

Barratt and David Wilson Homes

Cherryfield Drive, Kirkby

Proposed Residential Development

Environmental Statement Addendum

October 2024

Prepared for

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Homes**

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Demolition Plan	NW-23-43	-
Overall Coloured Planning Layout	H9305-DWH-XX-XX-DR-UD-203100	X
Overall Drainage Layout	H9305-DWH-XX-XX-DR-UD-203101	-
Overall Planning Layout	H9305-DWH-XX-XX-DR-UD-203001	X
Overall Brand Split Plan	H9305-DWH-XX-XX-DR-UD-203002	X
Overall Affordable Plan	H9305-DWH-XX-XX-DR-UD-203402	A
DWH Planning Layout (Sheet 1 of 2)	H9305-DWH-XX-XX-DR-UD-203004	X
DWH Planning Layout (Sheet 2 of 2)	H9305-DWH-XX-XX-DR-UD-203005	X
DWH Affordable Plan (Sheet 1 of 2)	H9305-DWH-XX-XX-DR-UD-203400	D
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DWH Materials Layout (Sheet 1 of 2)	H9305-DWH-XX-XX-DR-UD-203150	D
DWH Materials Layout (Sheet 2 of 2)	H9305-DWH-XX-XX-DR-UD-203151	D
DWH Boundary Treatment Plan (Sheet 1 of 2)	H9305-DWH-XX-XX-DR-UD-203250	C
DWH Boundary Treatment Plan (Sheet 2 of 2)	H9305-DWH-XX-XX-DR-UD-203251	C
DWH Hard Landscaping Plan (Sheet 1 of 2)	H9305-DWH-XX-XX-DR-UD-203200	D
DWH Hard Landscaping Plan (Sheet 2 of 2)	H9305-DWH-XX-XX-DR-UD-203201	D
DWH Electric Vehicle Charging Point Plan (Sheet 1 of 2)	H9305-DWH-XX-XX-DR-CS-021100	D
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DWH Storey Heights Plan (Sheet 1 of 2)	H9305-DWH-XX-XX-DR-UD-203450	D
DWH Storey Heights Plan (Sheet 2 of 2)	H9305-DWH-XX-XX-DR-UD-203451	D
DWH Street Scenes	H9305-DWH-XX-XX-DR-UD-203550	C
DWH House Type Pack	NW-23-27	-
Cherryfield Site Sections (1 of 3)	H870-DWH-XX-XX-DR-CE-30021	P01
Cherryfield Site Sections (2 of 3)	H870-DWH-XX-XX-DR-CE-30022	P01
Cherryfield Site Sections (3 of 3)	H870-DWH-XX-XX-DR-CE-30023	P01
Barratt Planning Layout	HXXXX-BAH-XX-XX-DR-UD-203001	21
Barratt Materials Layout	HXXXX-BAH-XX-XX-DR-UD-203150	02
Barratt Boundary Treatment Plan	HXXXX-BAH-XX-XX-DR-UD-203250	02
Barratt Hard Landscaping Plan	HXXXX-BAH-XX-XX-DR-UD-203200	02
Barratt Electric Vehicle Charging Point Plan	HXXXX-BAH-XX-XX-SP-CS-021100	02
Barratt Refuse Layout	HXXXX-BAH-XX-XX-DR-UD-203500	02
Barratt Storey Height Layout	HXXXX-BAH-XX-XX-DR-UD-203850	02
Barratt Street Scenes	HXXXX-BAH-XX-XX-DR-UD-203550	01
Barratt House Type Pack	NW-24-27	01
Affordable Housing Layout Barratt	HXXXX-BAH-XX-XX-DR-UD-203400	02

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- Chapter 3: Site Description
- Chapter 4: Alternatives
- Chapter 6: Traffic and Transport
- Chapter 7: Air Quality
- Chapter 8: Noise and Vibration
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- Appendix 7.3 - Demolition and Construction Mitigation Measures
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- Appendix 9.1 – Heritage Assessment
- Appendix 11.1 – Sustainability Statement and Energy Strategy

Replacement/ new Appendices

- **Appendix 8.3** – Site Suitability Assessment
- **Appendix 10.1** - Phase 1 and 2 Geotechnical Assessment
- **Appendix 10.2** - Remediation and Enabling Works Strategy
- **Appendix 12.3** - Water Vole Survey

Non-Technical Summary

A full planning application was submitted to Knowsley Council (MCC) in February 2024 for a residential led development on the land off Cherryfield Drive, Kirkby. The application was validated in April 2024. The site is located within the administrative authority of Knowsley Metropolitan Borough Council (KMBC).

Since the planning application was submitted in February 2024, Barratt & David Wilson Homes ('the Applicant') and their design team have undertaken extensive engagement with KMBC and a series of comments have been provided on the submitted proposals. In response to these comments, design amendments have been made to the proposed layout. As a result of these changes, the assessments within the March 2024 ES have been reviewed to identify where new or altered significant effects are anticipated. The ES Addendum (ESA) should be read in conjunction with and as an Addendum to the March 2024 ES submitted alongside planning application 24/00068/FUL. Accordingly, addendums to the following chapters have been prepared to consider whether there are any changes to the previously identified effects:

- Chapter 6 – Traffic and Transport;
- Chapter 7 – Air Quality;
- Chapter 8 – Noise and Vibration;
- Chapter 9 – Heritage;
- Chapter 10 – Geology, Ground Conditions and Contaminated Land;
- Chapter 11 - Climate Change and
- Chapter 12 – Ecology.

Since the planning application was submitted it has become clear that incorrect versions of some of the assessments within the EIA were uploaded to the Knowsley Council planning portal and consulted upon. In addition, new environmental information has been submitted to the Council. This ES addendum therefore includes the latest versions of the documents, the new environmental information submitted and assess the amendments to the scheme. The ES addendum will need to be re-consulted upon by Knowsley Council in accordance with the requirements of Regulation 25 of the EIA Regulations 2017.

The design amendments include:

- The number of proposed units reduced from 807 to 800 units
- Introduction of 8 x 1 bed units
- The main spine road has been updated and re-aligned
- Re-location of the drainage Basin
- Adopted roads updated across the site to show correct centre lines and widths. For example, 5.5m with 2m footpath either side and shared surface with 5m with 1m verge either side.
- Frontage parking reduced
- House type re allocated across the site to increase landscape frontage
- 2.5 storey plots removed from backing onto existing residences
- Amenity space (20m²) added to the flats
- Plots 1-66 moved away from the existing residence property to allow a min. 22m back-to-back
- Parking courts reduce from 9 Plots to 5

- Parking courts updated along Cherryfield drive to provide a strong frontage
- Affordable units update
- Water butts added
- Individual Plots updated

A summary of each of the chapters contained within the ES Addendum is included below.

Traffic and Transport

The reduction from 807 to 800 units will have a minimal impact on the forecasted number of vehicle trips generated by the proposed development. As the March 2024 Environmental Statement (ES) assessed a higher number of dwellings and associated vehicle trips, with no residual effects identified, the conclusions of that assessment remain robust and valid. Therefore, no updates to the assessment are necessary, and no additional environmental information related to traffic and transport is required. No update to the assessment of cumulative effects is required.

Air Quality

There have been no amendments to the proposed development such that an update to this assessment is required, and no additional environmental information is required with regards to air quality. As such, the March 2024 ES remains valid and there are no additional significant effects associated with air quality. No update to the assessment of cumulative effects is required.

Noise and Vibration

This Site Suitability Assessment (Appendix 8.3) supporting the March 2024 ES has been updated to reflect slight changes to the proposed layout, respond to the consultation responses received and supplements Chapter 8 of the updated ES.

The overall number of proposed dwellings has reduced from 807 to 800. This will not result in a material reduction in construction or operational traffic flows compared to those assessed in the March 2024 ES. Consequently, there are no changes in likely significant effects identified in the ES as a result of traffic associated with Proposed Development. The likelihood of significant effects remains negligible, and therefore not significant. There have been no material changes to the site boundary or layout of the proposed development since the March 2024 ES. Therefore, the likelihood of significant effects during operation remains as not significant.

Heritage

Since the submission of the original ES in March 2024 the heritage assessment has been updated to reflect the fact that an apartment block is proposed in the northwestern part of the site. Therefore, an updated ES chapter and updated Appendix 9.1 Heritage Impact

Assessment was submitted to the Council in September 2024. The updated chapter and Heritage Impact Assessment has been submitted with this addendum.

The revised proposals and the layout in the northwestern part of the Site (closest and most relevant to the heritage assets) has only been altered very slightly with some building types having been replaced. The larger apartment block on the corner remains as previously proposed. Therefore, there have been no amendments to the proposed development such that an update to this assessment is required, and no additional environmental information is required with regards to heritage. As such, the September 2024 ES Chapter remains valid and there are no additional significant effects associated with heritage. No update to the assessment of cumulative effects is required.

Geology Ground Conditions and Contaminated Land

Since the submission of the original ES in March 2024 further site investigation has been undertaken in the north west of the site. Therefore, an updated ES chapter and updated Appendix 10.1 Phase 1 and 2 Geotechnical Assessment and Appendix 10.2 Remediation and enabling works strategy has been submitted with this addendum.

The conclusions remain the same as in the March 2024 ES and there are no additional significant effects associated with geology, ground conditions or contaminated land. No update to the assessment of cumulative effects is required.

Climate Change

There have been no amendments to the proposed development such that an update to this assessment is required, and no additional environmental information is required with regards to climate change. As such, the March 2024 ES remains valid and there are no additional significant effects associated with climate change. No update to the assessment of cumulative effects is required.

Ecology

Water Vole surveys have been undertaken and the report included as appendix 12.3 of this ES addendum. No evidence of water vole or otter activity was detected at the surveyed section of Kirkby Brook. There have been no amendments to the proposed development such that an update to the ecological assessment within the March 2024 is required. As such, the March 2024 ES remains valid and there are no additional significant effects associated with ecology. No update to the assessment of cumulative effects is required.

Summary

Overall, the Applicant has worked proactively with the Council and a significant number of consultees during determination of the planning application. The result of this process has necessitated select updates to the design and corresponding updates to plans and technical assessments which are submitted for approval. In addition, the ES addendum

includes the latest versions of the documents, and the new environmental information submitted since the application was validated in May 2024.

