rationale for each of these criteria. Where it is possible to do so, criteria will be based on recognised

standards and guidelines. Where this is not possible, the criteria will be based on expertise and professional experience.

Effects and significance

3.10 Effects are generally understood to be the consequences of impacts on sensitive receptors. The significance of the effect is informed by the magnitude of the impact and the sensitivity of the receptor.

3.11 The assessment of significance within the ES will be described using consistent terminology across chapters, with effects described as being 'major', 'moderate', 'minor' or 'negligible'. This also includes neutral or no impact assessments, with individual chapters explaining this as necessary. The method for settling on significance is left to the judgement of each technical consultant, reflecting best practice within their specialist area.

3.12 Effects are generally considered to be 'Significant' where they are of 'Moderate' or 'Major' significance (either adverse or beneficial). However, the approach may differ between assessments. Where this is the case, this will also be outlined within the relevant ES technical chapter.

3.13 In addition to the significance of the effect, statements will also be made as to whether effects are adverse or beneficial, direct or indirect, temporary or permanent, reversible or irreversible, short-, medium- or long-term and/or cumulative. Definitions and examples for each are provided below:

- Adverse – a harmful or unfavourable effect (e.g., the loss of trees to allow the construction of new buildings);
- Beneficial – a favourable or advantageous effect (e.g., the creation of jobs as a result of proposed construction works);
- Direct – an effect without intervening factors (e.g., the removal of trees to allow for the construction of new buildings);
- Indirect – an effect not directly caused by the development (e.g., changes to the pattern of traffic movements across the road network as a result of a new road being constructed);
- Temporary – an effect lasting only for a limited period of time (e.g., piling during construction);
- Permanent – an effect lasting or intended to last or remain unchanged indefinitely (e.g., land reclamation from the sea);
- Reversible – an effect that is capable of being reversed so that the previous state is restored (e.g., the removal of solar panels to revert to grazing pasture);
- Irreversible – an effect that is not capable of being undone or altered (e.g., gravel extraction);
- Short term – an effect lasting between 0 and 7 years;
- Medium term – an effect lasting between 8 and 12 years;
- Long term – an effect lasting more than 12 years; and
- Cumulative – increasing by one addition after another (e.g., traffic generated by different developments occurring in close proximity to one another).

<u>Cumulative effects</u>

3.14 The EIA Regulations require the consideration of cumulative effects. Cumulative effects can be either:

- The combined or 'inter-development' cumulative effect of the proposed development together with other developments that are consented but not yet completed (taking into consideration effects during both the construction and operational stages); and
- The combined, synergistic or 'intra-development' cumulative effects caused by the combination of a number of effects of the proposed development on a particular receptor (taking into consideration effects during both the construction and operational stages), which may collectively cause a more significant effect than individually.

3.15 Inter-development cumulative effects will be described within each technical chapter in the ES, while intra-development ("Type 1") cumulative effects will be considered within a separate, stand-alone ES chapter in the main volume of the ES.

3.16 For 'inter-development' cumulative effects, these should only be considered where those effects are likely to be significant effects. Importantly, in line with the EIA Regulations, these should be 'existing and/or approved projects'.

3.17 In addition, Schedule 2 of the EIA Regulations presents an appropriate baseline for what threshold significant effects might arise. The majority of projects in the surrounding area are either Category 10(a) industrial estate development projects or Category 10(b) urban development projects. On this basis, the consideration of cumulative schemes has been generally limited to those projects where:

- the development includes more than 1 hectare (site area) of urban development which is not dwellinghouse development; or
- the development includes more than 150 dwellings; or
- the overall area of the development exceeds 5 hectares.

3.18 At this stage, the following schemes would be considered for inclusion in the inter-development cumulative assessment. These are schemes of sufficient scale for cumulative effects to arise but are 'approved' projects. This list shall be kept under review; however, the Applicant would welcome suggestions for additional schemes to consider from the Local Authority.

Planning reference	Address	Description	Status
P/2023/0280	Land off Bryn Lane, Wrexham ("Kingmoor")	Hybrid planning permission (a) outline permission (all matters reserved except for means of access) for erection of up to 3 warehouse and distribution units (use class b8) and (b) full planning permission for demolition, means of access, earthworks, drainage, landscaping, ecology zone and relative ecological mitigation measures, and ancillary works	Approved with some construction commenced

3.19 The Applicant is aware of other live planning applications in the vicinity of the Wrexham Industrial Estate which do not have any certainty on delivery. These will be considered on a case-by-case basis when the design is frozen for production of an ES.

3.20 Existing developments form part of the baseline and will therefore be considered in the ES in this way.

Structure of Environmental Statement

3.21 An ES must meet the requirements set out in Schedule 4 (Regulation 17(3)) of the EIA Regulations; however, these requirements do not include a specific structure that an ES should accord with. The ES for this project would be structured as follows.

3.22 The ES would comprise three volumes:

- Volume 1 - the main volume of the ES and will describe: the proposals, the alternative options considered, the baseline environmental conditions, the likely significant effects of the proposed development alone and in combination with the cumulative schemes, the proposed mitigation measures, and the residual environmental effects. Any relevant figures for chapters will be included in the body of the chapters.

- Volume 2 - contain the technical appendices, which will include all of the technical reports that have informed the assessments reported within the technical chapters. Where relevant, it will also contain reports which deal with topics that are considered unlikely to result in significant environmental effects. It will include also include any relevant drawings.

- Volume 3 – a Non-Technical Summary, intended to summarise the ES for laypersons.

3.23 The ES Volume 1 would be structured as follows:

- Introduction
- EIA Methodology
- Application site and surrounding area
- Proposed Development
- Alternatives and design evolution
- Construction Strategy and Phasing
- Technical Chapters
- Intra-development / Type 1 cumulative effects
- Residual effects

3.24 The individual technical chapters would generally be structured as follows:

- Introduction (including confirmation that the authors constitute competent experts in line with Regulation 17(4) of the EIA Regulations)
- Methodology (including any commentary on the EIA Scoping Opinion)
- Baseline conditions
- Potential impacts
- Embedded mitigation
- Assessment of effects (including embedded mitigation)
- Additional mitigation
- Residual effects
- Inter-development cumulative effects

4.0 ENVIRONMENTAL TOPICS SCOPED OUT OR NOT REQUIRING AN INDIVIDUAL CHAPTER

4.01 As set out below, the following topics have been scoped out of the EIA:

- Archaeology and Built Heritage
- Ground Conditions and Contamination
- Arboriculture
- Minerals
- Flood Risk and Drainage
- Microclimate (including sunlight / daylight & wind)

4.02 Significant impacts are not anticipated to arise as a result of the Proposed Development in respect of these topics.

4.03 In addition, the following topics do not require an individual chapter and, instead, will be covered in individual assessments within technical chapters to ensure any potential significant effects are considered:

- Climate Change
- Human Health
- Major Accidents and Disasters

Archaeology and Built Heritage

Summary of analysis

4.04 A historic environment desk-based assessment was undertaken in 2025[1] to support the planning application for the construction of new employment facilities with associated landscaping and parking. Prior to undertaking the assessment, a Written Scheme of Investigation (WSI) was submitted to Heneb – Clwyd Powys Archaeology as archaeological advisors to Wrexham Council, outlining the proposed approach to the baseline assessment, including the study area, data sources to be utilised, and the assessment methodology[2].

4.05 Data was gathered for all designated historic assets within a 1km Study Area, and all non-designated historic assets within 500m of the Site boundary from Cadw and Heneb Historic Environment Record (HER), and a site walkover was conducted at the time.

4.06 Cadw records three designated historic assets within the 1km Study Area, comprising a grade II* listed 18th century church, a grade II listed 19th century house, and the Marchwiel Conservation Area. It was assessed that the Proposed Development is not within the setting of these assets and the development would not impact the heritage significance of any designated historic asset due to the distance between the Site and the assets.

4.07 The HER records 55 non-designated historic assets within the Study Area. Seven non-designated historic assets are recorded within the Site, comprising below-ground remains of late medieval or early post medieval ridge and furrow, the sites of former post medieval sluices and the recorded locations of former post medieval ponds which are recorded from historic mapping and aerial imagery. These have been assessed as being of negligible heritage significance.

4.08 A geophysical survey had previously been undertaken of the Site in 2020 to support an earlier planning application. The results of that survey remain relevant to informing this planning application. The survey identified anomalies relating to post medieval agricultural use of the site such as former field

boundaries corresponding to historic mapping, locations of ponds or former marl pits, as well as areas with below-ground evidence of medieval or early post medieval ridge and furrow.

4.09 Archaeological trial trenching took place in 2025 following consultation with Heneb regarding the results of the desk-based assessment and geophysical survey. The trial trench evaluation was conducted in accordance with a Written Scheme of Investigation which was approved by Heneb prior to undertaking the survey. Eight trenches were excavated across the Site targeting known anomalies and testing 'negative' areas. A small number of archaeological features were identified including a shallow gully and ditches, a possible pit or ditch terminus, and a shallow irregular feature. No artefacts or dating evidence was recovered from any of the features and the report concluded that the features were likely representative of land use as part of the sewage works, agricultural marl extraction, and arable cultivation.

4.10 It is assessed therefore that the Site has a low potential for as yet unknown archaeological remains relating to of all periods and that any such remains would likely be of low heritage significance.

Consultation

4.11 Consultation was carried out with Heneb -Clwyd Powys Archaeology as archaeological advisors to Wrexham Council at key stages in the assessment process. Following completion of the survey the Planning Archaeologist confirmed that no further archaeological work would be necessary prior to the development commencing.

Rationale for scoping out

4.12 In summary, the rationale for scoping out this discipline is as follows:

- Historic environment assessment has confirmed that there will be no direct or indirect impact on any designated historic assets.
- Non-designated historic assets recorded within the Site are of negligible heritage significance and are of late medieval to post medieval agricultural origin or associated with the modern sewage works.
- Evaluation of the archaeological resource has confirmed a low potential for archaeological remains and that any such remains would be of low heritage significance.
- Therefore, the impact on known and potential archaeological remains present within the Site is not considered to be significant and will not be considered further in the EIA or reported in the ES.
- These impacts (which are not considered to be significant) have been set out in the desk-based assessment to be submitted as part of the Application. No further evaluation or archaeological mitigation is anticipated to be required.

Ground Conditions and Contamination

Summary of analysis

4.13 A Phase 1 Contaminated Land Assessment has undertaken for land west of Sesswick Way ('Five Fords'). The Site is currently in agricultural use, comprising a large cornfield. Historically, the Site comprised agricultural fields from at least the 1870s until the early 1900s, when it operated as a Sewage Farm for approximately 50-60 years, before reverting to agricultural use in the early 1960s.The historical application of sewage sludge from waste water treatment has the potential to introduce a range of pollutants, including heavy metals and organic contaminants. Further potential on-site contamination sources include Made Ground within infilled drainage ditches and ponds, which may be a source of ground gas. No significant contamination sources were identified in relation to the Site's current agricultural use.

