

2. Assessment Scope and Methodology

2.1. Introduction

- 2.1.1. This chapter explains the methodology used to prepare the technical chapters of this Environmental Statement (ES) and describes its structure and content. In particular, it sets out the process of identifying and assessing the likely significant environmental effects of the Proposed Development, with each individual chapter of this ES stipulating its own specific assessment criteria.

2.2. General Approach to EIA

- 2.2.1. In accordance with the EIA Regulations (Regulation 18)¹, an ES is a statement which includes at least:-

"(a) a description of the proposed development comprising information on the site, design, size and other relevant features of the development;

(b) a description of the likely significant effects of the proposed development on the environment;

(c) a description of any features of the proposed development, or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;

(d) a description of the reasonable alternatives studied by the developer, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment;

(e) a non-technical summary of the information referred to in sub-paragraphs (a) to (d); and

(f) any additional information specified in Schedule 4 relevant to the specific characteristics of the particular development or type of development and to the environmental features likely to be significantly affected.

(4) An environmental statement must –

(a) where a scoping opinion or direction has been issued in accordance with regulation 15 or 16, be based on the most recent scoping opinion or direction issued (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion or direction);

(b) include the information reasonably required for reaching a reasoned conclusion on the significant effects of the development on the environment, taking into account current knowledge and methods of assessment; and

¹ The Town and Country Planning (Environmental Impact Assessment) Regulations 2017; Schedule 1 (18)

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(c) be prepared, taking into account the results of any relevant UK environmental assessment, which are reasonably available to the person preparing the environmental statement, with a view to avoiding duplication of assessment.

(5) In order to ensure the completeness and quality of the environmental statement –

(a) the developer must ensure that the environmental statement is prepared by competent experts; and

(b) the environmental statement must be accompanied by a statement from the developer outlining the relevant expertise or qualifications of such experts”

2.2.2. Accordingly, in summary, this ES comprises the following information:

- A description of the Proposed Development comprising information about the Site including the nature, design, size and scale of the development;
- The data necessary to identify and assess the main effects which the Proposed Development is likely to have on the environment, including a description of the relevant aspects of the current state of the environment (baseline) and forecasting methods used;
- A description of the likely significant effects of the Proposed Development (construction, operation and vulnerability to risks from major accidents and/or disasters) covering direct effects and any indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative effects, explained by reference to the Proposed Development's possible effect on: population, human health, biodiversity, land, soil, water, air, climate, material assets, cultural, architectural and archaeological heritage, landscape and the interaction between any of the foregoing material assets (as appropriate and scoped through formal process);
- Where significant adverse effects are identified with respect to any of the foregoing, mitigation measures are proposed in order to avoid, prevent or reduce and if possible offset those effects;
- A description of the reasonable alternatives studied, which are relevant to the Proposed Development;
- A summary in non-technical language of the information specified above; and
- A statement outlining the relevant experience of the experts who have undertaken the assessment and drafted the technical chapters within this ES (provided at the front of this document); and
- A reference list detailing the sources used.

2.3. The Development Assessed within this ES

2.3.1. This ES supports an:

“Outline application (including details of access to but not within the site) for the erection of up to 700 dwellings together with public open space, landscaping, new vehicular access junctions, active travel links, sustainable urban drainage systems and other associated infrastructure.”

2.3.2. Further information on the development is provided within Chapter 4: The Proposed Development and Alternatives.

2.3.3. To ensure that the Proposed Development will remain the same as that assessed within this ES, development parameters and an accompanying Parameters Plan have been established and assessed. Together, these contain the parameters and controls defining those aspects of the Proposed Development capable of having significant environmental effects, as defined in the EIA Regulations.

2.3.4. The matters encapsulated within the development parameters and Parameter Plan at **Figure 4.1** include:

- Land use areas, including residential, green infrastructure/ open space and access;
- Maximum building heights across the Site;
- Vehicular access points into the Site;
- Retained pedestrian and cycle access; and
- Indicative location of proposed pedestrian and cycle connections

2.3.5. The Parameter Plan forms the basis of the ES assessments and illustrates the maximum extent if the aspects of the Proposed Development being assessed for any likely significant effects.

Consideration of Alternatives

2.3.6. Schedule 4, Paragraph 2, of the EIA Regulations requires that the ES contain:

“A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer... and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects”.

2.3.7. In addition, the National Planning Practice Guidance (“NPPG”) on EIA (Paragraph O35) states that:

“where alternative approaches to development have been considered, the Environmental Statement should include a description of the reasonable alternatives studied which are relevant to the proposed development and its specific characteristics and provide an indication of the main reasons for the choice made, including a comparison of the environmental effects”

2.3.8. Accordingly, this ES contains a section within **Chapter 4** setting out the alternatives considered.

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2.4. Scope of Environmental Impact Assessment and Public Consultation

- 2.4.1. In order to determine the scope of the EIA a request for a Scoping Opinion was submitted on behalf of the Applicant to KMBC on 26th March 2025 (**Appendix 2.1**). The request described the Site context, the nature and purpose of the Proposed Development, and identified the proposed scope and structure of the EIA for KMBC consideration.
- 2.4.2. KMBC issued its Scoping Opinion on 21st May 2025; this is enclosed within **Appendix 2.2**. KMBC contacted a number of consultees as part of the Scoping exercise, their responses are summarised in the below table.
- 2.4.3. In summary, KMBC broadly agreed with the approach, methodology and structure of the ES, including the topics proposed to be ‘scoped in’ and ‘scoped out’. Some more detailed matters were raised / clarified, as summarised in **Table 2.1** below. This table also identifies where these comments, where relevant, are addressed within this ES. Any subsequent discussions regarding the scope of the assessment that has been undertaken separately to the EIA scoping process, are discussed within the relevant technical chapters.