Introduction

- 1.1 A full planning application was submitted to Knowsley Council (KMBC) in February 2024 for a residential led development on the land off Cherryfield Drive, Kirkby.
- 1.2 The site is located within the administrative authority of Knowsley Borough Council (KMBC). The site location plan and redline planning application boundary is shown on drawing **H9305-DWH-XX-XX-DR-UD-201001** and **H9305-DWH-XX-XX-DR-UD-203002**. There are no changes proposed to the full planning application boundary.
- 1.3 The site area is approximately 23.7 hectares. The Site is located to the south of Kirkby Town Centre and occupies an area of mostly undeveloped land. The Site is bordered to the west by the A506, to the south by Bewley Drive and to the north and east by Cherryfield Drive. At the northeast corner of the Site is the Knowsley Community College, Kirkby Campus, which consists of a college building, carparking and playing fields. To the east of the Site is Kirkby Leisure Centre, with associated carparking and football pitches. The character of the area to the south, east and west of the Site is defined by 20th and 21st century residential development.
- 1.4 There is also a smaller residential development on the north side of Bewley Drive. To the northwest of the Site is the historic settlement of Kirkby, including the Church of St Chad.
- 1.5 A full planning application was submitted to KMBC in February 2024, which was supported by an Environmental Statement (ES) prepared by Egniol. The ES was prepared in accordance with the 2017 EIA Regulations (SI 2017/571) and is referred to in this report as the 'March 2024 ES', which presented the findings of the Environmental Impact Assessment (EIA) works undertaken by the applicant and the design team with the objective of identifying and mitigating any potentially significant environmental effects. The ES documents provided with the February 2024 application can be accessed on KMBC's website using the following reference - 24/00068/FUL.
- 1.6 Since the planning application was submitted, the Applicant and their design team have undertaken extensive engagement with KMBC and the community and a series of comments have been provided on the submitted proposals. In response to these comments, design amendments have been made to the proposed layout. The ES Addendum (ESA) should be read in conjunction with and as an Addendum to the March 2024 ES submitted alongside planning application 24/00068/FUL.
- 1.7 Since the planning application was submitted it has become clear that incorrect versions of the assessments within the EIA were uploaded to the Knowsley Council planning portal and consulted upon. In addition, new environmental information has been submitted to the Council. This ES addendum therefore includes the latest versions of the documents, the new environmental information submitted and assesses the amendments to the scheme.
- 1.8 The changes to the proposed development are explained in Chapter 5 of this ES Addendum. As a result of these changes, the assessments within the March 2024 ES have been reviewed to identify where new or altered significant effects are

anticipated. Where assessments have not changed this is stated as such within the ES Addendum. This constitutes additional environmental information as defined by the 2017 EIA Regulations (SI 2017/571) and this October 2024 ES Addendum has been prepared on this basis.

- 1.9 Additional information of a substantive nature submitted voluntarily by an applicant must be treated in the same way as information formally requested by the Local Planning Authority (LPA). Therefore, although no 'formal' request for further information has been made by the LPA, this Addendum is submitted under Regulation 25 'Further information and evidence respecting Environmental Statements' of the 2017 EIA Regulations in connection with the submitted proposed changes to the scheme. Accordingly, KMBC should consult on this additional information in accordance with the requirements of Regulation 25 of the EIA Regulations.
- 1.10 This Addendum represents a supplementary report to the March 2024 ES and should be read in conjunction with the previous assessment documents. This ES Addendum should be treated in accordance with Regulation 25 'Further information and evidence respecting environmental statements' of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017.
- 1.11 This ES Addendum comprises of three volumes, which incorporates a non-technical summary (Volume 1), the main assessment text (Volume 2), both of which are contained in full within this document, and associated plans (Volume 2a) and appendices (Volume 3).
- 1.12 The March 2024 ES and this ES Addendum are available for viewing on KMBC's planning portal. Further copies of this ES are available electronically at a cost of £25, and hard copies subject to a fee sourced from printing companies. If hard copies of the ES are required please contact Egniol Consulting at:

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Contact: Richard Kevan

2. Approach & EIA Methodology

- 2.1 This ES Addendum has been prepared in accordance with statutory requirements and current industry accepted guidance in relation to EIA. The ES Addendum has been prepared to review the March 2024 ES and, where necessary, updated with further assessment work where there is the potential for material changes in terms of the impact of the previously identified effects.
- 2.2 The ES Addendum should be read in conjunction with and as an Addendum to the March 2024 ES submitted alongside planning application 24/00068/FUL. As set out above, further information is submitted relating to design amendments following comments received during the planning determination and to ensure the correct versions of reports have been consulted upon. Accordingly, addendums/updates to the following chapters have been prepared to consider whether there are any changes to the previously identified effects.
- Chapter 6 – Traffic and Transport;
 - Chapter 7 – Air Quality;
 - Chapter 8 – Noise and Vibration;
 - Chapter 9 – Heritage;
 - Chapter 10 – Geology, Ground Conditions and Contaminated Land;
 - Chapter 11 - Climate Change; and
 - Chapter 12 – Ecology.

ES Addendum Approach and Methodology

- 2.3 The March 2024 ES considered likely significant environmental effects as a result of the proposed development on the immediate site and its surroundings. As part of the iterative design process, mitigation measures were identified early in the process and 'embedded' into the scheme. Where significant adverse effects remained following the incorporation of mitigation measures, the March 2024 ES identified these remaining or 'residual' effects and classified them in accordance with a standard set of significance criteria. A detailed methodology section is included within Chapter 2: Approach of the March 2024 ES. The approach to the ES Addendum has utilised the same methodology in terms of defining 'significance' and reference should be made to the original ES.
- 2.4 Where there have been updates to a technical assessment due to additional assessment work, these are set out within the technical sections of this ES Addendum.
- 2.5 The sections of this report are numbered in accordance with the chapter numbers of the March 2024 ES for ease of reference.

The Project Team

- 2.6 The ES Addendum has been compiled using a range of sources and with inputs from technical specialists. The organisations and their roles in the project team are listed in Table 2.1 below. The organisations inputting to this ES Addendum remain the same as those who inputted to the March 2024 ES.

Table 2.1: Project Team

Discipline	Company
Traffic and Transport	Mode
Air Quality	Air and Acoustic Consultants
Noise and Vibration	Noise Consultants
Heritage	Turley
Ground Conditions and Contaminated Land	E3P
Climate Change	WATT
Ecology	ERAP
EIA Coordinators	Egniol

- 2.7 Overall, there has been no amendment to the approach of the EIA since the March 2024 ES. Where there has been an update to a technical assessment or amendments have been introduced, these are set out within the technical sections of this ES Addendum.
- 2.8 Following a review of the KMBC planning portal no further cumulative schemes have been identified. Therefore, no changes are anticipated to the cumulative effects assessments as set out in the March 2024 ES.

Version Control of Documents

- 2.9 Incorrect versions of the assessments within the EIA were uploaded to the Knowsley Council planning portal and consulted upon. The following documents need to be reconsulted upon as the incorrect versions were uploaded to the portal. They have been re-submitted to KMBC since validation. All documents are included as Appendix 1 to this addendum.

Volume 1 Main Text

- Chapter 2: Approach
- Chapter 3: Site Description

- Chapter 4: Alternatives
- Chapter 6: Traffic and Transport
- Chapter 7: Air Quality
- Chapter 8: Noise and Vibration
- Chapter 9: Heritage

Volume 2: Figures

- Figure 7.5 – Future Receptors
- Figure 7.7 – Demolition Dust Risk Buffers
- Figure 7.8 – Earthworks and Construction Dust Risk Buffers
- Figure 7.9 – Trackout Dust Risk Buffers

Volume 3: Appendices

- Appendix 7.1 – Construction Methodology
- Appendix 7.3 - Demolition and Construction Mitigation Measures
- Appendix 7.4 – Traffic Data
- Appendix 7.5 – Verification
- Appendix 8.1 – Glossary
- Appendix 8.2 – Baseline Noise Survey Method
- Appendix 8.3 – Site Suitability Assessment
- Appendix 9.1 – Heritage Assessment
- Appendix 11.1 – Sustainability Statement and Energy Strategy

2.10 The following reports have been updated following consultation to the planning application and are included within this ES addendum:

- **Appendix 8.3** – Site Suitability Assessment
- **Appendix 10.1:** Phase 1 and 2 Geotechnical Assessment
- **Appendix 10.2:** Remediation and enabling works strategy

2.11 The following report has been prepared following consultation to the planning application and is included within this ES addendum:

- **Appendix 12.3:** Water Vole Survey

3. Site Description

Site Location

- 3.1 The site area is approximately 23.7 ha. The Site is located to the south of Kirkby Town Centre and occupies an area of mostly undeveloped land. The Site is bordered to the west by the A506, to the south by Bewley Drive and to the north and east by Cherryfield Drive. At the northeast corner of the Site is the Knowsley Community College, Kirkby Campus, which consists of a college building, carparking and playing fields. To the east of the Site is Kirkby Leisure Centre, with associated carparking and football pitches. The character of the area to the south, east and west of the Site is defined by 20th and 21st century residential development. There is also a smaller residential development on the north side of Bewley Drive. To the northwest of the Site is the historic settlement of Kirkby, including the Church of St Chad.
- 3.2 There have been no changes to the site boundary or site description since submission of the March 2024 ES.

4. Alternatives

- 4.1 As set out within the March 2024 ES, no alternative sites were considered by the Applicant, as the site is in the Applicants control and is well suited for proposed use.
- 4.2 There have been no amendments to the proposed development that necessitate an update to the alternative's assessment presented as part of the March 2024 ES.

5. The Proposed Development

5.1 The planning application seeks full planning permission for the construction of a residential development comprising of 800 dwellings with a combination of 1–4-bedroom properties, bungalows, apartments, highway infrastructure and landscaping. This is a reduction of 7 units from that submitted in February 2024.

5.2 As noted in Chapter 1 of this report, a full planning application was submitted to KMBC in February 2024, which was supported by an ES prepared by Egniol. Since this application was submitted there have been changes to the design of the development and therefore the planning application drawings have been updated (see **Table 5.1** and **Volume 2a: Main Text ES Addendum Figures** for these updated drawings).

5.3 The description of development remains the same as defined on the planning application forms as:

“Full planning application for demolition of existing buildings and erection of a residential development (Use Class C3) with associated access, landscaping, parking and infrastructure including reconfiguration of existing Cherryfield Drive car park and highways improvements to Cherryfield Drive”.

5.4 Since the planning application was submitted in February 2024, Barratt & David Wilson Homes (‘the Applicant’) and their design team have undertaken extensive engagement with KMBC and a series of comments have been provided on the submitted proposals. In response to these comments, design amendments have been made to the proposed layout.