4.14 The surrounding area is predominately characterised by agricultural land; however, a number of commercial and industrial units are located to the north-east of the Site associated with Wrexham Industrial Estate and to the west of the Site associated with Five Fords Waste Water Treatment Facility. The adjacent Five Fords

Waste Water Treatment Works, present since the early 1900s and expanded in recent decades, may be associated with pollutants such as organic matter, oils and metals. Historical infrastructure in the area, including railways (to the south and north-east) and associated embankments, together with small-scale industrial activities within Wrexham Industrial Estate, could have resulted in localised contamination, but these are located off-site and at a sufficient distance that they are not expected to represent a significant risk to the Site.

4.15 The environmental setting is considered to be of low to moderate sensitivity, as the Site is considered likely to be underlain by a significant thickness of low-permeability Till (a Secondary Undifferentiated Aquifer), which overlies the Salop Formation (a Secondary A Aquifer), providing protection to the deeper, more sensitive aquifer. The nearest surface water feature is a drainage channel located approximately 20 m north-east, flowing into the River Clywedog 60 m to the north. No ecologically designated sites or priority habitats are present within 1 km of the Site.

4.16 A Phase II Ground Investigation has been undertaken by Tier Environmental (Report Ref: TE1890-TE-00-XX-RP-GE-001-V02, February 2025) to supplement the Phase 1 Contaminated Land Assessment. This is included as an appendix to this Scoping Report. The investigation comprised trial pits, window sample boreholes, and cable percussion boreholes, with associated soil, groundwater, and ground gas monitoring. The ground conditions were confirmed to comprise topsoil (0.25-0.5 m below ground level (bgl)), localised Made Ground associated with historic pond infill and Glacial Till to >10 m bgl. Peat and soft organic clays were encountered in isolated areas.

4.17 No soil concentrations of potential contaminants of concern were identified above Generic Assessment Criteria protective of human health for the proposed development. Trace asbestos (chrysotile fibre bundles <0.001% w/w) was detected in two out of 22 soil samples collected from the south-west and north-west of the Site.

4.18 Overall, the Phase II investigation confirmed that risks to the proposed development are low and can be effectively managed through standard mitigation measures, including removal of unsuitable soils if encountered, basic radon protection, and appropriate asbestos handling procedures secured via planning conditions.

Consultation

4.19 An enquiry was submitted to Wrexham Borough Council (WBC) on 10th September 2024 under Part IIA of the Environmental Protection Act 1990 regarding any records of contaminated land for the Site and surrounding area. A response was received on 19th September 2024, which confirmed that the Site has historically been identified as forming part of a Sewage Farm (1938), which is recognised within Department of Industry Profiles as a potentially contaminative land use. While the Council is required to consider such sites under its statutory duties, WBC confirmed that no sites within the County Borough have yet been determined as ‘Contaminated Land’ under Part IIA.

4.20 WBC advised that they were not aware of any intrusive investigations undertaken at the Site; however, this response pre-dated the Phase II Ground Investigation by Tier Environmental. Council records indicate that the land to the west is occupied by the Five Fords Waste Water Treatment Works and land to the east forms part of Wrexham Industrial Estate, which was formerly used by the Ministry of Defence for explosives manufacture at the Royal Ordnance Factory (ROF) Wrexham. The ROF was operational between 1941 and 1945 and was subsequently redeveloped as part of the Industrial Estate. WBC further confirmed that no current or former landfill sites are recorded within 250 m of the Site and no private water supplies are recorded within 2 km, the nearest being approximately 2.3 km away.

4.21 A Preliminary UXO Desk Study was undertaken by Zetica UXO, which identified no significant military activity or evidence of bombing affecting the Site. The UXO risk was therefore classified as Low.

Rationale for scoping out

4.22 In summary, our rationale for scoping out this discipline include:

- Baseline assessment and Phase II ground investigation identified no significant contamination risks associated with the Site's historical or current uses in the context of the proposed commercial/industrial development, which will largely comprise buildings and hardstanding, limiting pollutant pathways.
- The environmental sensitivity of the Site is low to moderate, with low-permeability Glacial Till providing a protective barrier to deeper groundwater and no nearby sensitive ecological receptors.
- UXO risk has been assessed as Low.
- The Phase II Ground Investigation concluded that any residual risks can be effectively managed through standard mitigation measures secured via appropriately worded planning conditions.

Arboriculture

Summary of analysis

4.23 A tree survey in accordance with BS5837:2012 Trees in Relation to design Demolition and Construction was undertaken on 13 November 2024 and identified 19 trees, five groups of trees and five hedges, including one veteran tree.

4.24 The majority of the surveyed vegetation (with the exception of two isolated trees and a short length of hedge) stand to the site perimeters, including the one tree identified as a veteran, and the design would seek to retain and avoid impacts to the vast majority of perimeter trees, groups and hedges (inclusive of the veteran tree to the north west).

Consultation

4.25 Contact with the applicable local planning authority in December 2024 confirmed there were no extant TPOs present at the site and no ancient woodlands are listed or identified by Natural Resources Wales on or immediately bordering the site.

Rationale for scoping out

4.26 A subsequent Arboricultural Impact Assessment will be undertaken at a later stage to identify tree retentions and removals and advise on expected suitable tree protection measures and input into any landscape and ecology mitigation required.

4.27 This is considered sufficient to understand any impacts from the Proposed Development.

Minerals

Summary of analysis

4.28 A Minerals Safeguarding Assessment (MSA) has been undertaken by Carter Jonas, noting the presence of a Sand and Gravel Safeguarding Area and Non Energy Mineral Extraction Exclusion Area within the Site boundary. These were introduced through the now un-adopted Wrexham Local Development Plan; however, it is still considered prudent to consider impact on minerals with reference to the policy wording.

Rationale for scoping out

4.29 The MSA (included as an appendix to this Scoping Report) has benefitted from a Phase 2 Ground Investigation survey which allows for a detailed understanding of below ground matters. Ground investigations, completed in December 2024, comprised the excavation of 18 trail pits and drilling of 26

boreholes. The boreholes were drilled to a maximum depth of 10.45 metres below ground level (bgl). These investigations give a robust understanding of the underlying mineral for the whole site incorporating both the safeguard area and the land to the south.

4.30 Site investigations have revealed that the deposit of sand and gravel is highly variable across the site, occurring in pockets which vary significantly in respect of depth below the surface (0.25m to 7m bgl). The thickness of the deposit was also highly variable. Where deposits were encountered the thickness ranged of 0.25m to 2.6m, with an average thickness of deposit of 0.95m. However, these are variable, with areas of the site where the deposit may extend beyond this depth, equally there will be areas within the site where there are no deposits of sand and gravel, as revealed in 45% of the boreholes and trial pits.

4.31 The deposit has a significant silt content, varying from circa 19% to 95% (see table 1 within the MSA issued alongside this Scoping Report). In order for the any extracted mineral to meet the various technical specifications required for the construction industry, for example in the manufacture of ready mixed concrete, the mineral would require processing to remove the silt fraction. The diminutive nature of the reserve would not support the development of a processing plant on site. Third party operators are unlikely to process the as raised material, as the silt element is considered to be a waste material rather than a resource that they would then need to manage or dispose of.

4.32 The high-level reserve estimate for the site is assessed to be in the order of 115,600m^3 or 208,090t. However, its variable distribution, thickness and high silt content would make it an unattractive proposition for a mineral operator. The setting up of a mineral extraction operation involves significant financial investment and requires the deposit to be of suitable quality and size to support the investment. Typically, a new standalone sand and gravel reserve will need to be in the order of circa 0.75-1Mt to support the costs associated with:

- securing planning permission, including an Environmental Impact Assessment
- securing relevant environmental permits for water and waste handling
- setting up of a processing plant, and
- operational costs for soil and overburden removal, extraction of the mineral, and restoration of the site.

4.33 The potential exists for the as raised mineral to be exported to a local processing plant. Borras Quarry, operated by Breedon, is located c. 6km by road to the north. Given that the pockets of mineral contain 40-60% fines, an operator is unlikely to accept the as raised mineral due to issues that the silt element, a waste product, will have on their existing operations.

4.34 Overall, it is considered that the potential reserve does not merit extraction. In addition, the Proposed Development would not result in sterilisation of an economic reserve of sand and gravel. With this in mind, there cannot be significant environmental effects. A Mineral Safeguarding Assessment would be submitted as part of the application.

Flood Risk and Drainage

Summary of analysis

4.35 A Flood Consequences Assessment has undertaken for land west of Sesswick Way ('Five Fords'). Currently, the site comprises an agricultural field bordered by hedgerows, trees and fence lines.

4.36 The NRW Flood Map for Planning has identified the site is located within Flood Zone 1 (Zone A), indicating that the site is at low risk (less than 1 in 1000 years or 0.1% annual probability of flooding in any given year), from fluvial sources from both coastal and riverine flooding.

4.37 Some areas of the site are within Flood Zones 2 and 3 for surface water, indicating a 0.1% to 1% probability of flooding from surface water in a given year (Flood Zone 2), or a greater than 1% probability of flooding from surface water in a given year (Flood Zone 3). These areas include the surface water flow path traveling in a north easterly direction across the site, and parts of the site boundaries. Other flooding sources (such as groundwater, sewers and reservoirs) have also been assessed and are deemed as low.

4.38 According to TAN15, the site is within Fluvial Flood Risk Zone A. Flood risk from fluvial sources is low and therefore the justification test is not applicable. The development is therefore appropriate for development on flood risk grounds.

4.39 A SuDS Strategy has been prepared for the site which is compliant with the Welsh Government's "*Statutory standards for sustainable drainage systems – designing, constructing, operating and maintaining surface water drainage systems*". Runoff rates will be limited to greenfield rates both for the 1 in 1-year and 1 in 100-year (+ climate change allowance) events, regulated by a complex flow control, such as a hydrobrake. Appropriate sediment and pollution control measures are also included. The proposals will sustainably manage surface water runoff and provide betterment by futureproofing the site to the impacts of climate change on peak rainfall throughout the lifetime of the scheme.

Consultation

4.40 No formal consultation has taken place. However, baseline information has been established through assessment of existing drainage characteristics including topography, soil infiltration potential, and proximity to receiving watercourses. Ground investigations confirm that infiltration techniques are not viable due to low permeability soils, hence attenuation and controlled discharge to the existing network are required. The approach to phosphate assessment and alignment with nutrient neutrality objectives are in accordance with Natural Resources Wales (NRW).

Rationale for scoping out

4.41 In summary, our rationale for scoping out this discipline include:

- The site is in Flood Zone 1 and is therefore at low risk of flooding from rivers and the sea.
- The only source of flooding for the site is surface water, which comprises a flood flow route that flows diagonally across the site from southwest to northeast. The flood flow route is not continuous with routes beyond the site boundary and is discontinuous in the southwest corner of the site, indicating that it arises from runoff from the site itself, rather than conveying flows from beyond the site boundary. It is anticipated that the flood depths are shallow and therefore, the flood risk and any associated contamination from runoff will be adequately mitigated by the provision of SuDS, which will accommodate the 1 in 100-year + climate change event for the site, and also provide water quality benefits.
- With regard to phosphate neutrality, as the scheme will be largely warehousing and offices, the increase in wastewater discharges associated with the scheme will be limited. Phosphorus loads will be estimated using established NRW nutrient budget methodologies, and appropriate mitigation provided, with a financial contribution made to offset any deficit if on-site measures cannot achieve neutrality. Consequently, any impacts on sensitive European Designated sites will be negligible.