Table 2.1: Summary of Formal Scoping Opinion and Consultee Responses

Local Authority / Consultee	Summary of Comments/Discussion	Where Matters will be Addressed in the ES (or explain why not if not relevant)
Knowsley Metropolitan Borough Council (KMBC) – Scoping Opinion (21/05/2025)	Confirm the approach, methodology, and structure for the ES is acceptable. With regard to cumulative effects the council confirms application 22/00163/FUL is now complete. Agree with the scope of the ES, however note it is acceptable for waste to be scoped out but consideration must be given to policies WM8 and WM9 of the Merseyside and Halton Joint Waste Local Plan. <u>Ecology</u> Agree with the scope of surveys proposed and note scope of assessment follows previous advice from the council and MEAS. Note if woodland within and adjacent to the site is deemed ancient woodland that the air quality chapter should also considered these as a receptor in their assessment and this should feed into ecology chapter. <u>Transport:</u> - The LPA reiterate the advice and requests made by WSP on behalf of National highways in their response. - KMBC Highways are satisfied with the proposed scope of the assessment and consider this appropriate. <u>Cultural Heritage</u> Agree with the approach for heritage and note more detailed comment on this section will be provided under a separate response. The Council's scoping opinion reiterates the advice provided by consultees including Historic England, Environmental Health, Natural England, United Utilities, Public Health and KMBC landscape. Detailed summaries are provided in the following sections of this table and are not repeated here. The LLFA agree with the proposed scope for flood risk and drainage and request at section 12.4.2 of the scoping report an increase in debris and sediment into local watercourses is also considered.	

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Local Authority / Consultee	Summary of Comments/Discussion	Where Matters will be Addressed in the ES (or explain why not if not relevant)
United Utilities (UU) (16/04/2025)	- Recommend a detail site wide foul and surface water drainage strategy is provided with the planning application, this should assess topography, infiltration potential, all forms of flood risk, existing water features and naturally occurring flow paths. - Noting surface water drainage proposals should follow drainage hierarchy. - Should surface water be unable to infiltrate at this site, UU request that all land that is necessary to facilitate a discharge to a watercourse is fully identified within any future submission. - UU strongly advise the applicant engages with us at the earliest possible opportunity to identify United Utilities assets which may be impacted by these proposals. Recommend using pre-development enquiry service to further discuss the proposals. - UU request that the development incorporate water efficiency measures, such as rainwater recycling and water butts.	This will be addressed where relevant within the Flood Risk and Drainage Chapter.
Natural England (NE) (17/04/2025)	NE provide their standard advice on EIA Scoping, and include the following recommendations: - The ES should include the information as set out within Schedule 4 of the EIA Regulations - The ES should fully consider the implications of the development as a whole and in-combination with other projects. - The ES should consider any impacts upon local wildlife and geological sites, including local nature reserves. - The ES should assess the impact of all phases of the proposal on protected species (including, for example, great crested newts, reptiles, birds, water voles, badgers and bats). - The Environmental Statement should include details of: Any historical data for the site affected by the proposal (e.g. from previous surveys); Additional surveys carried out as part of this proposal; The habitats and species present; The status of these habitats and species (e.g. whether priority species or habitat); The direct and indirect effects of the development upon those habitats and species; Full details of any mitigation or compensation measures; and Opportunities for biodiversity net gain or other environmental enhancement. - The ES should assess the impacts of the proposal on any ancient woodland, ancient and veteran trees, and the scope to avoid and mitigate for adverse impacts. It should also consider opportunities for enhancement. - The ES should include a full assessment of the potential impacts of the development on local landscape character using landscape assessment methodologies. - A landscape and visual impact assessment should also be carried out for the proposed development and surrounding area. Natural England recommends use of the methodology set out in Guidelines for	This will be addressed where relevant within the Ecology and Biodiversity chapter.