5.5 The design amendments include:

- The number of proposed units reduced from 807 to 800 units
- Introduction of 8 x 1 bed units
- The main spine road has been updated and re-aligned
- Re-location of the drainage Basin
- Adopted roads updated across the site to show correct centre lines and widths. For example, 5.5m with 2m footpath either side and shared surface with 5m with 1m verge either side.
- Frontage parking reduced
- House type re allocated across the site to increase landscape frontage
- 2.5 storey plots removed from backing onto existing residences
- Amenity space (20m²) added to the flats
- Plots 1-66 moved away from the existing residence property to allow a min. 22m back-to-back
- Parking courts reduce from 9 Plots to 5
- Parking courts updated along Cherryfield drive to provide a strong frontage
- Affordable units update
- Water butts added
- Individual Plots updated

5.6 All drawings have been updated to capture the design changes noted above. These will supersede the previous drawings submitted in under Planning

Application 24/00068/FUL. The drawings together with the description of the proposed amendments in this chapter have been used as a basis for the assessment of environmental effects within this ES addendum. These drawings are included in **Volume 2: Figures** of the ES.

Table 5.1 – Planning Application Drawings

Drawing Type	Drawing Reference	Revision
Location Plan	H9305-DWH-XX-XX-DR-UD-201001	P01
Existing Survey	NW-23-38	-
Demolition Plan	NW-23-43	-
Overall Coloured Planning Layout	H9305-DWH-XX-XX-DR-UD-203100	X
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Overall Planning Layout	H9305-DWH-XX-XX-DR-UD-203001	X
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Overall Affordable Plan	H9305-DWH-XX-XX-DR-UD-203402	A
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DWH Affordable Plan (Sheet 2 of 2)	H9305-DWH-XX-XX-DR-UD-203401	D
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DWH Boundary Treatment Plan (Sheet 2 of 2)	H9305-DWH-XX-XX-DR-UD-203251	C
DWH Hard Landscaping Plan (Sheet 1 of 2)	H9305-DWH-XX-XX-DR-UD-203200	D
DWH Hard Landscaping Plan (Sheet 2 of 2)	H9305-DWH-XX-XX-DR-UD-203201	D
DWH Electric Vehicle Charging Point Plan (Sheet 1 of 2)	H9305-DWH-XX-XX-DR-CS-021100	D
DWH Electric Vehicle Charging Point Plan (Sheet 2 of 2)	H9305-DWH-XX-XX-DR-CS-021101	D
DWH Refuse Layout (Sheet 1 of 2)	H9305-DWH-XX-XX-DR-UD-203500	C
DWH Refuse Layout (Sheet 2 of 2)	H9305-DWH-XX-XX-DR-UD-203501	C
DWH Storey Heights Plan (Sheet 1 of 2)	H9305-DWH-XX-XX-DR-UD-203450	D
DWH Storey Heights Plan (Sheet 2 of 2)	H9305-DWH-XX-XX-DR-UD-203451	D
DWH Street Scenes	H9305-DWH-XX-XX-DR-UD-203550	C
DWH House Type Pack	NW-23-27	-
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Cherryfield Site Sections (2 of 3)	H870-DWH-XX-XX-DR-CE-30022	P01
Cherryfield Site Sections (3 of 3)	H870-DWH-XX-XX-DR-CE-30023	P01
Barratt Planning Layout	HXXXX-BAH-XX-XX-DR-UD-203001	21
Barratt Materials Layout	HXXXX-BAH-XX-XX-DR-UD-203150	02
Barratt Boundary Treatment Plan	HXXXX-BAH-XX-XX-DR-UD-203250	02
Barratt Hard Landscaping Plan	HXXXX-BAH-XX-XX-DR-UD-203200	02
Barratt Electric Vehicle Charging Point Plan	HXXXX-BAH-XX-XX-SP-CS-021100	02
Barratt Refuse Layout	HXXXX-BAH-XX-XX-DR-UD-203500	02
Barratt Storey Height Layout	HXXXX-BAH-XX-XX-DR-UD-203850	02
Barratt Street Scenes	HXXXX-BAH-XX-XX-DR-UD-203550	01
Barratt House Type Pack	NW-24-27	01
Affordable Housing Layout Barratt	HXXXX-BAH-XX-XX-DR-UD-203400	02

6. Traffic and Transport

- 6.1 The reduction from 807 to 800 units will have a minimal impact on the forecasted number of vehicle trips generated by the proposed development. As the March 2024 Environmental Statement (ES) assessed a higher number of dwellings and associated vehicle trips, with no residual effects identified, the conclusions of that assessment remain robust and valid. Therefore, no updates to the assessment are necessary, and no additional environmental information related to traffic and transport is required.
- 6.2 A summary of the traffic and transport assessment submitted with the March 2024 ES is provided below for reference.

March 2024 ES – Traffic and Transport Summary

- 6.3 The highway safety assessment concluded that the proposed development would not have a detrimental impact upon highway safety, therefore the residual effects for highway safety are considered to be **negligible – not significant**. As movements during the construction phase can be managed to avoid peak pedestrian and network periods, the residual highway safety effect is **negligible-not significant** during this period.
- 6.4 The TA (Appendix 6.1 of the March 2024 ES) concludes that the proposed development would not have a detrimental impact upon highway capacity. Therefore, the residual driver delay effect during the operational phase is considered to be **negligible – not significant**. As movements during the construction phase can be managed to avoid network peak periods, the residual driver delay effect during this period is also considered to be **negligible-not significant**.

7. Air Quality

- 7.1 There have been no amendments to the proposed development such that an update to this assessment is required, and no additional environmental information is required with regards to air quality. As such, the March 2024 ES remains valid and there are no additional significant effects associated with air quality. No update to the assessment of cumulative effects is required.
- 7.2 A summary of the air quality assessment submitted with the March 2024 ES is provided below for reference.

March 2024 ES – Air Quality Summary

- 7.3 A construction dust assessment has been undertaken for the construction phase associated with the Proposed Development and in accordance with IAQM (2024) guidance. Following the successful implementation of the suggested mitigation measures, the impact of the Proposed Development during construction on the local area and sensitive receptors although adverse, will be temporary, and **'not significant'**.
- 7.4 The change in predicted NO₂, PM₁₀ and PM_{2.5} concentrations at existing and future receptors in 2025 during peak construction of the Proposed Development are anticipated to be temporary, **negligible** and **'not significant'**.
- 7.5 The change in predicted NO₂, PM₁₀ and PM_{2.5} concentrations at existing and future receptors in 2028 during the operational year of the Proposed Development are anticipated to be **negligible** and **'not significant'**.

8. Noise and Vibration

Introduction

- 8.1 Chapter 8 of the March 2024 ES comprised an assessment of the likely significant effects of noise and vibration impacts associated with the construction and operation of the Proposed Development.
- 8.2 The chapter identifies any new or altered significant effects which could arise from that presented in the March 2024 ES. Where the assessment has not changed it is referenced as such within this chapter.
- 8.3 The approach to this assessment is set out within this chapter and at Chapter 2 of the ES Addendum.
- 8.4 This ES Addendum Chapter should be read in conjunction with Chapter 8 of the March 2024 ES submitted as part of the full planning application (Ref. 24/00068/FUL).

Assessment Methodology and Significance Criteria

- 8.5 There are no changes to the assessment methodology since the March 2024 ES.

Assumptions/Limitations

- 8.6 There are no changes to the assumptions and limitations detailed in the March 2024 ES.

Baseline Conditions

- 8.7 Baseline conditions have not changed materially since the March 2024 ES.

Embedded Mitigation

- 8.8 There are no changes to the embedded mitigation measures since the March 2024 ES.

Assessment of Likely Significant Effects

Construction Phase – Construction Road Traffic

- 8.9 The overall number of proposed dwellings has reduced from 807 to 800. This will not result in a material reduction in construction traffic flows compared to those assessed in the March 2024 ES.
- 8.10 Consequently, there are no changes in likely significant effects identified in the ES as a result of the construction road traffic associated with Proposed Development. The likelihood of significant effects remains negligible, and therefore not significant.

Construction Phase - Construction Activities

- 8.11 There has been no material changes to the site boundary or layout of the proposed development since the March 2024 ES. Therefore, the likelihood of significant effects remains as not significant.

The Completed and Operational Development – Operational Road Traffic

- 8.12 The overall number of proposed dwellings has reduced from 807 to 800. This will not result in a material reduction in operational road traffic flows compared to those assessed in the March 2024 ES.
- 8.13 Consequently, there are no changes in likely significant effects identified in the ES as a result of the operational road traffic associated with Proposed Development. The likelihood of significant effects remains negligible, and therefore not significant.

Additional Mitigation / Enhancement Measures*Construction Phase*

- 8.14 No additional mitigation measures are required at the construction phase compared to those detailed in the March 2024 ES.

The Completed and Operational Development

- 8.15 No additional mitigation measures are required for the completed and operational development compared to those detailed in the March 2024 ES.

Residual Effects

- 8.16 There are no additional residual effects, and no changes to the residual effects previously identified in the March 2024 ES.

Conclusions

- 8.17 There are no changes to the conclusions set out in the noise chapter of the March 2024 ES. Therefore, with respect to construction and operational, noise and vibration, effects remain assessed as not significant.

Assessment of Cumulative Effects

- 8.18 There are no additional cumulative effects, and no changes to the cumulative effects previously identified in the noise chapter of the March 2024 ES. Therefore, cumulative effects remain assessed as not significant.

9. Heritage

- 9.1 Since the submission of the original ES in March 2024 the heritage assessment has been updated to reflect the fact that an apartment block is proposed in the northwestern part of the site. Therefore, an updated ES chapter and updated Appendix 9.1 Heritage Impact Assessment was submitted to the Council in September 2024. The updated chapter and Heritage Impact Assessment has been submitted with this addendum.
- 9.2 The revised proposals and the layout in the northwestern part of the Site (closest and most relevant to the heritage assets) has only been altered very slightly with some building types having been replaced. The larger apartment block on the corner remains as previously proposed. Therefore, there have been no amendments to the proposed development such that an update to this assessment is required, and no additional environmental information is required with regards to heritage. As such, the September 2024 heritage chapter remains valid and there are no additional significant effects associated with heritage. No update to the assessment of cumulative effects is required.

The chapter below replaces the previous ES chapter as set out in the March 2024 ES.

- 9.3 This chapter assesses the likely significant effects of the proposed development on the historic environment. In particular, it considers the potential effects on the existing built heritage in the wider area.
- 9.4 It describes the methods used to assess the likely significant effects, the baseline conditions currently existing at the Site and in its surroundings, the potential direct and indirect effects of the Proposed Development arising from the construction and the operational phase, the mitigation measures required to prevent, reduce, or offset the identified significant effects and the residual effects. It has been written by Turley Heritage.
- 9.5 This Chapter is supported by the following figures and appendices:
- Appendix 9.1: Heritage Assessment
 - Appendix 9.2: Heritage Asset Plan

Planning Policy Context

- 9.6 The Heritage Assessment has been undertaken within the context of relevant planning policies, guidance documents and legislative instruments. These are summarised below.