Microclimate (including Wind and Sunlight & Daylight)

Summary of analysis

4.42 Assessment of impacts from wind consider impacts on pedestrian safety and comfort, using appropriate testing. Sunlight and Daylight impacts consider impacts on nearby sensitive receptors (notably, residential properties and public open space).

Rationale for scoping out

4.43 The Proposed Development would currently be up to 23m in height. This is not considered likely to cause any significant effects from a wind microclimate perspective. It is noted that the Utopia City application (P/2023/0497) proposed taller industrial buildings and did not require an assessment of wind impacts.

4.44 In terms of Sunlight Daylight, there are no residential buildings within immediate vicinity of the Site. The adjacent Public Right of Way is unlikely to classify as a 'public open space' with regard to BRE Guidance. In any case, this is open to west with adjacent land currently comprising agricultural fields ensuring that daylight is still received within the Public Right of Way. In addition, as an outline planning application, Reserved Matters applications could consider a layout which located built development at a set back from the Public Right of Way.

4.45 Overall, it is not considered that any significant effects would arise from this discipline.

Disciplines which do not require an individual chapter

Climate change

4.46 The EIA Regulations require a consideration of climate, seeking to account for climate by requiring a description of 'the impact of the project on climate' and 'the vulnerability of the project to climate change' (Schedule 4, paragraph 5(f)).

4.47 Key climate projections for the UK could include:

- Summers will become hotter and drier;
- Winters will become milder and wetter;
- Soils will become drier on average;
- Snowfall and the number of very cold days will decrease;
- Sea levels will rise; and
- Storms, heavy and extreme rainfall, and extreme winds will become more frequent.

4.48 The consequences of climate change have the potential to lead to significant environmental effects on multiple EIA topic areas. For example, rising sea levels can affect fluvial and coastal flood risks and hotter and drier summers may affect sensitive ecological habitats.

4.49 It is proposed that the effects of climate change that are relevant to each technical topic will be considered within the specific technical ES chapter. If climate change does not affect the assessment of the technical discipline, this will be stated.

4.50 For those assessment where climate change is relevant, the following will be considered within the context of the most recent climate change projections:

- The vulnerability of the baseline environment to projected changes;
- The vulnerability of the proposed development to climate change; and
- The effect of the proposed development within the context of climate change.

4.51 This position was considered acceptable for the Environmental Statement provided as part of the Utopia City planning application (P/2023/0497).

Major accident and disasters

4.52 A report by IEMA and ARUP[1] suggested that, in general, major accidents and/or disasters should be considered as part of an assessment where the development has the potential to cause the loss of life,

[1] Institute for Environmental Assessment and ARUP (2020) Major Accidents and Disasters in EIA: A Primer.

permanent injury and/ or temporary or permanent destruction of an environmental receptor which cannot be restored through minor clean-up and restoration.

4.53 The EIA Regulations state that the following should be provided within the ES in relation to this topic: *"a description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned."*

4.54 Major accidents and disasters of potential relevance to the proposed development include vehicle accidents, which will be considered as appropriate. Other types of major accidents and disasters may also be of relevance to the location of the application site and the nature of the proposed development but, are considered unlikely to result in significant effects, e.g., extreme temperatures and earthquakes, and have therefore not been included.

4.55 Therefore, it is not proposed that risks of major accidents and disasters are the subject of a separate technical ES chapter. This position was considered acceptable for the Environmental Statement provided as part of the Utopia City planning application (P/2023/0497)

Human health

4.56 The EIA Regulations also introduced the requirement for 'population and human health' factors to be included on the list of environmental topics considered in EIA. It is also noted that legislation, such as the Well-being of Future Generations (Wales) Act 2015 sets a goal for 'A healthier Wales'.

4.57 Many of the technical ES chapters proposed for inclusion in the ES will already address the potential implications of their topics on human health by virtue of set target values or objectives based on human health tolerances (e.g., air quality or noise) or through the consideration of policy requirements and targets promoting healthier behaviours (e.g., active travel such as cycling and walking).

4.58 Therefore, effects on human health are already considered to be 'scoped in' to the ES, albeit it is not proposed that human health is the subject of a separate technical ES chapter. Human health considerations that are relevant to each technical topic will be clearly identified within each relevant technical ES chapter. The relevant literature or studies, which draw upon the human health outcomes anticipated as a result of the use of these targets, will be referenced where necessary.

4.59 This position was considered acceptable for the Environmental Statement provided as part of the Utopia City planning application (P/2023/0497)

5.0 MATTERS SCOPED IN

4.60 As set out below, the following topics have been scoped into of the EIA:

- Agriculture and soils
- Socioeconomics
- Ecology
- Transport
- Noise and vibration
- Air Quality
- Landscape and Visual Impact

Agriculture and soils

Consultation and Baseline Conditions / Information

Consultation

4.61 The Applicant has not consulted on Agricultural Land issues. This is as a clear methodology on the assessment of agricultural land quality for use in planning, is provided with its use supported by planning guidance. In addition, the existing ALC survey work conducted by Welsh Government is freely available.

Baseline and Completed Background Studies

4.62 A detailed assessment of Agricultural Land Classification (ALC) grades for the built development proposal area of the site has been undertaken. This ALC assessment (included as an Appendix to this EIA Scoping Report) covers Parcel A of the Site supplements the existing 2002 ALC assessment undertaken by the Welsh Government as part of a previous planning permission.

4.63 Both surveys broadly concur, the site being predominantly ALC Grade 3a. The applicant's subsequent survey over a greater extent found a Grade 2 land at sample points along the southern edge of the site and a sample point of Grade 3b land in the northern half. These sample points do not provide sufficient support for the demarcation of separate areas of Grade 2 and Grade 3b land. All agricultural land surveyed is therefore classed as ALC Grade 3a.

4.64 The area to the south of the disused rail line (Parcel B) is proposed for biodiversity enhancement, with no significant disturbance of the soil resource. Although the land will fall out of agricultural use, return of this land to economic agricultural production will be easily achieved should such a need ever arise. This area has not been subject to a detailed site assessment of ALC grade, instead relying upon the Welsh Government Predicative Agricultural Land Classification mapping that shows this as an area of Grade 3a.

Scope of Assessment

Key Issues and Requirement for Assessment

4.65 ALC Grades 1, 2 and 3a are considered to be the best and most versatile agricultural land, with Grade 1 being the highest quality. This is the agricultural land that is best able to meet future unknown demand for crop production including non-food crops such as biomass fuel and pharmaceutical feedstocks. As such, national planning guidance seeks to avoid unnecessary loss of this resource.

4.66 Built development on agricultural land results in the loss of the land resource as for all practical intents and purposes, the land will not be restored to agricultural use and loss cannot be mitigated through the creation of new agricultural land or the enhancing of the quality of an off site area of agricultural land.

4.67 Unlike the agricultural land, the soil associated with that land can be recovered and reused, both within the proposed development and at an offsite location.

4.68 Loss of agricultural land and disturbance of the soil resource associated with it would occur in the construction phase of the development. There would be no significant operational effects of the proposed development on agricultural land or soils.

Identification of Effect/s which are Likely to be Significant.

4.69 A summary of potentially significant effects is provided in the table below.

Effect	Receptor	Construction / operation	Discussion
Loss of agricultural land	Agricultural land	Construction	Development of the site would result in the loss of an area of best and most versatile agricultural land
Loss and/or degradation of soil resource	Soil	Construction	Construction work could result in the direct loss of soil material from the site, such as deliberate disposal, or the degradation of soil material during handling and any period of storage.

4.70 No significant effects of the operational scheme are anticipated for agricultural land or soils

Assessment Methodology for Likely Significant Effects

Method of Assessment

4.71 The assessment methodology for likely significant effects will apply the guidance provided by the Institute of Environment and Assessment (IEMA) Guide: A New Perspective on Land and Soil in Environmental Impact Assessment (IEMA. February 2022).

4.72 Development of the site would result in a loss of approximately 24.3ha of Grade 3a agricultural land. The Grade 3a land quality makes the receptor sensitivity very high, and the extent of greater than 20ha makes the magnitude of impact major. As a result, the loss of the agricultural land resource would be considered to be a major adverse impact, a significant effect.

Supporting Documents

4.73 ALC assessments for the site area will be provided as an appendix, forming the baseline for agricultural land quality.

4.74 Soils data collected as part of the ALC assessment will also be provided to provide a baseline for the soil resource.

Socioeconomics

Consultation and Baseline Conditions / Information

Consultation

4.75 None to date.

Baseline and Completed Background Studies

4.76 The baseline will examine in detail the extent to which key indicators have changed over time, with the analysis focussing on the following indicators:

- Population
- Employment (including: Qualifications and skills; labour force; economic activity; business base; productivity; and, earnings
- Health and Wellbeing
- Deprivation

4.77 The data sources include: National Census (2011 & 2021) and other Office for National Statistics (ONS) sources; NOMIS labour market statistics; and evidence published by the Council. Details of these data sources is included at the end of this section.

4.78 Economic needs and impact assessment (July 2025) – Desk based study. Includes:

- Local and national policy review
- Economic assessment including predicted GVA.

Scope of Assessment

Key Issues and Requirement for Assessment

4.79 An assessment to determine the likely significant socio-economic effects on the population, labour market and local economy of the proposed development. The assessment will include consideration of the likely socio-economic effects associated with both the construction and operational (post completion) phases of the proposed development.

4.80 There is no national or government guidance which sets out a preferred methodology for assessing potential socio-economic impacts and effects of development proposals. However, guides have been published which cover methodological elements of the assessment. Of relevance are The Home and Communities Agency (HCA) Additionality Guide (2014: 4th addition) and the HCA Employment Densities Guide (2015: 3rd addition).

Identification of Effect/s which are Likely to be Significant.

Assessment of Indicators

4.81 The assessment of socio-economic effects will focus on the following indicators:

Site Preparation, Earthworks and Construction Phase

- Construction related employment including the number of construction jobs directly and indirectly supported through the construction supply chain;
- Number of “induced” jobs supported by onward spending of wages in the economy; and
- Productivity impacts - as measured by Gross Value Added (GVA).

Operational Phase

- Increased population and labour force;

- Uplift in local incomes and expenditure from new households (population) residing on the proposed development;
- Public revenue effects such as New Homes Bonus payments and additional Council Tax and Business Rates Revenues;
- Direct, indirect and induced employment and productivity impacts associated with employment generating uses and floorspace; and
- Community facilities effects including increased demand for local education and health care services.

Sensitive Receptors

4.82 The following receptors to socio-economic changes and effects have been identified:

- The Labour force residing in the local and wider impact areas;
- Businesses that form the economy of the local and wider impact areas;
- Workforce and businesses situated in the local and wider impact area;

Potentially Significant Effects

4.83 The following potentially significant effects have been identified:

- The Creation of direct, indirect and induced employment;
- Economic productivity generated (measured in gross value added);
- Identification of Effects which are Not Significant

4.84 The following effects have been identified as potentially relevant to the proposed development but will not be considered further with the EIA or reported in the ES because they are deemed to be not significant. A factual evidence base has been provided below to support this.