Local Authority / Consultee	Summary of Comments/Discussion	Where Matters will be Addressed in the ES (or explain why not if not relevant)
	Landscape and Visual Impact Assessment 2013 ((3rd edition) produced by the Landscape Institute and the Institute of Environmental Assessment and Management. - The ES should include an assessment of the impacts on any land in the area affected by the development which qualifies for conditional exemption from capital taxes on the grounds of outstanding scenic, scientific, or historic interest. - The ES should consider potential impacts on access land, common land, public rights of way and, where appropriate, the England Coast Path and coastal access routes and coastal margin in the vicinity of the development, in line with NPPF paragraph 105. - The following issues should be considered and, where appropriate, included as part of the Environmental Statement (ES): The degree to which soils would be disturbed or damaged as part of the development; and The extent to which agricultural land would be disturbed or lost as part of this development, including whether any best and most versatile (BMV) agricultural land would be impacted. - The ES should take account of the risks of air pollution and how these can be managed or reduced. This should include taking account of any strategic solutions or SNAPs, which may be being developed or implemented to mitigate the impacts on air quality. - The assessment should take account of the risks of water pollution and how these can be managed or reduced. - If your planning application is affected by Nutrient Neutrality, the ES needs to take account of any strategic solutions for nutrient neutrality or Diffuse Water Pollution Plans, which may be being developed or implemented to mitigate and address the impacts of elevated nutrient levels. - The ES should identify how the development affects the ability of the natural environment (including habitats, species, and natural processes) to adapt to climate change, including its ability to provide adaptation for people. - The ES should also identify how the development impacts the natural environment's ability to store and sequester greenhouse gases, in relation to climate change mitigation and the natural environment's contribution to achieving net zero by 2050. - The ES should consider the contribution the development could make to relevant local environmental initiatives and priorities to enhance the environmental quality of the development and deliver wider environmental gains.	
KMBC – Public Health (24/04/2025)	Note if considerations which are usually put into a Health Impact Assessment (HIA) are to be embedded within the ES this needs to be made explicit, with reference to the impact on the existing communities near to the site development as well as the new community this will create.	This will be addressed within the Socio-Economics Chapter of the ES.

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Local Authority / Consultee	Summary of Comments/Discussion	Where Matters will be Addressed in the ES (or explain why not if not relevant)
	Consideration should be made to existing facilities in the area and the impact this will have on them. Need to ensure all properties have access to bike stores. Note need to consider how home could be kept cool in summer as well as warm in winter.	
WSP Transport on behalf of National Highways (24/04/2025)	WSP on behalf of National Highways provided advice on the EIA Scoping Report and the Transport and Access Appraisal Note provided to National Highways. NH request the assessment include: - Up to date policy section to be provided which includes DfT Circular 01/2022 and Planning for the future documents - The current operation of M57 Junctions 4, 3, and 2, noting any observed queuing on the slip roads. As well as existing walking, cycling, and public transport opportunities available from the Site. - Baseline traffic conditions to include current traffic flows, queue length survey data of the Strategy Road Network (SRN) junctions and existing operation of the SRN. - Up to date analysis of collision data to be provided using SRN (specifically M57 Junctions 4, 3 and 2) using STATS19 data. - TRICS assessment to be updated - Evidence to be provided for the routing assignment of the trip distribution and include M57 Junction 3. - Confirmation of committed developments and agreement with the LPA, not allocated in the Local Plan, in line with Circular 01/2022, should be included - Confirmation of opening year of the development, which should be used in the assessment and include full build out of the proposals - Merge-Diverge Assessment to be undertaken of SRN Junctions M57 Junctions 4 and 2	This will be assessed within the Transport and Access Chapter.
Historic England (29/04/2025)	HE have responded as though this were a screening rather than a scoping consultation. Request the Environmental Impact Assessment (EIA) should examine the potential impacts on all heritage assets likely to be affected, including designated heritage assets and their settings, as well as non-designated features of historic, architectural, archaeological, or artistic interest.	This will be assessed within the Cultural Heritage Chapter.
Environment Agency (29/04/2025)	No objection.	N/A

Local Authority / Consultee	Summary of Comments/Discussion	Where Matters will be Addressed in the ES (or explain why not if not relevant)
Merseyside Environmental Advisory Service (MEAS) (02/05/2025)	MEAS confirm the approach along with the proposed methodology and structure of the ES is acceptable. Advise the use of best practice guidance that can assist the EIA methodology. Note it is acceptable for waste to be scoped out of the EIA however consideration should be given to policies WM8 and WM9 of the Merseyside and Halton Joint Waste Local Plan. Advice in relation to Ecology: - Note issues raised in the scoping report follows previous pre-application advice and agree with the scope of survey required. - Air quality can impact on ancient woodland communities (irreplaceable habitat). Should detailed botanical survey confirm existing woodlands on and adjacent / near to the site to be ancient semi-natural woodland then the air quality chapter should also assess impacts on these woodlands and they should be included as a receptor in air quality assessments. This will need to feed into assessment of impacts to ancient semi-natural woodlands (if confirmed) within the ecology and biodiversity chapter. Note the proposed methodology with respect to archaeology is acceptable.	This will be assessed within the Ecology and Air Quality Chapters.
KMBC – Environmental Health and Consumer Protection (06/05/2025)	Environmental Health noted that the Environmental Statement will include both an air quality assessment and a noise assessment, which they support. They requested that, if air source heat pumps are proposed for the development, potential noise impacts from compressor and fan units should be addressed within the noise assessment. While contaminated land has been scoped out of the ES, they confirmed that a separate assessment will be undertaken, which they consider acceptable.	This will be assessed within the Noise Chapter. Contaminated land is scoped out of the ES with a separate assessment undertaken.
Merseyside Environmental Advisory Service (MEAS) – Contaminated Land (14/05/2025)	Ground Investigation Strategy (Section 6.3): The proposed approach is generally acceptable; however, clarification is needed on several topics before proceeding with the ground investigation. It is essential that the approach be agreed upon with the Local Planning Authority (LPA) in advance: - Ground Gas Monitoring: Further clarification is required regarding the assessment methodology and the assessment criterion for Total Organic Carbon (TOC) that will determine the necessity of ground gas monitoring. Any decision to forego ground gas monitoring must be thoroughly justified and approved by the LPA. Should an empirical method such as CL:AIRE RB17 be employed, it must be adhered to rigorously in accordance with the guidelines and included within the ground investigation strategy. - Other Areas of Infilling: Additional areas of infilling should be anticipated. The established approach for infilled ground should also be applied to other areas where made ground is encountered.	Contaminated land is scoped out of the ES with a separate assessment undertaken.