Legislation

The Planning (Listed Buildings and Conservation Areas) Act 1990

- 9.7 Under s66(1) of The Planning (Listed Buildings and Conservation Areas) Act 1990, Knowsley Council, in determining the submitted full planning application has a statutory duty to pay special regard to the desirability of preserving listed buildings, their setting or any features of special interest they may possess. The concept of 'preserve' has been interpreted through case law to mean 'to cause no harm'.

- 9.8 The setting of conservation areas is not expressly protected by primary legislation. However, the National Planning Policy Framework (NPPF) states that the setting of a designated heritage asset (including conservation areas) can contribute to its significance.

National Planning Policy

National Planning Policy Framework

- 9.9 Paragraph 200 of the NPPF outlines the information required to support planning applications affecting heritage assets, stating that applicants should describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.
- 9.10 Paragraph 203 of the NPPF states that planning authorities should take account of the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and the desirability of new development making a positive contribution to local character and distinctiveness.
- 9.11 Paragraph 205 requires, *"when considering the impact of development on the significance of a designated heritage asset that great weight should be given to the asset's conservation"*. 'Conservation' is defined by the NPPF as *"the process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance."*
- 9.12 Paragraphs 207 and 208 differentiate between 'substantial' and 'less than substantial harm' and provide a framework for the consideration of harm to the significance of designated heritage assets where it arises, bearing in mind the considerable importance and weight that must be given to the statutory duties of the 1990 Act.
- 9.13 Paragraph 212 requires that *"Local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites, and within the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably."*

Local Planning Policy

Knowsley Local Plan: Core Strategy

- 9.14 Policy CS19 of the Knowsley Local Plan: Core Strategy (2016) relates to design quality and accessibility in new development. It states:

"To enhance local distinctiveness, identity and the accessibility of places, new development within Knowsley will be expected to... respond to and integrate positive characteristics of immediate surroundings, including local materials, scale, mass, form, layout, alignment and density of the existing built environment... [and] complement and enhance (where possible), existing landscape, topography, Green Infrastructure; and features of local importance and historic interest."

- 9.15 Policy CS20 of the Core Strategy sets out the local planning policy in relation to built heritage within Knowsley. It states:

“Development proposals in Knowsley should preserve or enhance the Borough’s historic and architectural assets, including Listed Buildings, Conservation Areas, Historic Parks and Gardens and archaeological remains, together with other local areas, buildings and structures of historic importance. The Council will:

- Require preservation of the local distinctiveness and character of historic assets through sensitive design of new development, including appropriate integration with their setting and immediate landscape;*
- Prevent demolition and/or development which would result in substantial harm or the loss of designated historic assets unless the proposal would result in substantial public benefits which clearly outweigh the harm or loss;*
- Where a development proposal will result in less than substantial harm to a designated heritage asset, assess such harm against the benefits of the proposal;*
- Facilitate long term conservation and enhancement of local assets and areas of historic importance, including through the preparation of Conservation Area Management Plans”.*

Other Relevant Policy, Standards and Guidance

- 9.16 The assessment will be undertaken in line with best practice guidance documents to inform the approach and impact assessment. These documents which will be used to inform the assessment are listed below:
- Historic England (2015) Good Practice Advice in Planning Note 2, Managing Significance in Decision Taking in the Historic Environment
 - Historic England (2017) Good Practice Advice Note 3: The Setting of Heritage Assets
 - Highways England (2020) The ‘Design Manual for Roads and Bridges’ ((LA 104 Environmental Assessment and Monitoring) and (LA 106 Cultural Heritage Assessment)) (‘DMRB’)
 - IHBC, CIfA & IEMA (2021) Principles of Cultural Heritage Impact Assessment 2021

Assessment Methodology and Significance Criteria

Study Area

- 9.17 A Study Area of 1km from the Site boundary has been set as a basis for the consideration of potential effects of the Proposed Development on built heritage assets. The Site, Study Area and all heritage assets within it are identified on a **Heritage Asset Plan at Appendix 9.2**.
- 9.18 In defining an appropriate Study Area, best practice guidance, professional judgement, and a review of the potential effects of the Proposed Development on built heritage has been applied. The following factors have been taken into consideration:
- The nature and extent of the Proposed Development;
 - The proximity of heritage assets to the Proposed Development;

- The degree of inter-visibility between heritage assets and the Site taking into consideration, for instance, changes in topography as well as interposing townscape and landscape features and informed by a site visit; and
- The significance of heritage assets and the contribution made by their setting, including any known historic or functional relationships.

9.19 The Proposed Development, due to its height, scale and mass, is unlikely to be visible beyond the Study Area. However, in accordance with the NPPF and Historic England guidance the professional judgements made in this Assessment are based on the effect of the Proposed Development on the significance of heritage assets, rather than whether the development will be visible from them, although this is also a consideration.

Survey and Data Sources

9.20 The following background studies have informed this Chapter:

9.21 **Heritage Assessment:** A detailed Heritage Assessment (**Appendix 9.1**) has been prepared. This assessment has been carried out to address the statutory duty of the Planning (Listed Buildings and Conservation Areas) Act 1990 and in accordance with planning policy (including the requirement of NPPF Paragraph 200) and best practice guidance. The Heritage Assessment identifies the heritage significance and setting of all assets within the Study Area and assesses the impact of the Proposed Development upon that significance.

Assessment Process

9.22 In the absence of specific prescribed criteria for the assessment of impacts on built heritage, the methodology for establishing the relative value or importance of heritage assets; the magnitude of change; and the significance of effect will be taken from Design Manual for Roads and Bridges (DMRB) (Volume 11, Section 2, Part 4, 2019)¹ and informed by Historic England guidance.

9.23 Analysis has also been informed by a site visit undertaken in August 2022. The site visit sought to gauge potential effects of the Proposed Development on the heritage assets, inform judgements on their relative heritage significance and importance within any grouping, and also how sensitive they would be to change within their setting.

Reporting of the Environmental Effect and Significance Criteria

9.24 The assessment of likely significant environmental effects as a result of the Proposed Development has been taken into account for the construction and operational phases.

Determining Sensitivity of Receptor

9.25 The heritage significance (value or importance) of the heritage assets (receptors) is defined on the basis of Table 9.1 which has been informed by the DMRB and a clear understanding and appreciation of the heritage significance of each asset and the contribution of setting to their heritage significance. This has been undertaken in accordance with Historic England guidance and informed by a site visit, research and professional opinion. The Heritage Assessment

¹ Design Manual for Roads and Bridges (DMRB) (Volume 11, Section 2, Part 4) (2019).

(Appendix 9.1) establishes the heritage baseline and heritage significance of the heritage assets and this has informed the sensitivity of the receptor.

Table 9.1: Criteria for Determining the Sensitivity of the Receptor

Sensitivity	Asset Type
High	Scheduled monuments with standing remains Registered Battlefields Grade I and II* listed buildings Other listed buildings that can be shown to have exceptional qualities in their fabric or historical association not adequately reflected in the listing grade Grade I and II* registered parks and gardens Conservation areas containing very important buildings
Medium	Grade II listed buildings Historic (unlisted) buildings that can be shown to have exceptional qualities in their fabric or historical association Grade II registered parks and gardens Conservation areas containing important buildings Historic townscape or built-up areas with historic integrity in their buildings, or built settings (e.g. including street furniture and other structures)
Low	'Locally listed' buildings and landscapes Historic (unlisted) buildings of modest quality in their fabric or historical association Historic townscape or built-up areas of limited historic integrity in their buildings, or built settings (e.g. including street furniture and other structures)
Negligible	Assets of no architectural or historic note; buildings of an intrusive character

Determining the Magnitude of Change

- 9.26 The magnitude of change (or impact) to heritage assets is assessed using the criteria outlined in **Table 9.2**. The terminology used in **Table 9.2** (Major, Moderate, Minor, negligible, No Change) differs to the DMRB (major/ large, moderate/medium, minor/ small), however it has been adopted to ensure consistency across the ES.

Table 9.2: Criteria for Determining the Magnitude of Change/Impact to Heritage Assets

Magnitude of Change (Impact)		Definition
Major	Adverse	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements.
	Beneficial	Large scale or major improvement of resource quality; extensive restoration; major improvement of attribute quality.
Moderate	Adverse	Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements.
	Beneficial	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality.
Minor	Adverse	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements.
	Beneficial	Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring.
Negligible	Adverse	Very minor loss or detrimental alteration to one or more characteristics, features or elements.
	Beneficial	Very minor benefit to or positive addition of one or more characteristics, features or elements.
No Change	Adverse	No loss or alteration of characteristics, features or elements; no observable impact in either direction.

Determining the Level of Effect

- 9.27 The level of effect attributed has been assessed based on the sensitivity of the affected receptor and the magnitude of change due to the Proposed Development, as set out in Table 9.3 below, also informed by the 'Design Manual for Roads and Bridges' (LA 104 Environmental Assessment and Monitoring) and (LA 106 Cultural Heritage Assessment).

Table 9.3: Criteria for Determining the Significance of Effect on Heritage Asset Receptors

Sensitivity of Receptor	Magnitude of Effect				
	No change	Negligible	Minor	Moderate	Major
High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
Medium	Neutral	Neutral or slight	Slight	Moderate	Moderate or large
Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

- 9.28 The level of effect is confirmed as a single level and not a range, informed by professional judgement. For each effect, it has been concluded whether the effect is '*beneficial*' or '*adverse*'. A statement is also made as to whether the level of effect is '**Significant**' or '**Not Significant**', again based on professional judgement.
- 9.29 The following terms have been used to define the significance of the effects identified and these can be '*beneficial*' or '*adverse*':
- **Very large effect:** where the Proposed Development is likely to cause a considerable change from the baseline conditions and the receptor has limited adaptability, tolerance or recoverability or is of the highest sensitivity. This effect is considered to be 'Significant.'
 - **Large effect:** where the Proposed Development is likely to cause either a considerable change from the baseline conditions at a receptor which has a degree of adaptability, tolerance or recoverability or a less than considerable change at a receptor that has limited adaptability, tolerance or recoverability. This effect is considered more likely to be 'Significant' but will be subject to professional judgement.
 - **Moderate effect:** where the Proposed Development is likely to cause a small, but noticeable change from the baseline conditions on a receptor which has limited adaptability, tolerance or recoverability or is of the highest sensitivity; or where the Proposed Development is likely to cause a considerable change from the baseline conditions at a receptor which can adapt, is tolerant of the change or/and can recover from the change. This effect is considered less likely to be 'Significant' but will be subject to professional judgement.