- Crime – Site security arrangements for the proposed development during the construction phase will be in line with the requirements set out in the Construction (Design and Management) Regulations 2015 and appropriate levels of security will be provided. In terms of the operational phase, the masterplan for the Site will be designed according to Building for Life standards and other relevant guidance which include measures for designing out crime.

4.85 A summary of potentially significant effects is provided in the table below.

Effect	**Receptor**	**Construction / operation**	**Discussion**
Beneficial (moderate/major) Temporary and local and regional in scale	Construction Employment	Construction	The development of the site will result in local construction jobs over a finite period. Construction workers on site will also spend some money in the local economy.
Beneficial (minor to negligible) Permanent and mostly local in scale with some wider effects	Labour force/supply	Construction and operation	New commercial development will inevitably result in labour 'leakage' from older or established sites into a new site, but this will be a limited effect and will be balanced by the facilitation of potentially new employment types and businesses in the area.
Beneficial (major)	Employment	Operation	The delivery of the scheme will result in new permanent jobs, both on site, and in 'supply chain' activities.

Effect	Receptor	Construction / operation	Discussion
Permanent and mostly local in scale with some wider effects			Workers will also bring with them an amount of expenditure in the local economy. Collectively the scale of the economic boost will be measure through a calculation of Gross Value Added (GVA).

Assessment Methodology for Likely Significant Effects

Method of Assessment

4.86 As stated previously there is no standard approach, so an assessment methodology is proposed here under which draws upon the sources of data used here; further desk based research and analysis; and, modelling of potential outputs.

Desk study

4.87 Appropriate study areas will be defined, which – in the absence of formal guidance – will be based on an understanding of relevant local and wider economic geographies and a consideration of the extent to which socio-economic effects are likely to be contained therein. It is currently envisaged that a local impact area will be defined to cover the administrative area of Wrexham.

Assessment modelling

4.88 Best practice and methodological guidance will be drawn upon as appropriate to inform key elements of the assessment, including the Additionality Guide produced by the former Homes and Communities Agency (HCA), now Homes England.

4.89 Net additional economic impacts will be presented, accounting for a range of economic additionality factors such as leakage, displacement and multiplier effects. The assessment will consider the effects of providing different types of employment by comparing the value added and employment density of B8 warehousing, verses B2 manufacturing (be that traditional or advanced), and/or other tech. related business.

4.90 The assessment will also identify how commercial development dos not only create job on the site in question but is also a benefit to the 'supply chain' and wider local economy. This assessment will be made with the acknowledgement that not all the jobs created will be wholly new, but that some people may move jobs from established businesses to a new alternative (albeit that this is not expected to be a significant issue).

4.91 Receptors in this assessment will be the local workforce; whether that is the creation of new jobs or the movement of jobs between employers and sites, and effects on the wider economy measured in GVA.

4.92 The sensitivity of receptors will be determined by way of observed change locally compared to regional and national trends. Through observation of a receptor's capacity for change relative to wider comparator areas and/or national standards, the sensitivity of receptors locally will be observed.

4.93 Once the sensitivity of the receptor has been identified, the impact of the Proposed Scheme will be benchmarked against the observed rate of change in baseline. This will allow a relative assessment of the magnitude of impact that is attributable to the Proposed Scheme to be conducted.

4.94 The assessment of likely significant effects on sensitive receptors will consider the sensitivity of the receptor and the magnitude of change to determine significance, on a scale of high or large, medium, low or small and negligible. Significant effects will be determined through professional judgment.

Limitations

4.95 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:

- The assessment is desk-based and therefore reliant on data and information obtained from a variety of official published sources. No further verification of these sources will be undertaken unless otherwise stated in the ES Chapter;
- Where necessary, professional and realistic assumptions will be made and applied.

Supporting Documents

4.96 A socioeconomics report, or similar, may be produced. It would likely draw on the following datasets:

- HCA (now Homes England) Additionality Guidance (4th Edition 2014): https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/378177/additionality_guide_2014_full.pdf
- The HCA Employment Densities Guide: https://www.gov.uk/government/publications/employment-densities-guide
- National Census (2011/2021)
- Live table on household characteristics 801: https://www.gov.uk/government/statistical-data-sets/live-tables-on-household-characteristics
- Mid-year estimates of the usual resident population: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/wardlevelmidyearpopulationestimatesexperimental
- NOMIS ward data: https://www.nomisweb.co.uk/
- English indices of deprivation: https://www.gov.uk/government/collections/english-indices-of-deprivation
- Evidence published by national and local government.

Noise and vibration

Consultation and Baseline Conditions / Information

Consultation

4.97 WCBC's pre-app response, noted that it would be important to determine existing background noise levels to inform detailed layout and design of development and identify mitigation measures that may be required to protect living conditions of nearby existing residential properties.

Baseline and Completed Background Studies

4.98 A Noise Assessment has been produced, including baseline noise surveying between 09/01/2025 to 14/01/2025. Measurements were taken from the locations overleaf, reflecting location of nearest sensitive receptors.

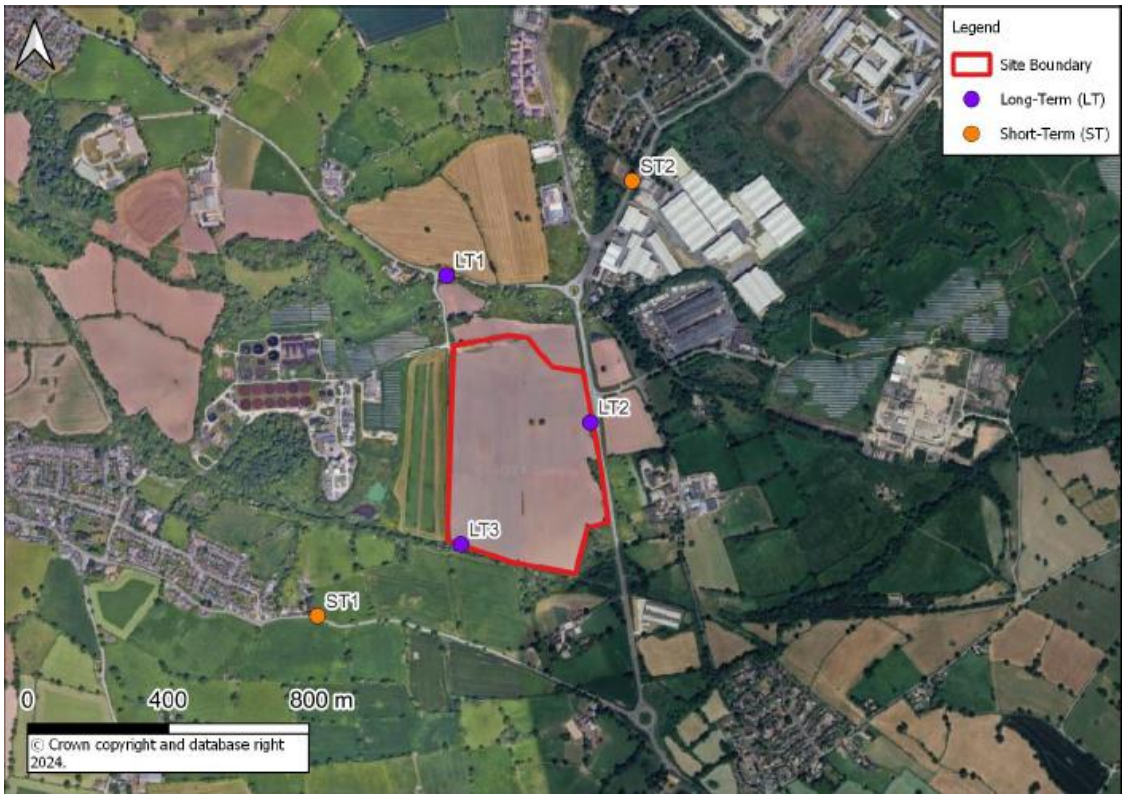


Figure 2 - 2025 Noise Survey Monitoring Locations



Figure 3 - Sensitive Receptor Locations

Scope of Assessment

Key Issues and Requirement for Assessment

4.99 Operational Phase: including noise from activities such as HGV movements and internal manufacturing breakout. Character correction of +3dB was applied in line with BS 4142. Assessment outcome was +3 dB above background, resulting in Lowest Observed Effect Level (LOAEL).

4.100 A cumulative assessment of neighbouring developments has not been considered at this stage; however, schemes within the surrounding area will need to be assessed cumulatively, once application statuses have been confirmed. Change in road traffic noise as a result of the completed and operational development has also not been considered in the initial report and, as such, will need to be considered once traffic data becomes available in 18-hour AAWT format.

4.101 Construction Phase: construction related traffic movements and activities on site have not been assessed in the initial report; however, the development has the potential to cause temporary disturbance to surrounding receptors during the course of the works and will need to be scoped into the ES chapter. It is understood that the nearest receptor is Five Fords Cottage (R02) approximately 170m to the northeast of the site; due to distance from site to receptors, vibration has been scoped out

Identification of Effect/s which are Likely to be Significant.

4.102 Likely significant noise and vibration effects during demolition and construction and once the Development is completed and operational to be addressed in the ES will include:

- Temporary noise and vibration effects on existing sensitive receptors surrounding the Site as a result of demolition and construction works;
- Temporary noise effects arising from changes in traffic entering the Development during construction works;
- Change in road traffic noise levels at existing sensitive receptors as a result of the Development once completed and operational;
- Maximum permissible building services plant noise emissions have been advised for nearest receptors; however, should more recently updated plant details become available (including specifications and location etc.), then an assessment of this would also need to be considered. This level of detail is unlikely to be required at outline planning application stage.
- Cumulative assessment of plant noise may increase the potential operational noise impacts at nearest receptors.

4.103 A summary of potentially significant effects is provided in the table below.

Effect	Receptor	Construction / operation	Discussion
LOAEL – SOAEL	R01 to R04	Operation	Initial assessment resulted in a +3dB above background (LOAEL). Should plant proposals change and should an cumulative assessment be required, this has the potential to increase predictions into a SOAEL.
LOAEL	All	Construction	Construction traffic and site works may have the potential to cause

			disturbance, assessment required
LOAEL	All	Operation	Traffic noise may increase as a result of the development, assessment required

Assessment Methodology for Likely Significant Effects

Method of Assessment

4.104 Prediction of noise and vibration levels generated from key demolition and construction activities and an assessment of the likely significant impacts using the methodology set out in BS 5228-1.

4.105 Prediction of operational noise will need to be considered based on updated proposals and potential cumulative impact from neighbouring developments in accordance with BS 4142:2014. Other receptors may need to be considered as a result.

4.106 Assessment of the potential effect of changes in road traffic noise levels as a result of traffic generated by the completed and operational Development upon existing sensitive receptors. This will be undertaken in accordance with the detailed calculation methodology set out in the Calculation of Road Traffic Noise (CRTN) memorandum[vi]. The significance of any predicted changes would be assessed with reference to the Design Manual for Roads and Bridges (DMRB), Volume 11, Section 3, Part 7 – '*Noise and Vibration*' (2011)[vii] and other relevant documents.

4.107 Where significant noise and vibration effects are identified, consideration will be given to appropriate mitigation measures to safeguard amenity and ensure compatibility with adjoining sites. The residual effects after implementation of these measures will also be considered and assessed for their significance.