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Local Authority / Consultee	Summary of Comments/Discussion	Where Matters will be Addressed in the ES (or explain why not if not relevant)
	- Re-use of Site-Won Topsoil: The strategy suggests limited sampling (a minimum of 20 samples) to assess the suitability of topsoil for re-use. It is crucial that adequate representative sampling and analysis be conducted relative to the volume intended for re-use.	
Knowsley Council – Environmental Sustainability, Landscape (19/05/2025)	Request LVIA includes assessment of vegetation in winter and request the visual envelope be quantified. Request the two woodlands in the centre of the site are classed as Ancient Woodland, until proven otherwise and a 15m buffer applied with no development. The 15m buffer can be classed as public open space (POS) but not the woodlands themselves. Request further information on proposed landscape screening in respect to the setting of Knowsley Hall and any potential buffer planting. Note wildlife corridor connecting from west to east is missing the last bit of connection in the southeast of the Site, the corridor should be at least 20m wide. Advise one centralised larger play facility is preferable to two smaller ones. Note attenuation basins are not to be classed as POS and no SuDS are permitted in the central area between the woodlands. Provide advice on design of SuDS features. The active travel links need to be prioritised with direct offroad route connections to surrounding POS areas. Need to understand the relationship the development will have with the strip of land of Ross Close. Need off-road access points to connect to existing residential roads to allow permeability to and from Knowsley Village Centre. Request further information on the biodiversity net gain strategy and how any loss will be compensated for. Query what is the status of the angling pond in Spooky Wood going forwards. Note street trees need to be incorporated into all the different streetscapes and request more is done on the design to reduce rear facing properties to the POS.	This will be addressed within the Landscape and Visual and Ecology and Biodiversity Chapters.

Local Authority / Consultee	Summary of Comments/Discussion	Where Matters will be Addressed in the ES (or explain why not if not relevant)
Growth Lancashire (22/05/2025)	- The EIA should provide a full assessment of heritage assets - Notes there are likely to be impacts on the significance of Grade II Knowsley Park RPG noting the development could alter its rural setting - Views from within the parkland should be considered noting Stand Hill is the highest point in the park. - Grade II Little Wood Lodge also has potential for impacts although note it is well screened. - 1km buffer is considered appropriate	This will be addressed within the Cultural Heritage Chapter.

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2.4.4. Accordingly, the environmental themes scoped into or out of the EIA are given in **Table 2.2** below.

Table 2.2: Environmental Themes Scoped In/ Out

EIA Topic	Scoped In / Out	Where Addressed within ES (if applicable)
Population	Scoped in	To be assessed within the Socio-Economic Chapter
Human Health	Scoped in	To be assessed within various chapters as follows: Socio-Economic, Air Quality, Noise, Landscape and Visual and Transport
Biodiversity (e.g. flora and fauna)	Scoped in	To be assessed within the Biodiversity and Ecology Chapter
Land (e.g. land take)	Scoped in	To be assessed within the Landscape and Ecology Chapters
Soil	Scoped out	Given the Site is predominantly Grade 3b (88.7%) ² which is not considered best and most versatile (BMV) and the loss of any BMV soils would be under 20ha with 1.4ha of the Site containing Grade 3a soils. The Site is also unlikely to include significant areas of contamination. Therefore, soil, land contamination and agricultural resources is scoped out of this ES and was agreed with the LPA through the Scoping process.
Water	Scoped in	To be assessed within the Water Chapter
Air	Scoped in	To be assessed within the Air Quality Chapter
Climate	Scoped in	Climate to be assessed within various chapters as follows: Air Quality, Ecology & Biodiversity, and Flood Risk and Drainage. Given the nature of the proposals, it is not considered that there will be a significant impact in relation to 'climate change' in EIA terms relating to greenhouse gas emissions or any future significant impacts arising from climate change that would require adaptation within the Proposed Development. Therefore, Climate Change is not included as a specific chapter, as was agreed with the LPA through the Scoping process.
Material Assets	Scoped out	It is not considered there are any further 'material assets' to those already addressed within other EIA topics that may result in further significant effects.

² Patrick Stephenson Ltd, 2025, Agricultural Land Classification and Soil Resources – Home Farm Lane Knowsley, L34 OEB.

Cultural Heritage	Scoped in	To be assessed within the Cultural Heritage Chapter
Landscape	Scoped in	To be assessed in the Landscape and Visual Chapter
Interrelationship between above factors	Scoped in	Within each topic chapter and Summary

2.4.5. Matters scoped out have been agreed with KMBC through a formal Scoping Opinion and include:

- Ground Conditions;
- Agricultural Land and Soils;
- Lighting;
- Wind Microclimate;
- Daylight, Sunlight and Overshadowing;
- Electronic Interference;
- Waste;
- Vulnerability to Major Accidents and Disasters; and
- Material Assets.

2.4.6. Given the nature and intended longevity of the Proposed Development's operational life, decommissioning has not been considered as part of this study, as agreed in the scoping process. This EIA focuses on the likely significant effects of the Proposed Development during the construction and operational phases only.