- **Slight:** where the Proposed Development is unlikely to cause a noticeable change at a receptor, despite its level of sensitivity or there is a considerable change at a receptor which is not considered sensitive to a change. This effect is 'Not Significant'.
- **Neutral:** Where the Proposed Development will cause no change to the receptor. This effect is 'Not Significant.'

9.30 The level of effect to heritage assets is quantified based upon the particular heritage significance and setting of the asset and the nature of the effect on that significance. A detailed discussion is set out within the accompanying Heritage Assessment (**Appendix 9.1**). The assessor has therefore exercised professional and reasoned judgment in determining which of the levels of effect is more appropriate and this Chapter should be read in conjunction with the accompanying Heritage Assessment

Assumptions/Limitations

- 9.31 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:
- 9.32 The list of heritage and non-heritage asset assets within the Study Area has been compiled from information provided by the Merseyside Historic Environment Record, Knowsley Council and the National Heritage List for England.
- 9.33 This Chapter is focussed on built heritage only. An archaeological desk-based assessment has been produced as a standalone document and will be submitted as part of the Application which assesses the potential impacts on buried archaeological remains.

Consultation

Table 9.4: Consultation

Consultee	Date and Time	Comments	Actions
Knowsley Council Principal Conservation and Design Officer, Dorothy Bradwell	Scoping Opinion 20 October 2022	It is agreed that Heritage should be included with the ES. There are no additional built heritage assets that need be taken into consideration. The baseline information does not include identification of buried	As noted above, a standalone archaeological desk- based assessment will be submitted. The assessments of significance and setting and the impact assessments in the Heritage Assessment (Appendix 9.1) are aligned with Historic England's guidance

Consultee	Date and Time	Comments	Actions
		sites/consideration of archaeological potential, this should not be excluded. It was advised that the DMRB LA 104 and LA 106 is not particularly of relevance. It was recommended that “The Setting of Heritage Assets” is of greater relevance, and advised that the methodology for assessing the effects on heritage assets of be updated accordingly. The Scoping Report (paragraph 6.31) states that a Heritage Assessment will be appended to the ES, which is to be guided by the relevant Historic England Guidance, and this is welcomed.	(GPA3) ‘The Setting of Heritage Assets.’ GPA3 does not provide a methodology for EIA but is a key element of the assessment methodology that underpins the conclusions and professional judgements within the Built Heritage ES Chapter.
Knowsley Council Group Manager Majors and Planning Policy, Kevin Foster	Email correspondence, 11 November 2022	Confirmation that methodology is acceptable and request that all Historic England good practice is followed	The agreed methodology has been applied to the ES Chapter and Heritage Assessment (Appendix 9.1)
Knowsley Council Principal Conservation and	Consultation Response to application ref.	Agreement that the heritage impacts relate mainly to the effect on the settings	The Heritage Assessment (Appendix 9.1) has been updated to

Consultee	Date and Time	Comments	Actions
Design Officer, Dorothy Bradwell	24/00068/FUL, August 2024	of listed buildings (primarily Church of St Chad and Kirkby Hall Lodge) and the Old Hall Lane Conservation Area. It has been advised that the development on the corner of Cherryfield Drive/Valley Road will have a negative effect on the setting of the designated heritage assets. There is also concern in regard to the tree works on this corner and their potential effect on then extent of heritage and design impacts. The Heritage Assessment should be updated to take account of the latest revised proposals.	reflect the latest revised proposals and in light of the comments received by Officers.

Baseline Conditions

- 9.34 The baseline conditions have been established through an initial desktop survey to identify the relevant heritage assets within the Study Area, supported by a site visit. Desktop analysis was confirmed through a review of Historic England's National Heritage List for England, Merseyside Historic Environment Record (provided by Greater Manchester Archaeological Advisory Service (GMAAS) on 17 August 2022) and other local resources. Desktop and archival research have contributed to an understanding of the historic development of the Site, heritage assets and surrounding area.
- 9.35 The historical development of the site is discussed in detail within the accompanying Heritage Assessment (**Appendix 9.1**), however a summary of the historic development is set out below:
- The settlement of Kirkby was founded in the early medieval period, although the town remained largely farmland until the 20th century.

- By the time of the first edition OS map (1850), the settlement was shown to be low density and surrounded by agricultural land.
- Kirkby and the Site remained largely agricultural land through the latter half of the 19th century and the early 20th century.
- Following the extensive bomb damage in Liverpool during the Second World War and a programme of slum clearances within the City, Kirkby began to be developed as an overspill estate in the 1950s.
- The development Site itself was not developed and remained largely open space through the 20th century, aside from the construction of a college to the north west of the Site, and school complex to the east.
- The school buildings were demolished in the 21st century and replaced by a leisure centre.

Designated Heritage Assets

- 9.36 Through the full analysis of all designated heritage assets within the study area, as set out within the Heritage Assessment (**Appendix 9.1**), the designated heritage assets that have been identified and considered within the Chapter are set out in **Table 9.4**.

Table 9.5 Sensitive Heritage Assets

Asset Type	Name	Grade	Sensitivity
Listed Building	Church of St Chad	II*	High
Listed Building	Kirkby Hall Lodge	II	Medium
Listed Building	Vicarage	II	Medium
Listed Building	Stables to the North of the Vicarage	II	Medium
Listed Building	Gate Piers to South of Vicarage	II	Medium
Listed Building	Kirkby War Memorial	II	Medium
Conservation Area	Old Hall Lane, Kirkby Conservation Area	N/A	Medium

- 9.37 The above designated heritage assets identified at **Table 9.4** are defined on a Heritage Asset Plan with other assets within the Study Area (**Appendix 9.2**).

Embedded Mitigation

Construction

- 9.38 The following embedded mitigation which has been evaluated as part of the construction phase assessment is outlined below.
- The Site will be secured using hoardings/fencing; and
 - Construction noise will be managed and reduced as far as possible.

The Completed and Operational Development

- 9.39 The following embedded mitigation which has been evaluated as part of the operational phase assessment is outlined below.
- 9.40 The existing belt of trees along the north western boundary of the Site will be retained to function as a visual buffer to the Proposed Development in views from the conservation area and listed buildings to the north west.

Assessment of Likely Significant Effects

Construction

Change in the Setting of Heritage Assets

- 9.41 There are temporary effects that may affect the setting and significance of heritage assets during the construction phase. This includes temporary diminution in the quality of the setting of heritage assets from the presence of machinery and construction traffic movements resulting in increased visual intrusion and noise. Such effects will be limited due to the intervening distance, development and vegetation between the Site and the heritage assets. The risk of such effects will be partially mitigated by embedded mitigation.
- 9.42 The southern boundary of the **Old Hall Lane Conservation Area** is situated to the north of the A506 roundabout and associated road network. The sensitivity of the asset is medium and the magnitude of change to the asset is considered to be negligible. Therefore, there is likely to be an indirect, temporary, adverse, effect which is considered to be **slight and not significant**.
- 9.43 The **Church of St Chad** (grade II* listed) is situated approximately 225m to the north west of the Site with intervening trees planting, development and the A506 roundabout. The sensitivity of the Church of St Chad is high and the magnitude of change to the asset is considered to be negligible. Therefore, there is likely to be an indirect, temporary, adverse, effect which is considered to be **slight and not significant**.
- 9.44 The remaining listed buildings (**Kirkby Hall Lodge, Vicarage, Stables to the North of the Vicarage, Gate Piers to South of Vicarage and Kirkby War Memorial**) are all grade II listed. They are at varying distances from the Site and principally experienced from within the conservation area itself. There is little intervisibility between the Vicarage, Stables to the North of the Vicarage, Gate Piers, Kirkby War Memorial, Sefton Cottage and the Site due to the intervening distance and enclosed nature of the Old Hall Lane Conservation Area. The sensitivity of the assets are medium and the magnitude of change is considered to be negligible. Therefore in relation to these assets, there is likely to be an indirect, temporary, adverse, effect which is considered to be **slight and not significant**.

The Completed and Operational Development

Change in the Setting of Heritage Assets

- 9.46 Effects associated with the operation of the Proposed Development which could affect the setting and therefore significance of heritage assets include, but are not limited to, visual changes associated with the Proposed Development (as discussed below).
- 9.47 The identified heritage assets (**Table 9.4**) are all located to the north of the Site and comprise a grouping of grade II listed buildings centred on a grade II* church, all within the Old Hall Conservation Area. The Site, as an undeveloped parcel of land, provides a sense of the area's previously rural character but given the very limited extent to which it is experienced alongside the assets and the surrounding developed area, it does not make a meaningful contribution to an understanding of the historic context of the conservation area or the listed buildings.
- 9.48 There will be limited intervisibility between the assets and the Proposed Development, due to the filtering effect of the existing and established trees and vegetation throughout the conservation area and the nature of the Site's topography. Part of the Proposed Development may be visible in filtered views from the conservation area. However, the existing character to the south and east of the conservation area is defined by two and three storey buildings such as Kirkby College and the Kirkby Gallery. The proposed three storey apartment building and one and two storey dwellings in the north west corner of the Site would be of a scale commensurate with the existing buildings in this location and will therefore maintain the character of the conservation area's setting to the south and west.
- 9.49 Visibility of the church tower from within the Site will be reduced by the Proposed Development. However, views of the upper stages of the tower from within the Site are not designed views or from land with any known associative or historic relationship with the asset. On balance, it is concluded that although there will be change within the setting of the church, its significance will be sustained by the Proposed Development.
- 9.50 The sensitivity of **Old Hall Lane Conservation Area** is medium and it is considered there will be no change to the asset's significance. Therefore, there will be an indirect, permanent effect that is considered to be **neutral and not significant**.
- 9.51 The sensitivity of the **Church of St Chad** (grade II* listed) is high and it is considered there will be no change to the asset's significance. Therefore, there will be an indirect, permanent effect that is considered to be **neutral and not significant**.
- 9.52 The sensitivity of the remaining listed buildings (**Kirkby Hall Lodge, Vicarage, Stables to the North of the Vicarage, Gate Piers to South of Vicarage and Kirkby War Memorial**) is medium and it is considered there will be no change to the asset's significance. Therefore in relation to these assets, there is likely to be an indirect, permanent effect which is considered to be **neutral and not significant**.

Additional Mitigation / Enhancement Measures

- 9.53 A CEMP will be provided as further mitigation in relation to the construction phase. No additional mitigation or enhancement over and above that which has been evaluated as part of the Proposed Development is required in connection with the operational phase of development.