Supporting Documents

4.108 A Noise Assessment will support the ES Chapter, likely forming an appendix.

Ecology

Consultation and Baseline Conditions / Information

Consultation

4.109 Consultation with Natural Resources Wales (NRW) (Senior Species Officer) with regards to great crested newt mitigation was undertaken in April 2025. Approach agreed for the development to follow a GCN mitigation strategy informed by the eDNA results, acknowledging the national population of GCN within the Wrexham Industrial Estate and providing the mitigation at Five Fords followed the previous approval.

Baseline and Completed Background Studies

4.110 TEP has provided ecology services in relation to the development of Five Fords, Wrexham. The following surveys have been undertaken:

- Ecology desktop survey consisting of 10km search for internationally statutory designated sites, 5km for nationally designated sites, and 2km search for local statutory and non-statutory designated sites as well as protected and priority species.
- An extended UK habitat survey of the site was undertaken in May 2025.
- Hedgerow Regulations Assessment survey was undertaken in May 2025.

- Great crested newt (GCN) eDNA sampling undertaken for off-site ponds by Tyler Grange in June 2024.
- Badger survey undertaken in August 2025.
- A Ground Level Tree Assessment (GLTA) for bats was undertaken in May 2025, whereby four trees were assessed to have suitability for roosting bats within and adjacent to site
- Breeding bird surveys were undertaken between March and June 2025.

Scope of Assessment

Key Issues and Requirement for Assessment

4.111 While the habitats at the application site are generally considered to be of low ecological value, the site does have the potential to support great crested newts and other common amphibians, badger, breeding birds, bats (roosting, foraging and commuting), brown hare, hedgehog and polecat which may be impacted by construction and/or operations on site.

Identification of Effect/s which are Likely to be Significant.

4.112 Ecological impacts can occur at all stages of a development process. Short-term impacts may result from preliminary ground investigation work, demolition and site clearance, and the construction activities themselves. Impacts associated with such activities are likely to be temporary and of a less significant nature than the longer-term impacts of the development. They may include risks such as disturbance to birds and other fauna using the site, or may come from pollution incidents or similar. Temporary habitats may also be created during this stage of development.

4.113 Long-term and permanent impacts are associated with the loss, fragmentation or modification of habitats present on or around a development site. Individual species of flora and fauna could be impacted to differing degrees and in various ways by the loss or alteration of habitat. Finally, potentially permanent impacts on wildlife adjacent to a development may occur due to human interference in one form or another. Such disturbance may lead to habitat deterioration and the disturbance of individual animals using adjacent habitats.

4.114 In relation to habitats and plants, potential impacts would include the permanent loss of habitat as well as other possible impacts, for example, partial loss or reduction in species diversity. The significance of such impacts would be associated with the relative conservation importance of the specific habitat and associated species. Just as impacts could be adverse, a development such as this provides significant opportunities for beneficial impacts through appropriate habitat creation and design.

4.115 A summary of potentially significant effects is provided in the table below.

Effect	Receptor	Construction / operation	Discussion
Indirect effects on (e.g. pollution effects) to statutory international designations.	Internationally designated sites - Afon Dyfridwy a Llyn Tegid (River Dee and Bala Lake) (Wales) Special Area of Conservation (SAC); River Dee and Bala Lake SAC (England)	Construction/Operation	Site is approximately 60m from the River Clywedog, a major tributary of the River Dee. Potential for runoff/pollution during construction. The proposed development could

Effect	Receptor	Construction / operation	Discussion
			potentially lead to an increase of phosphorus load from the receiving wastewater treatment works into the River Dee and Bala Lake SAC.
Indirect effects on (e.g. pollution effects) to statutory national designations	Nationally designated sites - Afon Dyfrdwy / River Dee SSSI (Wales)	Construction	Site is approximately 60m from the River Clywedog, a major tributary of the River Dee SSSI (Wales). Potential for runoff/pollution during construction.
Disturbance and / or indirect effects such as pollution effects to non-statutory designations	Non-statutory locally designated sites	Construction/Operation	There is the potential for indirect effects resulting from construction works such as airborne dust, noise and ground / water contamination.
Direct loss of and / or damage to ecologically valuable / 'Important' / or S7 habitats within the Site	Native hedgerow (S7 and/or 'Important' hedgerows); Broad-leaved trees	Construction	Hedgerows will be removed to allow for road access from the highway network, with an internal hedgerow and scattered trees to be removed as part of the site layout.
Post-construction disturbance / impact on ecologically valuable / 'Important' / or S7 habitats within the Site	Native hedgerow (S7 and/or 'Important' hedgerows); Broadleaved trees	Operation	There is the potential for the hedgerows and trees to be lost or damaged through a lack of ongoing management and / or as a result of

Effect	Receptor	Construction / operation	Discussion
			physical disturbance/erosion.
Accidental killing, injury, loss or disturbance (e.g. from noise and lighting) to protected and / or notable species and / or their habitats.	Great crested newt and common toad, roosting and foraging and commuting bats, breeding birds and other S7 priority species (ie hedgehog, brown hare, polecat if present)	Construction and operation	Construction works will include site clearance, drainage, site levelling earthworks and then construction itself. These activities will result in an increased risk of disturbance, injury and death to protected and /or notable species and / or their habitats.
Severance resulting in fragmentation or isolation of habitats upon which protected and / or notable species may be dependent on and effects upon such species			The development may fragment terrestrial habitat utilised by protected and /or notable species
Disturbance to protected and / or notable species post-construction associated with noise, lighting and mortality risks from new infrastructure	Great crested newt and common toad, roosting and foraging and commuting bats, breeding birds and other S7 priority species (ie hedgehog, brown hare, polecat if present)	Operation	Vehicular and pedestrian movements around the Site during the operation stage, will result in increased visual and noise disturbances and therefore could disturb protected and / or notable species, and lead to an increased risk of accidental death on new roads.

Assessment Methodology for Likely Significant Effects

Method of Assessment

Assessment Scenarios

4.116 The following proposed development scenarios are proposed for assessment:

- construction phase activities, which will also include the consideration of site enabling work activities; and
- The final completion of the scheme, assuming full occupation/operation.

4.117 The results from the assessment scenarios will be compared against the future baseline. The results for the future baseline scenario will be informed by the existing baseline results obtained from surveys undertaken in 2024 and 2025. It can be reasonably be assumed that the agricultural use of the site will continue in the absence of development and the ecological value of these features would be expected to remain at its existing level.

4.118 The assessment will consider the likelihood of significant effects on Important Ecological Features (IEF) during the construction and operational phases of the development. The assessment will also consider the proposed scheme with embedded mitigation measures in place.

Assessment Process Criteria

4.119 This assessment will be undertaken using the Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines for EcIA (hereafter referred to as the 'Guidelines'). Although this is recognised as current industry guidance for ecological assessment, the guidance itself recognises that it is not a prescription about exactly how to undertake an ecological impact assessment (EcIA); rather, CIEEM advises that they "provide guidance to practitioners for refining their own methodologies".

Important Ecological Features (IEFs)

4.120 It is necessary to determine which ecological features identified in the data search and extended UK habitat survey (habitats, species, ecosystems and their functions / processes) are important. IEFs should be subject to detailed assessment if they are likely to be impacted by the proposed development. It is therefore not necessary to carry out detailed assessment of features that are sufficiently widespread, unthreatened and resilient to project impacts such that there is no risk to their viability. Ecological features can be important for a variety of reasons and the rationale used to identify this is explained below. Importance may relate, for example, to the quality or extent of designated sites or habitats, to habitat / species rarity, to the extent to which they are threatened throughout their range, or to their rate of decline.

Evaluation to Determine Importance

4.121 Under the Guidelines, the importance of an ecological feature should be considered within a defined geographical context. The following frame of reference will be used in the assessment:

- International and European Value;
- National Value;
- Regional Value;
- Metropolitan, County, vice-county or other local authority; and
- Local Value.

4.122 Those ecological features that are considered to have an importance lower than 'Local' will not been considered further. Considering the Guidance, features of less than 'Local' importance are generally considered unlikely to trigger a mitigation or policy response in an EcIA.

Habitats

4.123 The Guidelines recommend that the value habitats and plant communities should be measured against should include published selection criteria where available. Where areas of a habitat or plant community do

not meet the necessary criteria for designation at a specific level, the Guidelines recommend that the ecologist may consider the local context if appropriate.

Species

4.124 The Guidelines deal with species that need to be assessed because they are of biodiversity value, rather than because they are legally protected (although some species may fit in to both categories). In assigning value to a species, it is necessary to consider its distribution and status, including a consideration of trends based on available historical records. The valuation of populations should make use of any relevant published evaluation criteria.

Assessment of Potential Effects

4.125 The following four-point scale will be used to express the degree of confidence in the prediction of impact significance; Certain/near certain, Probable, Possible and Extremely Unlikely. For residual impacts, this scale will also indicate the reliability of mitigation proposals. The Guidance defines that effects can be adverse or beneficial. Adverse effects can include:

- Direct loss of wildlife habitats;
- Fragmentation and isolation of habitats;
- Disturbance to species from noise, light or other visual stimuli;
- Changes to key habitat features; and / or
- Changes to the local hydrology, water quality and / or air quality.

4.126 Adverse and beneficial effects on nature conservation features will be characterised based on predicted changes because of the proposed activities. To characterise the effects on each feature, the assessment will take account of the following parameters:

- The magnitude of the effect;
- The spatial extent over which the effect would occur;
- The temporal duration of the effect;
- Whether the effect is reversible and over what timeframe; and
- The timing and frequency of the effect.

Assessment Criteria

4.127 In accordance with the Guidelines, the assessment will identify those beneficial and adverse effects which would be ‘significant’, based on the structure, function and conservation status of the ecological feature. The Guidelines define an ecologically significant impact as “… an effect that either supports or undermines biodiversity conservation objectives for ‘important ecological features’ or for biodiversity in general…”.

4.128 The conservation status of habitats and species within a defined geographical area is described in the Guidelines as follows and will be used in this assessment to determine whether the effects of the proposals on non-designated habitats and species are likely to be significant:

- For habitats, “…. conservation status is determined by the sum of influences acting on the habitat that may affect its extent, structure and functions as well as its distribution and its typical species within a given geographical area”; and
- For species, “… conservation status is determined by the sum of influences acting on the species concerned that may affect its abundance and distribution within a given geographical area”.

4.129 In addition to determining the significance of an effect on any ecological features, this ES chapter will also identify any legal requirements in relation to wildlife.

Significance of Effect Criteria

4.130 Once an impact has been described it is necessary to determine if the effect is ‘significant’. In the context of CIEEM EcIA guidance a significant effect is one that either supports or undermines biodiversity conservation

objectives for 'important ecological features'. This can include impacts on the structure and function of sites and habitats or the conservation status of habitats and species (i.e. does the impact alter the extent, distribution or abundance of the feature?). The decision on significance is made irrespective of the geographical scale of importance of the feature; even if an effect is found not to be significant at the level at which the feature has been valued, it may be significant at a more local level. A significant negative effect is not necessarily one that would make the proposals unacceptable.