2.4.7. It is also acknowledged that, given the nature of the development and its location, there is unlikely to be any significant adverse effects "deriving from the vulnerability of the development to risks of major accidents and/or disasters³", although consideration has been given to potential significant effects as a result of minor accidents, specifically within the construction stages; these are addressed within relevant disciplines throughout the ES.

2.4.8. A summary of where the Schedule 4 requirements are addressed within the ES given in **Table 2.3**.

³ The Town and Country Planning (Environmental Impact Assessment (EIA)) Regulations 2017; Schedule 4 (8)

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Table 2.3: Schedule 4 Requirements Summary

Schedule 4 Requirement	Where addressed within the ES
1. A description of the development, including in particular: (a) a description of the location of the development; (b) a description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases; (c) a description of the main characteristics of the operational phase of the development (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used; (d) an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases.	(a) Chapter 3 Application Sites (b) Chapter 4 Proposed Development and Alternatives (c) Chapter 4 Proposed Development and Alternatives (d) within in Chapter 4 as it relates to the scheme descriptions and within Chapters 5 – 12 as it relates to the individual topic areas.
2. A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.	Chapter 4 Section 4 Alternatives.
3. A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.	The baseline is fully described / established within Chapters 5 – 12 in Section 3 Baseline Conditions as it relates to individual topic areas.
4. A description of the factors specified in regulation 4(2) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.	The baseline factors that have the potential to be affected by the Proposed Developments are fully described / established within Chapters 5 – 12 in Section 3 Baseline Conditions as it relates to individual topic areas.

5. A description of the likely significant effects of the development on the environment resulting from, inter alia: (a) the construction and existence of the development, including, where relevant, demolition works; (b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources; (c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste; (d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters); (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources; (f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change; (g) the technologies and the substances used.	(a, b, c, d f & g) A description of the likely significant effects for each individual topic area is discussed within Chapters 5–12 Section 4 Assessment of Likely Significant Effects as it relates to individual topic areas. of the ES. Climate Change is not considered as an isolated chapter within the ES, however, is considered through Air Quality, Ecology & Biodiversity, and Flood Risk and Drainage. (e) Chapter 5 – 12 Section 6 Cumulative and In-Combination Effects of the ES as it relates to individual topic areas. Chapter 2 details the approach to cumulative effects and lists developments considered within the assessment.
6. A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.	Chapter 5 – 12 detail the Assessment Approach (Section 2) used for the approach to each individual topic assessment, including limitations and difficulties to the assessments as it relates to individual topic areas.
7. A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.	Chapter 5 – 12 in Section 5 Mitigation, Enhancement and Residual Effects detail mitigation and enhancement measures as it relates to individual topic areas.
8. 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. Relevant information available and obtained through risk assessments pursuant to EU legislation such as Directive 2012/18/EU(3) of the European Parliament and of the Council	Chapter 5 – 12 in Section 5 Mitigation, Enhancement and Residual Effects details

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or Council Directive 2009/71/Euratom(4) or UK environmental assessments may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.	any residual effects as it relates to individual topic areas.
9. A non-technical summary of the information provided under paragraphs 1 to 8.	Non-Technical Summary is provided as a separate report to this ES.
10. A reference list detailing the sources used for the descriptions and assessments included in the environmental statement.	Chapter 14 Glossary, Acronyms and Chapter 15 References

2.5. EIA Methodology

2.5.1. The content of the ES is, in the main, based on the following:

- Review of the baseline situation through existing information, data, reports, site & desktop surveys;
- Consideration of the relevant National Planning Policy Framework (NPPF) and accompanying NPPG, and the statutory extant and emerging development plan policies;
- Consideration of potential sensitive receptors;
- Identification of likely significant environmental effects and an evaluation of their duration and magnitude where applicable;
- Expert opinion;
- Modelling;
- Use of relevant technical and good practice guidance; and
- Specific consultation with appropriate bodies.

2.5.2. Environmental effects have been evaluated with reference to definitive standards and legislation where available. Where it has not been possible to quantify effects, assessments have been based on available knowledge and professional judgment.

2.6. Approach to Determine Significance

2.6.1. The EIA identifies the likely 'significance' of environmental effects (beneficial or adverse) arising from the Proposed Development. Each technical chapter defines discipline specific 'likely significant effects' by the use of pre-determined assessment criteria. Individual disciplines stipulate the specific assessment criteria used within their own technical chapters under Assessment Approach; however in broad terms, environmental effects can be described as adverse, beneficial or neutral on a sliding scale, for example, major-moderate-minor-negligible.

2.6.2. In many technical disciplines (but not all), significance reflects the relationship between two factors:

- The magnitude or severity of an effect (i.e. the actual change taking place to the environment); and
- The sensitivity, importance or value of the resource or receptor.

2.6.3. Specific separate criteria for determining the degree of 'magnitude' and the degree of 'sensitivity' (or importance or value) is clearly defined within each technical chapter, and again is often on a sliding scale (e.g. high-medium-low).

2.6.4. The significance of a particular effect can then be derived from the interaction of the receptor's sensitivity and the magnitude of change likely to be experienced.

2.6.5. An example of this 'matrix' process is indicated below in **Table 2.4**, however it should be noted that this is provided as a general guide only. Discipline-specific methodology is often used

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rather than generic criteria, as it is recognised that broad criteria does not always cater for particular disciplines, particularly where best practice and guidance require subtle differences. All significance criteria are clearly explained within each technical chapter under the heading of Assessment Approach.