Residual Effects

- 9.54 Following the effective implementation of the embedded and additional mitigation measures proposed above, there are no significant residual effects arising from the Proposed Development during construction or operational phases.

Table 9.6: Residual Effects Summary

Description of Effect	Embedded Mitigation	Potential Effect (inc. Significance)	Further Mitigation	Residual Effect (inc. Significance)
Construction				
Change in the setting of heritage assets	The Site will be secured using hoardings/fencing; and Construction noise will be managed and reduced as far as possible.	Slight adverse (not significant)	Provision of a CEMP.	Slight adverse (not significant)
Operation				
Change in the setting of heritage assets	The existing tree belt along the north western boundary of the Site will be retained to function as a visual buffer to the proposed dwellings in views out from within the conservation area and the listed buildings to the north and west.	Neutral (not significant)	No additional mitigation or enhancement proposed.	Neutral (not significant)

9.55 There are no significant residual effects identified.

Conclusions

9.56 This chapter assesses the likely significant effects of the Proposed Development on the historic environment. It considers the potential effects on existing built heritage in the wider area.

9.57 The chapter describes the methods used to assess the likely significant effects, the baseline conditions currently existing at the Site and in its surroundings, the potential direct and indirect effects of the Proposed Development arising from the construction and the operational phase, the mitigation measures required to prevent, reduce, or offset the identified significant effects and the residual effects. It has been written by Turley Heritage together with a Heritage Assessment included at **Appendix 9.1**.

9.58 Baseline information has been obtained for the Site and surrounding area within a 1km radius (the 'Study Area'). In order to define the Study Area, a number of different factors have been taken into consideration. These include:

- The nature and extent of the Proposed Development;
- The proximity of heritage assets to the Proposed Development;
- The degree of inter-visibility between heritage assets and the Site taking into consideration, for instance, changes in topography as well as interposing townscape and landscape features and informed by a site visit; and
- The significance of heritage assets and the contribution made by their setting, including any known historic or functional relationships.

9.59 There are no designated or non-designated built heritage assets within the Site; however, there are assets within the wider area. Of the heritage assets identified within the Study Area, potential for significant environmental effects was identified in relation to the following assets and these were included for assessment in the ES Chapter:

- Old Hall Conservation Area
- Church of St Chad (grade II listed building)
- Kirkby Hall Lodge (grade II listed building)
- Vicarage (grade II listed building)
- Stables to the North of the Vicarage (grade II listed building)
- Gate Piers to South of Vicarage (grade II listed building)
- Kirkby War Memorial (grade II listed building)

9.60 It is concluded that during the construction phase there would be an indirect, temporary, adverse effect on the heritage assets identified above which is considered to be **slight and not significant**.

9.61 It is concluded that when completed, the Proposed Development would have an indirect and permanent effect on the above assets which is considered to be **neutral and not significant**.

Assessment of Cumulative Effects

9.62 Cumulative effects are the combined effects of several committed/consented schemes (in conjunction with the Proposed Development) which may, on an individual basis be insignificant but, cumulatively, have a significant effect.

Approach

- 9.63 The ES has given consideration to 'Cumulative 'Effects' for schemes located within a 2km radius from the boundary of the Site, as listed in **Chapter 2: Approach**. This search area is considered to be robust given the nature of the Application and the location of the Site. The Cumulative Scheme proposed to be considered as part of the cumulative effects assessment is outlined in **Table 9.6**.

Table 9.7: Cumulative Sites

Site Ref.	Application No.	Distance and Direction	Proposal	Scoped-in / Scoped-out	Justification
1.	20/00193/FUL	500m southwest	266no. Residential dwellings	Scoped out	With respect to the construction and operational phases, technical documentation submitted in support of this scheme did not identify effects on heritage assets. As such, there is no common receptor between the Proposed Development and the committed/consented scheme and there will be no cumulative effect on the heritage assets identified in this report.
2.	20/00124/FUL	2km northeast	Erection of B8 Warehouse and distribution centre	Scoped Out	
3.	19/00337/OUT	1.5km northeast	Industrial led mixed use development	Scoped Out	

10. Geology, Ground Conditions and Contamination

- 10.1 Since the submission of the original ES in March 2024 further site investigation has been undertaken in the north west of the site. Therefore, an updated ES chapter and updated Appendix 10.1 Phase 1 and 2 Geotechnical Assessment and Appendix 10.2 Remediation and enabling works strategy has been submitted with this addendum. The chapter and appendices also respond to consultation responses received on the application.
- 10.2 The conclusions remain the same as in the March 2024 ES and there are no additional significant effects associated with geology, ground conditions and contamination. No update to the assessment of cumulative effects is required.

The chapter below replaces the previous ES chapter as set out in the March 2024 ES.

- 10.3 This chapter assesses the likely significant effects of the proposed development on the site off Cherryfield Drive. In particular, it considers the potential effects of the historic site uses and the associated potentially contaminated land.
- 10.4 The chapter describes the methods used to assess the likely significant effects, the baseline conditions currently existing at the site and in its surroundings, the potential direct and indirect effects of the proposed development arising from the construction and the operational phase, the mitigation measures required to prevent, reduce, or offset the identified significant effects and the residual effects. It has been written by E3P Ltd.
- 10.5 This Chapter is supported by the following documents which are provided in the Appendices:
- E3P Ltd Phase I and II Geoenvironmental Site Assessment Cherryfield Drive, Kirkby, Liverpool, L32 8RX. Report Reference 15-280-R1-4. Dated October 2024.
 - E3P Ltd Remediation and Enabling Works Strategy Cherryfield Drive, Kirkby. Report Reference 15-280-R2-3. Dated October 2024.

Planning Policy Context

National Planning Policy

National Planning Policy Framework

- 10.6 The National Planning Policy Framework (NPPF) indicates that principal planning objective when considering development on land affected by contamination is to ensure that any unacceptable risks to human health, buildings and other property, and the natural and historical environment from the contaminated condition of land are identified, so that appropriate action can be considered and then taken to address those risks.
- 10.7 To prevent unacceptable risks from pollution and land instability, planning policies and decisions should ensure that new development is appropriate for its location. The effects (including cumulative effects) of pollution on health, the natural environment or general amenity, and the potential sensitivity of the area or proposed development to adverse effects from pollution, should be taken into account. Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rest with the developer and/or landowner.
- 10.8 The NPPF planning policies and decisions should also ensure that:

- The site is suitable for its new use taking account of ground conditions and land instability, including from natural hazards or former activities such as mining, pollution arising from previous uses and any proposals for mitigation including land remediation or impacts on the natural environment arising from that remediation;
- After remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990.

Local Planning Policy

- 10.9 The Knowsley Replacement Unitary Development Plan (UDP) was adopted in 2006. Under the transitional arrangements for moving to the Local Plan system the council 'saved' all but four of the 82 individual UDP policies, the 'saved' policies will remain in place until, in most cases, they are replaced by new policies in the Local Plan.
- 10.10 A key objective of the UDP is Objective 9 which is summarised below:

Objective 9

To make efficient use of previously developed land and buildings in providing land for new development. An important role of the UDP is to ensure that the use of greenfield land for new development is minimised. This will be achieved by focussing new development primarily towards previously developed (brownfield) land and buildings in the urban area. The sites identified in the UDP for new development (e.g. for new housing, industry or town centre uses such as shopping) are therefore mainly on brownfield sites.

Other Relevant Policy, Standards and Guidance

- 10.11 The assessment completed by E3P has been guided by the following legislation and good practice with due regard to the NPPF:
- Part 2A Environmental Protection Act 1990
 - Environment Agency Land Contamination: Risk Management (LC:RM) 2023
 - Environment Agency Groundwater Protection: Policy and Practice (GP3) 2008
- 10.12 BSI 10175 (Code of Practice for Investigation of Potentially Contaminated Land)
- 10.13 Part 2A of the Environmental Protection Act (EPA) 1990, introduced by s57 of the Environment Act 1995 (Reference 13.2), came into force in England on 1 April 2000. The main objective of introducing the Part 2A regime is to provide an improved system for the identification and remediation of land where contamination is causing unacceptable risks to human health or the wider environment given the current use and circumstances of the land.
- 10.14 The main documents that set out procedures for the conduct of technical processes or activities which may be relevant or partially relevant to Part 2A includes The Environment Agency LC:RM guidance and this document recommends a phased or tiered approach to risk assessment including:
- 10.15 Stage 1: Risk assessment
- Preliminary risk assessment.
 - Generic quantitative risk assessment.

- Detailed quantitative risk assessment.

10.16 Stage 1 includes information for intrusive site investigations.

10.17 Stage 2: Options appraisal

- Identify feasible remediation options.
- Do a detailed evaluation of options.
- Select the final remediation option.

10.18 Stage 3: Remediation and verification

- Develop a remediation strategy.
- Remediate.
- Produce a verification report.
- Do long term monitoring and maintenance, if required.

10.19 The assessment that is reported within the E3P Phase I and II Geoenvironmental Site Assessment (Appendix 10.1) encompasses a review of the available historical and geoenvironmental information and the collection of field data and laboratory testing and the completion of generic quantitative risk. As potential risks were identified, E3P has also completed the specification of remediation options, which are summarised within the Remediation and Enabling Works Strategy document (Appendix 10.2).

Assessment Methodology and Significance Criteria

Study Area

- 10.20 The subject site is a large irregular shaped parcel of land located to the south of Cherryfield Drive in Kirkby.
- 10.21 The southern sector of the site comprises maintained grassland with an area in the southeast of the site having recently undergone the felling of semi-mature and mature trees. The central sector of the site is currently unmaintained vacant grassland. Within the north of the site, is an area of active car park and former roadways and hardstanding associated with previous development. Knowsley community College is located in the north west of the site.
- 10.22 There is an additional area of vacant land with areas of hardstanding associated with former development, with a small building fronting Cherryfield Drive.