4.131 The standard Environmental Impact Assessment (EIA) terms for characterising magnitude of impact are shown below:

- Substantial Beneficial;
- Moderate Beneficial;
- Slight Beneficial;
- Negligible;
- Slight Adverse;
- Moderate Adverse; and,
- Substantial Adverse.

4.132 Box J. et al. (2017) set out an approach to explain the translation between traditional EIA significance terminology and that of the CIEEM guidelines. This is set out in the following Table 10.3. The CIEEM approach will be used to describe significance.

Table 10.3 Translation between traditional EIA and CIEEM terms of significance

Scale of significance following CIEEM guidelines	Equivalent significance using traditional EIA approach
International/ national (positive or negative)	Substantial (adverse or beneficial)
County/ District (positive or negative)	Moderate (adverse or beneficial)
Local (positive or negative)	Slight (adverse or beneficial)
Not significant	Negligible

4.133 Those IEFs that are considered to have an importance lower than 'Local' will not been considered further. Considering the Guidance, features of less than 'Local' importance are generally considered unlikely to trigger a mitigation or policy response in an EcIA.

Supporting Documents

4.134 The Ecology ES Chapter will be supported by the following technical reports:

- Ecology Desk Study
- Ecological Impact Assessment
- Breeding Bird Survey Report (alongside other relevant surveys, if required)

Transport

Consultation and Baseline Conditions / Information

Consultation

4.135 No consultation with Wrexham County Borough Council (WCBC) Highways has been undertaken. It is intended to undertake scoping discussions with the Local Highway Authority to agree on the overall scope of the traffic impact assessment with particular reference to baseline traffic flows, Proposed Development trip

generation, trip distribution and the extent of junction capacity assessments required. As such, until these discussions have been undertaken, the initial appraisal contained within this Chapter is subject to refinement and change. It should however be noted that any changes would not impact the proposed methodology for the Traffic and Transport Environmental Statement (ES) Chapter.

Baseline and Completed Background Studies

4.136 The Proposed Development is located to the west of Sesswick Lane to the south of the Wrexham Industrial Estate in Wrexham. A full qualitative assessment of the local highway network will be undertaken as part of the Transport Assessment.

4.137 To define an initial study area, a trip distribution exercise has been undertaken based on 2011 Census Data (Location of usual residence and place of work) for 'Car Drivers' working in Middle Layer Super Output Areas (MSOAs) 'Wrexham 016 and Wrexham 020' which cover the site location and the wider industrial estate. It has been assumed that trips undertaken by Light Goods Vehicles (LGVs) and Heavy Goods Vehicles (HGVs) would distribute evenly between key strategic routes including the A483, A525 and A534.

4.138 The data has been used to inform the pattern of arrivals and departures to / from the site to / from the top 50 MSOAs across the UK. Using this information, highway links expected to result in an increase in daily AADT or HGV movements have been included within the initial study area for the Traffic and Transport ES Chapter.

4.139 Baseline traffic data has been obtained from various sources. However, it is intended that a set of comprehensive traffic surveys will be undertaken across the study area in locations where existing data is older than 3 years. The baseline Annual Average Daily Traffic (AADT) for all traffic and HGV flows for links across the study area are presented in **Table 4.1**.

Table 4.1 – Baseline information

Link ID	Link Name	Between		Data Source	DfT Ref	Year	Type	AADT	HGV
1	Sesswick Way	Site Access	Cefn Road	2024 ATC	N/A	2024	ATC	5506	240
2	Sesswick Way	Site Access	A525	2024 ATC	N/A	2024	ATC	5506	240
3	Cefn Road	Sesswick Way	Adenbury Road	2024 ATC	N/A	2024	ATC	4320	50
4	Cefn Road	Abenbury Road	Queensway	2024 ATC	N/A	2024	ATC	6002	77
5	Cefn Road	Queensway	Dean Road	2024 ATC	N/A	2024	ATC	5576	79
6	Dean Road	Stryt Holt	Borras Road	No data	No data	No data	No data	No data	No data
7	Queensway	Cefn Road	Prince Charles Road	2024 ATC	N/A	2024	ATC	1866	1
8	Abenbury Road	Cefn Road	A525 Kingsmill Road	2024 ATC	N/A	2024	ATC	6183	11
9	A525 Bangor Road	Sesswick Way	Station Road	2024 ATC	N/A	2024	ATC	2486	71
10	A525 Wrexham Road	Station Road	Abenbury Road	2024 DfT	10608	2024	DfT	8000	97

Link ID	Link Name	Between		Data Source	DfT Ref	Year	Type	AADT	HGV
11	A525 Kingsmill Road	Abenbury Road	Whitegate Road	2024 ATC	N/A	2024	ATC	12940	33
12	Station Road	Piercey Ave	A525 Bangor Road	N/A	No data	No data	No data	No data	No data
13	A525	Sesswick Way	Kiln Lane	2024 ATC	N/A	2024	ATC	5944	203
14	Kiln Lane	A525	Overton Road	2019 DfT	951393	2019	DfT	2109	53
15	A525	Kiln Lane	B5426	No data	No data	No data	No data	No data	No data
16	Bridge Road South	Cefn Road	Clywedog Road South	2024 ATC	N/A	2024	ATC	6946	240
17	Clywedog Road South	Bridge Road South	Abenbury Way	2024 ATC	N/A	2024	ATC	2965	53
18	Abenbury Way	Clywedog Road South	Industrial Estate Road	MCC Survey	N/A	2023	MCC	7502	886
19	Industrial Estate Road	Abenbury Way	A534	MCC Survey	N/A	2023	MCC	22787	1463
20	A534 Wrexham Road	Industrial Estate Road	Wrexham Road	2024 DfT	96048	2024	DfT	7686	491
21	Borras Hall Lane	A534	Borras Road	MCC Survey	N/A	2023	MCC	1095	6
22	A534	Industrial Estate Road	Stryt Holt	2024 DfT	96049	2024	DfT	7686	491
23	A5156	A534	Borras Park Road	2024 DfT	93256	2024	DfT	22889	1879
24	A5156	Borras Park Road	Gresford Interchange	2024 DfT	93244	2024	DfT	27825	2005
25	A483 North	Gresford Interchange	A483 J7	2024 DfT	10560	2024	DfT	48480	3576
26	A483 South	Gresford Interchange	A483 J5	2024 DfT	30560	2024	DfT	53474	2494
27	B5445	Gresford Interchange	Clappers Lane	MCC Survey	N/A	2023	MCC	14294	206
28	Blue Bell Lane	Gresford Interchange	Plas Acton Road	MCC Survey	N/A	2023	MCC	8327	220

Scope of Assessment

Key Issues and Requirement for Assessment

4.140 An Area of Influence Study will be completed in relation to forecast traffic conditions both with and without the Proposed Development based upon IEMA guidelines Rules 1 and 2. This will define the highway links effectively scoped in for more detailed assessment.

4.141 On the basis that both the construction and operational phases of the Proposed Development may result in increases in AADT and / or HGV AADT above 30% (10% on sensitive links) on some of the links identified in **Table X.1**, both phases will be scoped in at this stage.

4.142 There are likely to be a number of links identified within **Table 4.1** where forecast increases in traffic are less than 30% (or 10% on sensitive links). Once confirmed through the Area of Influence Study, it is likely that a number of these will be discounted and scoped out of the ES Chapter.

Identification of Effect/s which are Likely to be Significant.

4.143 A summary of potentially significant effects is provided in the Table 4.2 below.

Table 4.2 – Consideration of effects

Effect	Receptor	Construction / operation	Discussion
Severance	Road users and adjacent land users along Highway Links Identified in **Table X.1** where AADT or HGV flows increase by over 30% (or10% on sensitive links)	Construction & Operation	Guidance on the assessment of severance is provided in the IEMA guidelines [2] (paragraphs 3.13 to 3.18), utilising proportionate changes in traffic flow. For those links within the study area (once defined), an assessment of the sensitivity of those links and the receptors potentially affected will be completed.
Driver Delay	Drivers at junctions along Links Identified in **Table X.1** where AADT or HGV flows increase by over 30% (or10% on sensitive links)	Operation	The TA will include assessment of driver delay through the analysis of individual junction locations identified through comprehensive analysis of traffic impacts on the highway network in the existing baseline condition and with the Proposed Development during the peak hours. Where required, the Proposed Development's effects on junction capacity will be mitigated to ensure conditions with the development are not materially worse than would otherwise have been the case without the development and mitigation.
Non-motorised User Delay	Non-motorised road users on Highway Links Identified in **Table X.1** where AADT or HGV flows increase by over 30% (or10% on sensitive links)	Construction & Operation	Changes in the volume, composition or speed of traffic may affect the ability of non-motorised users to cross roads. The assessment of such delay is described as being closely grouped with severance in the IEMA guidelines (paragraph 3.24).

[2] Institute of Environmental Management and Assessment (2023). Environmental Assessment of Traffic and Movement.

Effect	Receptor	Construction / operation	Discussion
Non-motorised user amenity	Non-motorised road users on Highway Links Identified in **Table X.1** where AADT or HGV flows increase by over 30% (or10% on sensitive links)	Construction & Operation	Non-motorised user amenity is broadly defined as the relative pleasantness of a journey and is considered to be affected by traffic flow, traffic composition and pavement width/separation from traffic. It has many parallels with the assessment of fear and intimidation, given the assessment metric in this instance is changes in traffic conditions. The IEMA guidelines (paragraph 3.30) suggest a tentative threshold for judging the significance of changes in pedestrian amenity would be where traffic flow (or its HGV component) is halved or doubled. Albeit the assessment should pay regard to local conditions and instead it is proposed to follow a similar assessment to that set out in relation to fear and intimidation to assess the magnitude of change in relation to flow, composition and speed.
Fear and intimidation	Road users and adjacent land users along Highway Links Identified in **Table X.1** where AADT or HGV flows increase by over 30% (or10% on sensitive links)	Construction & Operation	A framework for the assessment of fear and intimidation is provided in the IEMA guidelines (paragraphs 3.32 to 3.40). It is proposed to utilise the degree of hazard assessment summarised in Tables 3.1 to 3.3 of the same guidance to determine the magnitude of change on affected highway links.
Road Safety	Road users and adjacent land users along Highway Links Identified in **Table X.1** where AADT or HGV flows increase by over 30% (or10% on sensitive links)	Construction & Operation	It is anticipated that a study of historic collision records to identify cluster sites will be completed as part of the TA across a study area to be agreed with the LHA . It is also envisaged that road safety audits will be completed for new road junctions (e.g. accesses), as well as mitigation required to address capacity impacts.

Effect	Receptor	Construction / operation	Discussion
Severance	Road users and adjacent land users along Highway Links Identified in **Table X.1** where AADT or HGV flows increase by over 30% (or10% on sensitive links)	Construction & Operation	Guidance on the assessment of severance is provided in the IEMA guidelines [3] (paragraphs 3.13 to 3.18), utilising proportionate changes in traffic flow. For those links within the study area (once defined), an assessment of the sensitivity of those links and the receptors potentially affected will be completed.