Table 2.4: Example degrees of Significance based on Magnitude/Sensitivity

Magnitude of Change	Sensitivity of Receptor				
		High	Medium	Low	Negligible
	High	Major	Major	Moderate	Negligible
	Medium	Major	Moderate	Minor to Moderate	Negligible
	Low	Moderate	Minor to Moderate	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

2.6.6. Significance of effects would be assigned both before and after mitigation where relevant.

2.7. Mitigation

2.7.1. Standard measures and the adoption of construction best practice methods to avoid, minimise or manage adverse environmental effects, or to ensure realisation of beneficial effects, are assumed to have been incorporated into the design of the Proposed Development and the methods of its construction from the outset. Further information on the standard measures and construction best practice is detailed in Chapter 4: The Proposed Development and Alternatives. Where outlined, the assessment is of the Proposed Development incorporating these measures.

2.7.2. Where mitigation measures are proposed that are specific to an environmental theme (e.g. ecological measures incorporated into the landscaping scheme etc) and are purposely incorporated into the design, these are highlighted within the relevant technical chapter as 'mitigation by design' (or 'integral/embedded mitigation') and may be subject to appropriate planning conditions or obligations.

2.7.3. Where the assessment of the Proposed Development has identified potential for adverse environmental effects, the scope for mitigation of those effects, for example by way of compensatory measures, has been considered and is outlined in the appropriate technical chapter. It is assumed that such measures would be subject to appropriate planning conditions or obligations.

2.7.4. Where the effectiveness of the mitigation proposed has been considered uncertain, or where it depends upon assumptions of operating procedures, then data and/or professional judgment has been introduced to support these assumptions.

2.8. Cumulative and In-Combination Effects

2.8.1. The ES responds to the requirement in the Regulations to assess the cumulative effects of the Proposed Development. Within EIA, cumulative effects are generally considered to arise from:

- Inter-project Cumulative Effects: The combined effects of development schemes which may, on an individual basis be insignificant but, cumulatively, have significant effect; and

- Intra-project Cumulative Effects: The combined effect of individual effects (for example noise, airborne dust or traffic) on a single receptor where deemed potentially significant.

Inter-project Cumulative Effects

- 2.8.2. With respect to inter-project cumulative effects, the EIA Regulations state that consideration should be given to “*other existing and/or approved projects*” (Schedule 4, paragraph 5(e)). This is further supported by the NPPG which states “*There are occasions.....when other existing or approved development may be relevant in determining whether significant effects are likely as a consequence of a proposed development*” (Paragraph: 024 Reference ID: 4-024-20170728).
- 2.8.3. Regard will therefore be had to relevant “*existing and/or approved projects*”, which alongside the Proposed Development, could potentially result in significant cumulative effects (discussed further below). It is relevant to note however that not all these projects will necessarily have significant cumulative impacts.
- 2.8.4. It is also acknowledged that there may be other proposals which are considered as “reasonably foreseeable” as referred to within the European Guidance in relation to the definition of cumulative impacts. It is important to recognise that it is not the role of the ES to assess all these types of potential developments and a staged approach in identifying which of these ‘other sites’ are relevant to consider is appropriate.
- 2.8.5. In this context, a review of the surrounding potential ‘other sites’ within 3km of the Proposed Development has been undertaken, which can be categorised into the below: (for the purposes of the Proposed Developments and their setting, a proximity of 3km from both of the parcels boundary and major applications has been considered appropriate)
- Committed schemes (i.e. proposals with planning permission/consented which are either under construction or yet to commence);
 - Applications pending determination (i.e schemes with live planning applications which may or may not be within adopted allocations), and
 - Other potential schemes (e.g. adopted allocation or schemes which have screening / scoping submitted – some of these maybe considered relevant to include in cumulative assessment).
- 2.8.6. As per EIA guidance, consideration has been given to the level of certainty of each development identified within as part of the cumulative assessment, in the context of the European’s Guidance definition of cumulative effects and how “*reasonably foreseeable*” these are. For example, generally speaking it is relevant for development under construction to be considered ‘certain’ (as noted in **Table 2.5**), permitted applications not under construction to be considered ‘likely’ (as noted in **Table 2.5**), submitted undetermined applications which are local plan allocations to be considered ‘potential’ and undetermined applications with no other status are considered ‘uncertain’.
- 2.8.7. Finally, each ‘certain’, ‘likely’ or ‘potential’ development has then been considered whether it would, in combination with the Proposed Development, have potential to give rise to significant cumulative effects over and above those potentially as a result of the Proposed Development in isolation. (The permitted / under construction developments identified in **Table 2.5** have been considered in this manner). ‘Uncertain’ developments are not considered as reasonably

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foreseeable in the context of the European's Guidance definition of cumulative effects and therefore are proposed not to be considered further.

- 2.8.8. Where it is considered this could potentially result in significant effects, the 'other development' will then be considered within the cumulative assessments. The manner in which these are considered may vary dependent on the nature and progress of the development and the discipline which maybe impacted upon. For example, where the 'other development' is built or will be built at the commencement of the subject proposals construction, this may well be considered within the baseline and therefore already inherent in assessments. Other developments may have potential implications on some disciplines but not others e.g. no visual link, but potential transport implications or vice versa. Discussion is given on this in respective technical discipline chapters.
- 2.8.9. The below table sets out the schemes considered as part of the cumulative assessment.