Survey and Data Sources

- 10.23 The desk based assessment of ground conditions has been undertaken and a summary of this research is set out below together with a description of baseline conditions.
- 10.24 The information obtained and considered in the desk study includes historical Ordnance Survey maps, geological maps and memoirs, hydrological and hydrogeological records, environmental databases, coal mining and mineral extraction records and the results of the site investigations carried out previously near the site. The purpose of the desk study was:
- to establish the environmental setting of the site, particularly with regards to ground conditions including local geology, hydrology and hydrogeology;
 - to identify historic use or current potential sources of contamination and how these may affect the proposed scheme or indeed the wider environment;
 - to develop a Conceptual Site Model [CSM] of the site. This would be carried out in line with requirements of the Environmental Protection Act Part 2A (Ref 13.1) source-pathway-receptor '*pollutant linkage*' methodology;
 - to undertake a geotechnical appraisal of the site and identify any site constraints and potential risks;
 - to characterise, where possible, constraints and development considerations, including recommendations for further investigations, assessments and mitigation.
- 10.25 Ordnance survey maps, historical maps and environmental data have been obtained from a commercially available data provider (Landmark)
- 10.26 The environmental data obtained contains regulatory information from the following authorities:
- KMBC – air pollution controls, waste, contaminated land
 - Environment Agency – waste, hydrogeological, hydrological, pollution
 - Merseyside Waste Disposal Authority - waste

- Coal Authority – coal mining
- Natural England – sensitive sites, nature reserves
- Public Health England - radon
- Health & Safety Executive – COMAH permitted facilities

10.27 In addition to desk-based assessment, E3P has completed an intrusive ground investigation which comprised the following:

- 144 x mechanically excavated trial pits,
- 75 x window sample boreholes,
- 46 x Dynamic Cone Penetrometers,
- 11 x BRE365 Soakaway Tests,
- 3 x Cable Percussion Boreholes with Rotary Borehole follow on
- Construction of environmental monitoring installations.

10.28 Using data obtained from the intrusive ground investigation, E3P has completed a Tier II human health and controlled waters risk assessment in accordance with guidance presented with the EA publication LC:RM in order to develop a site Conceptual Site Model based on the presence of identified source-pathways and receptors.

Assessment of Effects

- 10.29 Based on the findings of the assessments the potential effects during the construction stage and the operational development have been evaluated using the method set out below and appropriate mitigation measures identified as necessary within the remediation and enabling works strategy.
- 10.30 The assessment includes consideration of any proposed earth works and the potential effects of the development activities on sensitive receptors such as groundwater, site workers and future residential end-users.

Identification of Sensitive Receptors

- 10.31 Table 10.1 provides a framework within which the sensitivity of receptors will be assessed. This part of the assessment will be based on professional judgement following a review of mapping and environmental data.

Table 10.1 Defining the Sensitivity of Receptors

Sensitivity	Definition
High	High quality watercourse, unprotected Principal Aquifer, potable groundwater abstraction, on-site operatives, residential properties, schools and hospitals within the site or within 250m of the site boundary.
Medium	Low quality watercourses, Secondary A Aquifer and residential properties, schools within 250m of the site boundary.
Low	Absence of surface watercourse, Unclassified Aquifer or low permeability drift and no sensitive land uses within 250m of the site boundary.

- 10.32 Table 10.2 provides a framework within which the magnitude of impact will be assessed during the construction and operational phases of the Proposed Development.

Table 10.2 Defining the Magnitude of Effect

Magnitude of Effect	Definition of Magnitude
High	Activities are likely to increase long-term contaminant release over and above the baseline conditions with significantly increased risks to human health and the wider environment. Effects are likely to be important considerations at a regional or district scale. Remedial work may mitigate such effects to some degree but is unlikely to remove all of the effects upon the affected receptors.
Medium	Activities are likely to result in significant contaminant release, or cause degradation of other soil quality parameters, over and above the baseline conditions, with significantly increased risks to human health or controlled waters. Effects could be permanent on a local scale or have wider, temporary impact. Remediation measures are likely to be largely effective although some residual effects may still arise.
Low	Activities may result in some contaminant release or cause degradation of other soil quality parameters over and above the baseline conditions with significant increased risks to human health or controlled waters. Effects are likely to be both temporary and local in nature and can be successfully addressed by remediation to leave minimal residual risk.
Negligible	No effect or effect where risks to human health or the wider environment are not significantly increased.

Significance Criteria

- 10.33 Table 10.3 provides a framework which allows for the magnitude of the likely impact to be combined with sensitivity of the receptor to determine the overall significance of the environmental effect. As much of the assessment is based on professional judgement following detailed review of published data this assessment will also be based on professional judgement. Effects considered to have Major Significance will be considered significant in EIA terms.

Table 10.3: Significance Criteria

Magnitude of Effect	Sensitivity of Receptors		
	High	Medium	Low
High	Major	Moderate	Moderate
Medium	Major	Moderate	Minor
Low	Minor	Minor	None

Magnitude of Effect	Sensitivity of Receptors		
	High	Medium	Low
Negligible	None	None	None

Assumptions/Limitations

- 10.34 Areas of the northern sector of the site were limited in terms of access due to a high volume of services.
- 10.35 Investigation of the Electricity Substation on the northern boundary was not possible due to the live nature of infrastructure in this area.

Consultation

Table 10.4: Consultation

Consultee	Date and Time	Comments	Actions
Environmental Health Officer (EHO) – Knowsley Council	Contacted 5 th January 2022, with correspondence from EHO on 5 th January 2022. Clarifications on landfill	Contact was made prior to any site investigation works, when E3P was preparing to complete the site works and completing the Phase 1 Desk Study to obtain information from the council in relation to the site and surrounding area.	None Required.
	E3P have been provided consultee responses from the EHO and their consultant MEAS dated 2nd September 2024.	E3P currently having on-going discussions in order to update reports.	Update to report on-going to satisfy comments from EHO/MEAS.
Environment Agency	EA consultee response received, dated 25th July 2024.	E3P recently had conversations with Contaminated Land Officer to reach agreement on updates to reports required.	Update to report on-going to satisfy comments from EA.

Consultee	Date and Time	Comments	Actions
Knowsley Council	Scoping Opinion 20 October 2022	Geology, Ground Conditions and Contamination to be scoped into the ES. Site investigation and risk assessment to be prepared including 12 months of gas monitoring. Ground gas monitoring currently on-going with final regime to be submitted on completion. Assessment of impact on controlled waters to be undertaken.	ES chapter prepared Site investigation included as Appendix 10.1 Assessment included within this chapter

Baseline Conditions

General History and Development

- 10.36 Historical mapping indicates that the site was undeveloped until the 1960s, with the subsequent construction of the college campus in the north-western sector and a school in the south-eastern sector. Circa 1961, historical mapping shows earthworks associated with the adjacent landfill site, by 1976 the landfill is no longer shown.
- 10.37 Residential dwellings and retail buildings, including a fuel station and electrical substations, are shown at the northern site boundary pre-1961.
- 10.38 Aerial imagery indicates the south-eastern sector of the site was cleared pre-2011; the hotel pre-2012; the residential housing pre-2015, the college in the north-west pre-2016; with the remainder of buildings in the north of the site demolished by pre-2019 and pre-2021.
- 10.39 There is currently no evidence of the fuel station above ground however it is understood the underground storage tanks are still present.
- 10.40 At present, the site is largely vacant, with the former roads and hardstanding at the north of the site and areas of car parking associated with the now-demolished school and college. A building associated with the former college remains in the north-western sector.
- 10.41 A review of geological map information indicates that drift strata beneath the site comprises Glacial Till across the majority of the site and Shirdley Hill Sand at the northern boundary. No drift deposits are recorded in the north-west of the site. The solid geological stratum beneath the site is mapped as the Chester Formation Sandstone.
- 10.42 The Glacial Till is classified as a secondary undifferentiated aquifer (drift) (low sensitivity) with the Shirdley Hill Sand classified as a secondary A drift aquifer (medium sensitivity). The bedrock stratum is classified as a principal aquifer (high sensitivity). No groundwater abstractions have been identified within a 1 km radius.
- 10.43 The Kirkby Brook is located 52m west to the site at a lower topographical gradient. The brook is assessed as being of medium sensitivity given its distance from the site.

Baseline Survey Information

- 10.44 The ground investigation works completed within the site have identified the following ground conditions.

Made Ground

- 10.45 Made Ground deposits were encountered within the majority of exploratory hole locations to depths of between 0.00m and 5.50 bgl. The depth of Made Ground was not proven in 20 locations due to either underground obstructions, the collapse of the trial pit, or the ingress of water.
- 10.46 Made Ground deposits generally comprised reworked topsoil of dark grey slightly gravelly clayey fine to coarse SAND or gravelly sandy to very sandy CLAY with frequent rootlets with gravel of brick, mudstone, sandstone and ceramic. TP164 was overlain by asphalt and concrete associated with the former garage/petrol station, with TP168 overlain by ceramic tiles overlying concrete indicative of the former residential dwellings in this area of the site. Furthermore, WS150, TP188 and TP196 in the north-east of the site was overlain by asphalt, with WS144, WS146, WS148, TP190, TP192 and TP194 overlain by concrete with rebar. TP197 and WS147 in the north-west of the site was overlain by asphalt and concrete.
- 10.47 Underlying the reworked topsoil or hardstanding, deeper Made Ground deposits comprised of reworked brown very sandy gravelly clays or gravelly sands.
- 10.48 Within TP160 the exploratory hole location was dug down the side of a former foundation which showed the slab to be 1.10m thick and the foundation going down to 2.80mbgl.
- 10.49 Made Ground deposits across the central and northern sector of the site comprised a clayey very gravelly fine to coarse ashy sand with gravel of ash, glass, ceramic, textiles, clinker, wood, timber, brick, metal, mudstone and cardboard. This material was considered to be incinerated materials utilised to create the level platform currently on site.
- 10.50 Within the north-western sector of the site, typically, the deposits within the hardstanding areas comprise 200mm of asphalt, underlain by circa 300mm of sandy gravel with gravel of limestone, concrete, and rare asphalt (subbase). Made Ground deposits underlying this comprised sandy gravel with cobbles, with gravel of brick, concrete, sandstone and mudstone with rare fragments of plastic, timber, metal, and cobbles of rebar and brick.

DRIFT

- 10.51 Drift deposits were encountered within the majority of exploratory locations with the exception of locations where the full depth of Made Ground could not be proven. The drift deposits are varied, generally comprising a soft to very stiff, medium to very high strength, slightly gravelly sandy brown CLAY with gravel of sandstone and mudstone or a slightly gravelly to gravelly slightly, slightly clayey to very clayey fine to medium SAND with gravel of sandstone and mudstone.

SOLID

- 10.52 The solid bedrock geology was first encountered between 4.70 mbgl and 6.10mbgl. and comprised of SANDSTONE.

- 10.53 A number of window sample probeholes terminated on or within weathered sandstone bedrock which was recovered as gravelly SAND from 1.20mbgl. to in excess of 5.45mbgl.

Value/Importance of Contaminated Land

- 10.54 Based on the findings of the ground investigation and subsequent laboratory chemical analysis, of soil and groundwater samples, a conceptual site model was developed that summaries the potential risk to human health (construction and occupational phase) and controlled waters (construction and occupational phases) based on a Source-Pathway-Receptor linkage assessment as per the requirements of EA guidance provided with LC:RM. The findings of the contaminated land risk assessment are summarised below.