Assessment Methodology for Likely Significant Effects

Method of Assessment

4.144 There are a number of environmental effects that can potentially be significant when considering traffic changes in relation to a new development. These are summarised below and are considered and analysed for any road links that exceed the IEMA significance criteria for changes in traffic flow volume or composition:

- Severance
- Driver Delay
- Non-motorised user delay
- Non-motorised user amenity
- Fear and intimidation
- Abnormal/Hazardous load

4.145 The construction of the Proposed Development is anticipated to utilise standard techniques and is unlikely to attract abnormal or hazardous load movements and accordingly these are scoped out of any subsequent assessment.

4.146 Given the nature of the Proposed Development, it is considered unlikely that abnormal or hazardous load movements will be required during the occupation phase and accordingly these are scoped out of any subsequent assessment.

4.147 An Area of influence Study will be completed in relation to forecast traffic conditions both with and without the Proposed Development based upon IEMA guidelines[4] Rules 1 and 2. This will define the highway links effectively scoped in for more detailed assessment. This is summarised in **Table 4.3**, which also expands upon IEMA Rule 1 and 2 criteria to assign a magnitude of change to total changes in total traffic flow or HGV composition to allow the consideration of proportionality for those links in exceedance of IEMA Rules 1 and 2.

[3] Institute of Environmental Management and Assessment (2023). Environmental Assessment of Traffic and Movement.

[4] Institute of Environmental Management and Assessment (2023). Environmental Assessment of Traffic and Movement.

Table 4.3 – Magntitude of change

Change in Traffic Flow	Magnitude of Change
Change in total traffic or HGV flows over 90%	Large
Change in total traffic or HGV flows of 60-90%	Medium
Change in total traffic or HGV flows of 30-60%	Small
Change in total traffic or HGV flows of less than 30%	Negligible

4.148 It should be noted that for specific transport and accessibility-related environmental effects, the magnitude of traffic change as summarised in **Table x.3**, is too coarse a metric to apply as the only assessment component. On this basis effect-specific metrics for the magnitude of impact will be relied upon where an appropriate methodology to do so is identified through the latest IEMA guidelines.

4.149 In tandem, a study will be completed to identify potential receptor sensitivity for those highway links identified in the Area of Influence Study to determine the likely sensitivity of receptors based upon the land uses and infrastructure in immediate proximity of identified links. A summary of the criteria to be applied in this assessment is provided in **Table X.4** with a combination of desktop study and site visits to be completed to inform this qualitative assessment.

Table 4.4 – Receptor types

Receptor Sensitivity	Receptor Type
High	Receptors of greatest sensitivity to traffic flow: schools, colleges, playgrounds, accident blackspots, retirement homes, urban/residential roads without footways that are used by pedestrians.
Medium	Traffic flow sensitive receptors including congested junctions, doctors' surgeries, hospitals, shopping areas with roadside frontage, roads with narrow footways, un-segregated cycleways, community centres, parks, recreation facilities.
Low	Receptors with some sensitivity to traffic flow: places of worship, public open space, nature conservation areas, listed buildings, tourist attractions and residential areas with adequate footway provision.
Negligible	Receptors with low sensitivity to traffic flows and those sufficiently distant from affected roads and junctions.

4.150 The assessment of likely significant effects to sensitive receptors will consider the sensitivity of the receptor (on a scale of high, medium, low and negligible) and the magnitude of change (on a scale of large, medium, small and negligible) to determine the significance of effect on a scale of major, moderate, minor and negligible as summarised in **Table 4.5** below.

Table 4.5 – Sensitivity of receptors

Sensitivity of Receptor	Magnitude of Change			
	Large	Medium	Small	Negligible

High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Negligible	Minor	Negligible	Negligible	Negligible

4.151 Effects are categorised to be major, moderate, minor or negligible. Where significant effects are identified, appropriate mitigation measures will be committed to in order to address these effects.

4.152 Where mitigation measures are required, a further assessment is undertaken on any remaining 'residual' effects that may still be present after the implementation of mitigation measures.

Supporting Documents

4.153 A Transport Assessment and a Travel Plan will be provided.

Air Quality

Consultation and Baseline Conditions / Information

Consultation

4.154 An Air Quality Assessment has been undertaken to consider potential impacts associated with a previous design iteration for the site. The methodology was agreed with Paul Campini, Enforcement Officer at Wrexham County Borough Council (WCBC), on 15th April 2025. Although the proposals have evolved, the principle of assessment is still valid. The comments provided in relation to the previous assessment are therefore considered relevant to the EIA.

Baseline and Completed Background Studies

4.155 As outlined above, an Air Quality Assessment was undertaken to consider potential impacts associated with a previous design iteration for the site. This is provided in Appendix G of the EIA Scoping Report. Potential impacts during the construction and operational phases of the development were considered and the main findings can be summarised as follows:

- During the construction phase of the development there is the potential for air quality impacts as a result of fugitive dust emissions from the site. These were assessed in accordance with the Institute of Air Quality Management (IAQM) document 'Guidance on the Assessment of Dust from Demolition and Construction V2.2'. Site-specific dust control measures were subsequently determined based on the analysis results. Following implementation, the residual significance of potential air quality impacts from dust generated by earthworks and construction activities was classified as not significant; and,
- Potential impacts during the operational phase of the proposals may occur due to road traffic exhaust emissions associated with vehicles travelling to and from the site. These were assessed using dispersion modelling. The results indicated that impacts on annual mean nitrogen dioxide (NO_2), particulate matter with an aerodynamic diameter of less than 10µm (PM_{10}) and particulate matter with an aerodynamic diameter of less than 2.5µm ($PM_{2.5}$) concentrations as a result of traffic generated by the development were predicted to be negligible at all sensitive receptor locations. Following consideration of the relevant issues, impacts as a result of the operation of the development were considered to be not significant, in accordance with the IAQM guidance 'Land-Use Planning & Development Control: Planning for Air Quality'.

4.156 Although the development proposals have evolved and a number of datasets updated since the Air Quality Assessment was completed, it is considered likely that similar impacts would be expected from the revised scheme.

Scope of Assessment

Key Issues and Requirement for Assessment

4.157 The proposed development has the potential to cause air quality impacts at sensitive locations. As such, the EIA will:

- Assess potential impacts associated with fugitive dust emissions during the construction phase of the development;
- Assess potential impacts associated with road transport emissions during the operational phase of the development; and,
- Identify any requirement for relevant mitigation measures.

Identification of Effect/s which are Likely to be Significant.

4.158 A summary of potentially significant effects is provided in the table below.

Effect	Receptor	Construction / operation	Discussion
Dust soiling as a result of fugitive dust emissions	Residents within 250m of the site	Construction	Potential for loss of amenity through dust deposition
Effects at human health receptors due to increases in PM_{10} concentrations as a result of fugitive dust emissions	Residents within 250m of the site	Construction	Potential for increases in PM_{10} concentrations with associated health effects at residential properties within 250m of the site
Effects at human health receptors due to increases in NO_2, PM_{10} and $PM_{2.5}$ concentrations as a result of road vehicle emissions	Residents within the vicinity of the affected road network	Operation	Potential for increases in NO_2, PM_{10} and $PM_{2.5}$ concentrations with associated health effects at residential properties within 200m of the affected road network

Assessment Methodology for Likely Significant Effects

Method of Assessment

4.159 It is proposed to follow the methodology adopted for the original Air Quality Assessment when undertaking the EIA. This is summarised below.

4.160 During the construction of the proposed development there is the potential for air quality impacts as a result of fugitive dust emissions from earthworks and construction activities. It is proposed to assess potential dust soiling effects, as well as potential increases in PM_{10} concentrations, in accordance with the IAQM document 'Guidance on the Assessment of Dust from Demolition and Construction V2.2'.

4.161 During the operation of the proposed development there is the potential for air quality impacts as a result of road traffic exhaust emissions associated with vehicles travelling to and from the site. These will be assessed through detailed dispersion modelling using ADMS-Roads in order to quantify pollution levels at sensitive locations both with and without the proposed development in place.

4.162 The assessment will be undertaken using relevant traffic data, local land use characteristics and 1-year of hourly meteorological records taken from the most representative observation station for the site. The modelling outputs will be verified against local monitoring data in accordance with the DEFRA 'Local Air Quality Management Technical Guidance (TG22)' methodology. The significance of potential effects at sensitive receptors will be determined based on the predicted magnitude of change in pollutant concentrations and the criteria provided within the IAQM document 'Land-Use Planning & Development Control: Planning for Air Quality'.

Supporting Documents

4.163 It is not proposed to produce any additional supporting documents for the Air Quality ES Chapter, all supporting information would form part of the ES Chapter or its appendices (for example, modelling input).

Landscape and Visual Impact

Consultation and Baseline Conditions / Information

Consultation

4.164 Pre-application advice from WCBC raised concerns as to the landscape effects of the Proposed Development, suggesting that a full ES Landscape and Visual Impact Assessment of the development parameters would likely be required.

4.165 Viewpoint locations have been determined by desktop investigation and fieldwork and have been agreed with WCBC outside the scoping process.

4.166 WCBC requested that the selection of views be checked against the previous permitted scheme for glasshouses on the Site. The proposed viewpoints and visual receptors for this application largely correspond with the views for the former scheme. The only omissions are external views from public highways, which the previous scheme's Landscape and Visual Impact Assessment found to receive no or slight visual effects in the long term. The users of these highways are inherently low sensitivity receptors.

Baseline and Completed Background Studies

4.167 Desktop assessment has been undertaken of the published landscape character context and relevant policy and designations. A Baseline Information Map showing the relevant designations and the study area is included at Appendix F of the EIA Scoping Report.

4.168 This has been supported by fieldwork to assess the character of the Site and its relationship with its landscape setting, including visibility from potential visual receptors. The fieldwork was informed by a Zone of Theoretical Visibility model (Appendix F of the EIA Scoping Report), which was based upon a bare-earth topographical model.

4.169 A map showing the location of the proposed viewpoints is presented at Appendix F of the EIA Scoping Report

Scope of Assessment

Key Issues and Requirement for Assessment

4.170 The Proposed Development has the potential to result in significant effects during both construction and operational phases upon the character of the Site and its relationship with its landscape setting, and upon the visual amenity of those who currently view the Site from public locations. It therefore requires a structured and rigorous assessment as part of the Environmental Impact Assessment.

Identification of Effect/s which are Likely to be Significant.

4.171 A summary of potentially significant effects is provided in the table below.

Effect	Receptor	Construction / operation	Discussion
Landscape change	Site and its immediate setting	Both	Alteration to the landscape fabric of the Site, leading to the direct loss of elements that are potentially valued within the local landscape
Landscape change	Wider landscape setting	Both	Indirect effects upon the contribution that the Site makes to wider landscape character, resulting in changes to how the landscape is perceived and the potential reduction in key characteristics.
Views of the Proposed Development	Public Right of Way users	Both	Introduction of the Proposed Development into views towards the Site, especially from routes that are used to enjoy the countryside.
Views of the Proposed Development	Public highway users (likely restricted to Sesswick Way)	Both	Introduction of the Proposed Development into views towards the Site from adjacent public highways. More distant views are highly unlikely to be significant.

Assessment Methodology for Likely Significant Effects

Method of Assessment

4.172 The assessment will be undertaken in line with the framework set out in Guidelines for Landscape and Visual Impact Assessment Third Edition (Landscape Institute and Institute of Environmental Management and Assessment, 2013), and it will be undertaken by a Chartered Landscape Architect.