Table 2.5: Long List of Potential Other Developments in relation to Cumulative Assessment

Address and Reference	Description of Development	Approx. Distance from the Site	Status	Certainty and relevance to consider in cumulative assessment	Proposed to be considered
22/00348/FUL Land bounded by East Lancashire Road, Ormskirk Road and Knowsley Lane	Erection of 3 no. commercial units (use class B2 or B8) including mezzanine floor, ancillary office and welfare floorspace together with service yard, loading bays, car and cycle parking, electric vehicle charging points, drainage infrastructure and landscaping together with improvements to public rights of way linking Ormskirk Road and Knowsley Lane including the diversion of the public right of way and other pedestrian accessibility works.	c. 1.5km north of the Site	Permission granted May 2023. Construction has not yet started.	Likely: Planning permission granted but construction has not yet started. Given the nature and location of the scheme, it is considered relevant to consider as part of the cumulative assessment.	YES
22/00163/FUL Land bounded by Villiers Road & Penrhyn Road	Erection of a industrial/commercial building (use classes B2/B8 and E (g) (iii) including mezzanine ancillary office space together with the construction of 2 no. new vehicular accesses to Villiers road, service yards, car/cycle parking, landscaping and other associated works.	c. 1.6km north of the Site	Permission granted November 2022. KMBC confirmed that the development is completed	Certain: development built and operational and is therefore considered as part of the existing baseline	Considered as part of the existing baseline
18/00062/HYB Land at Knowsley Lane, Huyton	Detailed application for 4,180 sqm of employment floor space (use class B1), 3,275 sqm ancillary floor space (use classes A1/A4/C1/SUI generis), 154 residential dwellings, improvement to Lord Derby Playing Fields/Oak Plantation and associated landscaping and infrastructure including a dedicated 500kVA substation	c.1.6km south of the Site	Granted July 2018 and remain extant with non-material amendments granted in Jun 2021.	Certain: formal planning permission granted and is part built. Given the nature and location of the scheme, it is considered relevant to	YES

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Address and Reference	Description of Development	Approx. Distance from the Site	Status	Certainty and relevance to consider in cumulative assessment	Proposed to be considered
	for the residential neighborhood and a 1000kVA substation for the eastern employment area and the demolition of Knowsley Lane Farm. Outline application for up to 26,350 sqm of employment flood space (use classes B1) and associated landscaping and infrastructure.		Development is part built.	consider as part of the cumulative assessment.	
22/00099/FUL Former Contract Chemicals Site Penrhyn Road	Erection of an industrial/logistics building (uses B2, B8 and E(g)(iii)) with ancillary offices, security gatehouse, transport office and associated works.	c. 1.7km north of the Site	Granted November 2023. Construction is underway.	Certain: Planning permission granted and construction is underway. As development is under construction and is likely to be complete before the construction of the Proposed Development it is considered within the baseline.	NO
25/00228/FUL Land North of Cut Lane	Construction of a battery energy storage system (BESS) and associated infrastructure including cabling	c. 1.9km north of the Site	Pending	Uncertain: no formal planning permission has yet been granted. Given the nature of the development and the distance from Site significant cumulative effects are not likely.	NO

Address and Reference	Description of Development	Approx. Distance from the Site	Status	Certainty and relevance to consider in cumulative assessment	Proposed to be considered
19/00243/OUT Vacant Land at Junction Of Moorgate Road/M57 Slip Road And School Lane Reserved matters (RM) application 21/00929/REM	Outline application for the erection of petrol filling station of up to 476 sqm, a drive thru unit of up to 225 sqm and erection of 3 No. industrial units up to 3,827 sqm	c. 2km northwest of the Site	Permission granted April 2020 and RM granted in August 2022. Construction has not yet started.	Likely: Planning permission granted but construction has not yet started. Given the nature and location of the scheme, it is considered relevant to consider as part of the cumulative assessment.	YES
24/00142/SO Land north of Cut Lane Kirkby	Screening opinion for proposed battery energy storage system (BESS) and associated infrastructure.	c. 2km north of the Site	Decision provided in May 2024 – no EIA required. No formal planning application has been made.	Uncertain: No formal planning application has yet been submitted. Given the nature of the development and the distance from Site significant cumulative effects are not likely.	NO
23/02008/FUL Land at Coopers Lane Knowsley Industrial Park	Proposed Development of a battery storage facility and associated infrastructure	c. 2km south of the Site	Granted April 2024. Construction has not yet started.	Likely: Planning permission granted but construction has not yet started. Given the nature and location of the scheme, it is considered significant cumulative effects are not likely and has therefore been scoped out of the cumulative assessment.	NO

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Address and Reference	Description of Development	Approx. Distance from the Site	Status	Certainty and relevance to consider in cumulative assessment	Proposed to be considered
22/00766/SO Land at Larkins Farm, Gellings Lane	Screening Opinion for the installation of a solar farm	c. 2.2km north west of the Site	Decided in January 2023 EIA not required – no formal application has been submitted	Uncertain: No formal planning application has yet been submitted. Given the nature of the development and the distance from Site significant cumulative effects are not likely.	NO
23/00456/FUL Vacant Land at Alchemy Way, Knowsley Industrial Park	Erection of 2 no. units (use class E9G)(II)(III) or B2 or B8 use) with ancillary office space, car parking and vehicular, pedestrian circulation with access onto Alchemy Way	c. 2.3km north of the Site	Granted April 2024. Construction has not yet started.	Likely: Planning permission granted but construction has not yet started. Given the nature and location of the scheme, it is considered significant cumulative effects are not likely and has therefore been scoped out of the cumulative assessment.	NO
19/00684/FUL Whitakers Garden Centre, Liverpool Road, Prescot	Erection of 227 no. dwellings together with vehicular/pedestrian accesses, landscaping & associated infrastructure	c. 2.5km south east of the Site	Permission granted December 2020 Development is part built.	Certain: Planning permission granted and construction is underway. As development is under construction and is likely to be complete before the construction of the Proposed Development	NO

Address and Reference	Description of Development	Approx. Distance from the Site	Status	Certainty and relevance to consider in cumulative assessment	Proposed to be considered
				it is considered within the baseline.	
23/01197/FUL Land to the north east of the junction of Gale Road and Admin Road, Knowsley Industrial Park,	Erection of 1 no. industrial unit (use Class B2 and B8) with ancillary office space including service yard, parking, substation and other associated works.	c. 2.6km north of the Site	Granted April 2024. Construction has not yet started.	Likely: Planning permission granted but construction has not yet started. Given the nature and location of the scheme, it is considered significant cumulative effects are not likely and has therefore been scoped out of the cumulative assessment.	NO
20/00379/FUL The Web Complex Admin Road Knowsley Industrial Park	Demolition of existing building and the erection of 2 no. industrial buildings (use Class B1/B2 and B8 with ancillary trade counter) together with vehicular access, car parking and service area.	c. 2.7km north of the Site	Granted March 2021. Construction has not yet started.	Likely: Planning permission granted but construction has not yet started. Given the nature and location of the scheme, it is considered significant cumulative effects are not likely and has therefore been scoped out of the cumulative assessment.	NO

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2.8.10. From **Table 2.5** the identified cumulative sites which have been considered as part of the cumulative assessment include:

- 22/00348/FUL – Erection of 3 no. commercial units (use class B2 or B8) including mezzanine floor, ancillary office and welfare floorspace together with service yard, loading bays, car and cycle parking, electric vehicle charging points, drainage infrastructure and landscaping together with improvements to public rights of way linking Ormskirk Road and Knowsley Lane including the diversion of the public right of way and other pedestrian accessibility works. Located 1.5km north of the Site.
- 18/00062/HYB – Detailed application for 4,180 sqm of employment floor space (use class B1), 3,275 sqm ancillary floor space (use classes A1/A4/C1/SUI generis), 154 residential dwellings, improvement to Lord Derby Playing Fields/Oak Plantation and associated landscaping and infrastructure including a dedicated 500kVA substation for the residential neighborhood and a 1000kVA substation for the eastern employment area and the demolition of Knowsley Lane Farm. Outline application for up to 26,350 sqm of employment flood space (use classes B1) and associated landscaping and infrastructure. Located c.1.6km south of the Site.
- 19/00243/OUT RM application 21/00929/REM – Outline application for the erection of petrol filling station of up to 476 sqm, a drive thru unit of up to 225 sqm and erection of 3 No. industrial units up to 3,827 sqm. Located c. 2km northwest of the Site.

Intra-project Cumulative Effects and In-Combination Effects

2.8.11. Intra-project effects are the combined effect of individual effects (for example noise, airborne dust and traffic) on a single receptor where deemed potentially significant and are also reviewed in each of the technical chapters of this ES and where relevant discussed in the Summary chapter.

2.9. General Assumptions & Limitations

2.9.1. The principal assumptions that have been made and any limitations that have been identified in preparing this ES are set out below:

- The principal land uses adjoining the Site remain as at the present day, except where relevant to consider the proposals discussed above;
- Information received from third parties is complete and up to date;
- The design, construction and completed stages of the Proposed Development will satisfy legislative requirements; and
- Conditions, or other legal obligations, will be attached to the planning permission to secure 'mitigation', where considered necessary to make the Proposed Development acceptable.

2.10. Structure of Technical Chapter

2.10.1. Throughout the EIA process, the likely significant environmental effects of the Proposed Development will be assessed. Within each of the technical chapters the information which will inform the EIA process has generally been set out in the following way:

- **Introduction** – to introduce the topic under consideration, state the purpose of undertaking the assessment and set out those aspects of the Proposed Development material to the topic assessment;
- **Assessment Approach** – to describe the method and scope of the assessment undertaken and responses to consultation in relation to method and scope in each case pertinent to the topic under consideration;
- **Baseline Conditions** – a description of the baseline conditions pertinent to the topic under consideration including baseline survey information;
- **Assessment of Likely Significant Effects** – identifying the likely effects, evaluation of those effects and assessment of their significance, considering both construction and operational and direct and indirect effects;
- **Mitigation, Enhancement and Residual Effects** – describing the mitigation strategies for the significant effects identified, noting any residual effects;
- **Cumulative Effects** – consideration of potential cumulative and in-combination effects (as discussed above); and
- **Summary** – a non-technical summary of the chapter, including baseline conditions, likely significant effects, mitigation and conclusion.