4.173 Assessments of effects will be undertaken at construction stage, upon completion of the Proposed Development, and 15 years following completion when any proposed planting is deemed to be fully established.

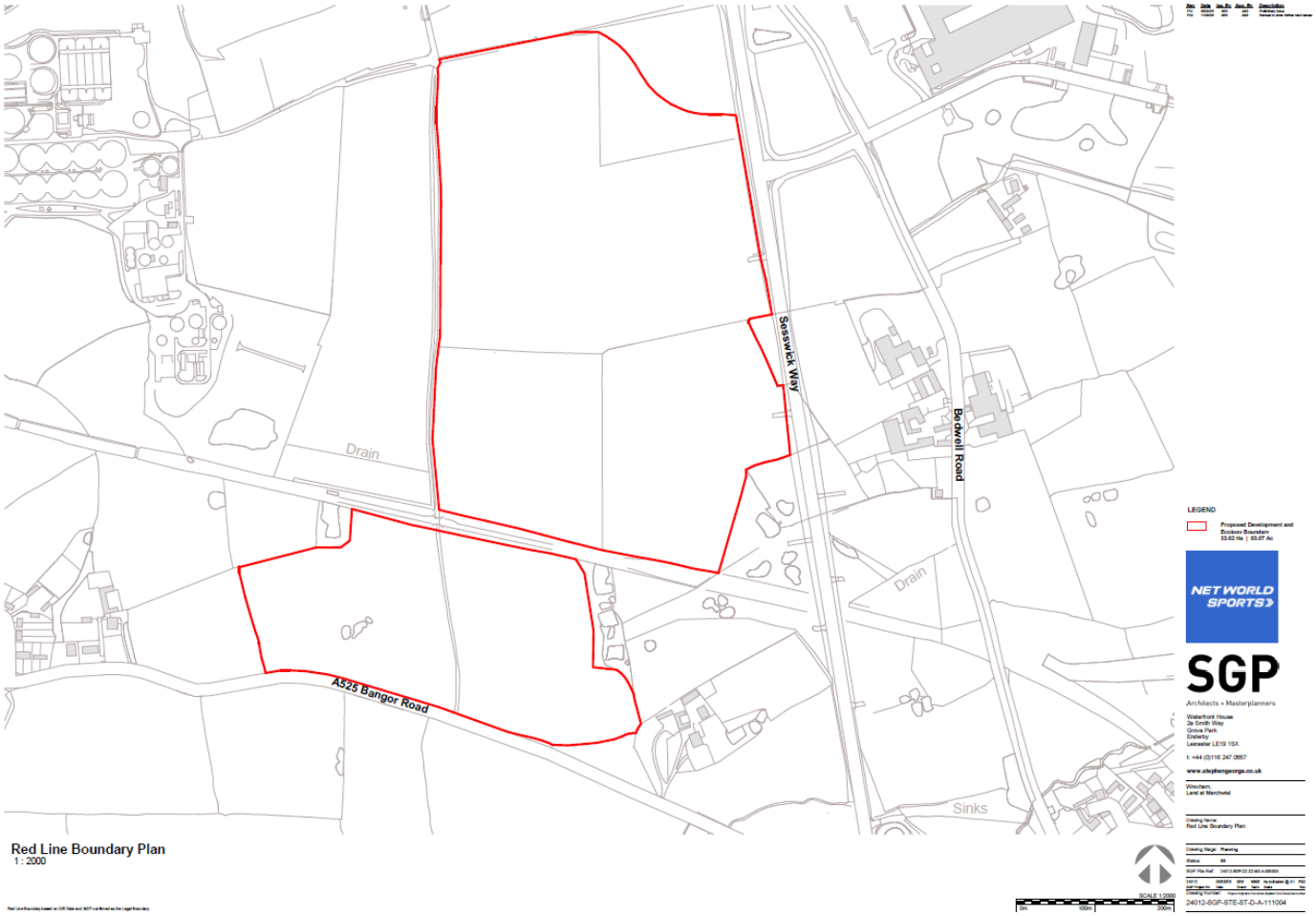
4.174 A comprehensive assessment methodology is presented at Appendix E of the EIA Scoping Report.

4.175 The assessment will include Type 3 wireframe visualisations, as described in the Landscape Institute Technical Guidance Note 06/19: Visual Representation of Development Proposals. This is considered the most proportional approach to represent the context, form and extent of the development for the purposes of this assessment.

Supporting Documents

4.176 A standalone Landscape and Visual Impact Assessment will be included as a technical appendix to the Environmental Statement, with the chapter itself summarising the findings of this assessment for brevity.

APPENDIX A: SITE LOCATION PLAN



APPENDIX B: CURRENT ILLUSTRATIVE MASTERPLAN



Unit 1		
Warehouse GIA	257,263 ft²	24,830 m²
1st Floor Office GIA (incl. GF Core)	15,000 ft²	1,394 m²
Gatehouse GIA	262 ft²	24 m²
Total GIA	**282,525 ft²**	**26,247 m²**
Dock Doors	28	
Level Access	4	
Trailer Spaces	50	
Car / Motorcycle Spaces	272	
Cycle Spaces	60	

Unit 2		
Warehouse GIA	37,806 ft²	3,512 m²
1st Floor Office GIA (incl. GF Core)	4,004 ft²	372 m²
Gatehouse GIA	0 ft²	0 m²
Total GIA	**41,810 ft²**	**3,884 m²**
Dock Doors	4	
Level Access	1	
Trailer Spaces	9	
Car / Motorcycle Spaces	44	
Cycle Spaces	10	

Unit 3		
Warehouse GIA	37,115 ft²	3,448 m²
1st Floor Office GIA (incl. GF Core)	4,004 ft²	372 m²
Gatehouse GIA	0 ft²	0 m²
Total GIA	**41,118 ft²**	**3,820 m²**
Dock Doors	4	
Level Access	2	
Trailer Spaces	8	
Car / Motorcycle Spaces	34	
Cycle Spaces	10	

Unit 4		
Warehouse GIA	24,030 ft²	2,232 m²
1st Floor Office GIA (incl. GF Core)	2,419 ft²	225 m²
Gatehouse GIA	0 ft²	0 m²
Total GIA	**26,449 ft²**	**2,457 m²**
Dock Doors	0	
Level Access	2	
Trailer Spaces	6	
Car / Motorcycle Spaces	19	
Cycle Spaces	10	

Unit 5		
Warehouse GIA	47,451 ft²	4,408 m²
1st Floor Office GIA (incl. GF Core)	5,037 ft²	468 m²
Gatehouse GIA	0 ft²	0 m²
Total GIA	**52,488 ft²**	**4,876 m²**
Dock Doors	5	
Level Access	1	
Trailer Spaces	10	
Car / Motorcycle Spaces	51	
Cycle Spaces	10	

Unit 6		
Warehouse GIA	163,628 ft²	15,202 m²
1st Floor Office GIA (incl. GF Core)	9,810 ft²	911 m²
Gatehouse GIA	0 ft²	0 m²
Total GIA	**173,438 ft²**	**16,113 m²**
Dock Doors	18	
Level Access	2	
Trailer Spaces	42	
Car / Motorcycle Spaces	170	
Cycle Spaces	20	

Unit 7		
Warehouse GIA	164,135 ft²	15,249 m²
1st Floor Office GIA (incl. GF Core)	8,523 ft²	792 m²
Gatehouse GIA	262 ft²	24 m²
Total GIA	**172,919 ft²**	**16,065 m²**
Dock Doors	15	
Level Access	2	
Trailer Spaces	35	
Car / Motorcycle Spaces	160	
Cycle Spaces	20	

Unit 8a		
Warehouse GIA	15,320 ft²	1,423 m²
1st Floor Office GIA (incl. GF Core)	1,928 ft²	179 m²
Gatehouse GIA	0 ft²	0 m²
Total GIA	**17,248 ft²**	**1,602 m²**
Dock Doors	0	
Level Access	2	
Trailer Spaces	0	
Car / Motorcycle Spaces	16	
Cycle Spaces	10	

Unit 8b		
Warehouse GIA	13,132 ft²	1,220 m²
1st Floor Office GIA (incl. GF Core)	1,928 ft²	179 m²
Gatehouse GIA	0 ft²	0 m²
Total GIA	**15,060 ft²**	**1,399 m²**
Dock Doors	0	
Level Access	2	
Trailer Spaces	0	
Car / Motorcycle Spaces	16	
Cycle Spaces	10	

Unit 9a		
Warehouse GIA	24,811 ft²	2,305 m²
1st Floor Office GIA (incl. GF Core)	2,811 ft²	261 m²
Gatehouse GIA	0 ft²	0 m²
Total GIA	**27,622 ft²**	**2,566 m²**
Dock Doors	0	
Level Access	2	
Trailer Spaces	0	
Car / Motorcycle Spaces	27	
Cycle Spaces	10	

Unit 9b		
Warehouse GIA	15,986 ft²	1,485 m²
1st Floor Office GIA (incl. GF Core)	2,124 ft²	197 m²
Gatehouse GIA	0 ft²	0 m²
Total GIA	**18,110 ft²**	**1,683 m²**
Dock Doors	0	
Level Access	2	
Trailer Spaces	0	
Car / Motorcycle Spaces	17	
Cycle Spaces	10	

Unit 10a		
Warehouse GIA	15,869 ft²	1,474 m²
1st Floor Office GIA (incl. GF Core)	1,928 ft²	179 m²
Gatehouse GIA	0 ft²	0 m²
Total GIA	**17,797 ft²**	**1,653 m²**
Dock Doors	0	
Level Access	2	
Trailer Spaces	0	
Car / Motorcycle Spaces	17	
Cycle Spaces	10	

Unit 10b		
Warehouse GIA	14,710 ft²	1,367 m²
1st Floor Office GIA (incl. GF Core)	1,928 ft²	179 m²
Gatehouse GIA	0 ft²	0 m²
Total GIA	**16,638 ft²**	**1,546 m²**
Dock Doors	0	
Level Access	2	
Trailer Spaces	0	
Car / Motorcycle Spaces	16	
Cycle Spaces	10	

Unit 10c		
Warehouse GIA	14,744 ft²	1,370 m²
1st Floor Office GIA (incl. GF Core)	2,222 ft²	206 m²
Gatehouse GIA	0 ft²	0 m²
Total GIA	**16,966 ft²**	**1,576 m²**
Dock Doors	0	
Level Access	2	
Trailer Spaces	0	
Car / Motorcycle Spaces	17	
Cycle Spaces	10	

Development GIA Schedule

Parameter Zone	Total GIA (sq ft)	Total GIA (m²)
	41,810 ft²	3,884 m²
Zone 1	462,690 ft²	37,491 m²
Zone 2	475,000 ft²	44,200 m²
Overall GIA	926,190 ft²	85,486 m²

Planning Site Area Schedule

Name	Area (Hectares)	Area (Acres)
Site	24.32 hectare	60.11 acres
Zone 1	9.9 hectare	24.47 acres
Zone 2	11.69 hectare	28.9 acres

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24012-SGP-STE-ST-D-A-011036

APPENDIX C: CURRENT ILLUSTRATIVE LANDSCAPING DRAWING (FOR ECOLOGY MITIGATION AREA)