Human Health

- 10.55 Elevated concentrations of heavy metals, mercury, non-volatile PAHs, naphthalene, asbestos and SVOCs have been identified within the soil analysis completed to date.
- 10.56 Heavy metals and non-volatile PAHs are considered to pose a risk to future end-users through dermal contact and ingestion. The risk can be mitigated through the installation of a cover system within garden and landscaping areas.
- 10.57 Mercury, naphthalene and dibutyl phthalate have been noted to be elevated in isolated locations across the site, and present a vapour risk to future end-users. It is recommended that a hotspot removal is completed and the materials either placed in an area of low sensitivity or removed from the site.
- 10.58 Within the soils analysis, no elevated concentrations of TPH or BTEX in the area of the former petrol filling station were identified to date. A hydrocarbon odour was identified within WS142 in this vicinity within SAND deposits underlying Made Ground. The tanks are understood to still be in-situ and the presence of contamination cannot be ruled out at this stage.
- 10.59 An exceedance of Total Petroleum Hydrocarbons C21 – C35 Aromatic hydrocarbons, in conjunction with visual and olfactory observations relating to hydrocarbon impact, have been encountered within the Made Ground deposits in TP202 and surrounding exploratory in the northwestern parcel of the site. It is recommended that a watching brief is completed during earthworks in this location, with delineation and further sampling to determine the extent of impact present at this location. This will be confirmed within a detailed remediation strategy
- 10.60 Asbestos, quantified between <0.001% and 0.009% has been identified within three locations at the site. As only trace fibres have been encountered, impacted soils and Made Ground will need to be placed in accordance with the asbestos conceptual site model with a suitable cover system placed in all garden and landscaped areas to prevent exposure to future site users. A hotspot removal should be completed in areas in which asbestos quantification is greater than 0.001%.

Controlled Waters

- 10.61 The assessment prepared in consideration of the developed CSM has not identified any potentially complete pollutant linkage or risk to controlled waters. Elevated TPHs against EQS screening values were identified in groundwater samples from WS142 in close proximity to the former petrol filling station, however, concentrations did not exceed the DWS screening value in relation to the underlying principal aquifer which is considered to be the primary receptor in this instance.

Elevated TPHs (C12-C16) were also found within WS202, exceeding the EQS threshold, but similarly, they did not exceed the DWS threshold. Therefore, the overall risk posed is reduced.

Ground Gas

- 10.62 Ground gas monitoring has characterised the majority of the site as CS1, with areas of deep Made Ground and noted areas adjacent to the landfill adhering to a CS2 classification.
- 10.63 Migration from the adjacent landfill has been identified, however a minimal flow has been recorded in the monitoring wells surrounding it, and therefore it is likely that the lateral migration of ground gases from the landfill is limited. As the landfill is uncapped, the majority of gases encapsulated within the landfill will be released to the atmosphere, however lows in barometric pressure may cause a swelling of the ground gas encroaching onto the site.
- 10.64 High methane concentrations have been identified within WS201 to the northwest of site, likely associated with a combination of encountered hydrocarbons in this area as well as the adjacent landfill to the south. Following suggested further investigation of the area, precautions may be increased or reduced based upon findings.
- 10.65 It is considered that a ground gas zoning plan is created for the site based on the sources identified, where precautionary CS2 protection measures are to be included within all of these areas. Ground gas mitigation design report required to define construction and verification requirements.
- 10.66 Ground gas monitoring in the north west of the site is still on-going.

Embedded Mitigation

- 10.67 Based on the findings of the site investigation and subsequent contaminated land risk assessment, E3P developed a detailed Remediation and Enabling Works Strategy (Ref 15-280-R2-3, dated October 2024) that sets out all the measures that are needed to mitigate the identified risks. The mitigation measures are summarised below.
- 10.68 As the above mitigation measures will be required ahead of construction or occupation of dwellings, these are considered to be embedded mitigation. The works will be completed as part of an agreed remediation strategy and subject to planning condition.
- Implementing of all works in strict accordance with UK Environmental Permitting and local planning authority requirements.
 - Controlled removal of all trees and vegetation.
 - Removal and treatment of all invasive plant species (as required if identified) in accordance with a specialist contractor method statement, validation and independent certification.
 - Further analysis of soils for PCBs in the vicinity of Electricity Substation when access is safe to do so.
 - Segregation of organic topsoil deemed unsuitable for use within a residential garden and placement in an area of no sensitivity or removal from the site in accordance with UK waste management legislation.
 - Decommission of all tanks and active drainage infrastructure in accordance with the contractor method statement and ensuring no environmental impact.
 - Removal of materials locally impacted by TPH compounds within the immediate vicinity of the USTs filling infrastructure associated with the former garage/ fuel station.

- Removal of materials locally impacted by TPH compounds within the immediate vicinity of the USTs filling infrastructure associated with the former garage/ fuel station.
- Delineation of TPH impacted materials in the north western sector of the site.
- Management of all anthropogenic material impacted by trace asbestos fibre in a controlled and legislatively compliant manner.
- Mercury speciation to determine if elevated concentrations are deemed to be a volatile risk.
- Delineation and hotspot removal of naphthalene and Dibutyl phthalate impacted soils.
- Identification, delineation and removal of organic materials within infilled ponds.
- Identification, delineation, and removal of organic materials within present pond (north west).
- Removal of all structures, relict foundations and buried features in their entirety.
- Removal of all materials considered geotechnically deleterious.
- Excavation and processing of Made Ground in a controlled manner with the sorting, processing and segregation of identified deleterious materials to geotechnical specification specifically the lifting, processing and sorting of Made Ground within the area of historically deposited materials (ash / incinerated materials).
- Validation sampling and leachate testing to confirm material retained on-site poses no unacceptable risk to the residential end-users controlled waters or the wider environment.
- Importation of suitable material (if required) to achieve the required development levels.
- Replacement of material in accordance with the E3P enabling specification and engineering requirements for the specific end use.

10.69 The developer's works will also include the completion of the following additional elements:

- Provision of a 600 mm cover system using certified material with appropriate validation within proposed garden areas, comprising 450 mm subsoil (potentially site-won natural drift deposits) overlain by 150 mm topsoil.
- Provision of a 300 mm cover system using certified material with appropriate validation within proposed areas of public open space and soft landscaping.
- Construction of dwellings with appropriate gas mitigation to be compliant with CS2 pending completion of ground gas monitoring.
- Construction of appropriate potable water supply infrastructure.

Assessment of Likely Significant Effects

Construction

- 10.70 Provided that the measures specified within the remediation and enabling works strategy are followed all risks to human health and controlled waters during construction are considered to be **negligible**. Works to be completed are summarised within Section 10.60 and 10.61.

The Completed and Operational Development

- 10.71 Provided that the measures specified within the remediation and enabling works strategy are followed all risks to human health and controlled waters during the operational phase of the development are considered to be **negligible**.

Additional Mitigation / Enhancement Measures

- 10.72 None identified.

Residual Effects

- 10.73 Upon completion of the remediation and enabling works in line with the strategy, there will be no residual effects.

Description of Effect	Embedded Mitigation	Potential Effect (inc. Significance)	Further Mitigation	Residual Effect (inc. Significance)
Construction				
Excavation through potentially contaminated soils	Works to be completed in line with the Remediation Strategy	Negligible	Full CEMP to be constructed for all works on site.	Negligible
Controlled Waters	Works to be completed in line with the Remediation Strategy	Negligible	Full CEMP to be constructed for all works on site.	Negligible
Operation				
Residents exposed to contaminated soils in gardens and landscaped areas.	Works to be completed in line with the Remediation Strategy. Cover system into gardens and landscaped areas and ground gas	Negligible	Building will be designed according to BS8486 which will prevent ingress of ground gas. Cover systems to be designed in line with industry best practice. Mitigation measures	Negligible

Description of Effect	Embedded Mitigation	Potential Effect (inc. Significance)	Further Mitigation	Residual Effect (inc. Significance)
	mitigation measures where required.		to be validated in line with warranty providers (NHBC/LABC) requirements.	

Conclusions

- 10.74 E3P has undertaken a tiered risk assessment at the proposed development in accordance with EA guidance provided within LC:RM and has followed this with a remediation options appraisal that is included within an remediation and enabling works strategy.
- 10.75 Where potential risks have been identified within the generic quantitative risk assessment a method for mitigation has been specified to ensure that there is a negligible risk to site construction workers and to future end users.
- 10.76 The site investigation and remediation strategy documents have been issued to KBMC and EA with further works being completed to satisfy the comments from KBMC and EA.

Assessment of Cumulative Effects

- 10.77 There is limited potential for the Proposed Development to give rise to likely significant cumulative effects in combination with other committed developments. This is because, following the implementation of the mitigation measures set out below there will no residual effects attributable to the Proposed Development on ground conditions such that a 'contribution' to cumulative effects cannot occur.

11. Climate Change

- 11.1 There have been no amendments to the proposed development such that an update to this assessment is required, and no additional environmental information is required with regard to climate change. As such, the March 2024 ES remains valid and there are no additional significant effects associated with the climate change.
- 11.2 A summary of the climate change assessment submitted with the March 2024 ES is provided below for reference.

March 2024 ES – Climate Change Summary

- 11.3 The development is targeting a low carbon development by minimising the heating demand through the adoption of a 'fabric-first' approach. Solar PV panels are being considered at this stage to further offset residual emissions.
- 11.4 In addition to the significant emission reductions, the development in its entirety, can tackle the predicted GHG emissions by offsetting the total amount produced through obtaining all operational energy from a 100% renewable energy electricity provider. This is course in down to homeowner choice in the future.
- 11.5 It will not be possible to eliminate every risk associated with climate change but through intelligent design, preparation and responsible construction, these risks will be minimised. Discussion and recommendations have detailed reducing these risks in key areas such as overheating, flooding and extreme weather, which has taken into consideration not only the health and safety of the users of the proposed development, but the resilience of the proposed development itself.

12. Ecology

- 12.1 Water Vole surveys have been undertaken and the report included as appendix 12.3 of this ES addendum. The report presents the results of a habitat suitability assessment and water vole and otter presence / absence survey carried out at Kirkby Brook, adjacent to the proposed residential development.
- 12.2 Kirkby Brook is designated as a Local Wildlife Site (LWS) owing to the presence of 'good water vole habitat'. Merseyside BioBank reported known records of water vole at Kirkby Brook with the closest record located 71 metres from the north-western site boundary and dated 1999 and the most recent record dated 2013 and located 340 metres from the site boundary (downstream).
- 12.3 The survey for evidence and field signs of water vole and otter covered the whole length of Kirkby Brook (both banks) that extends within the Valley Park to the west of the site (length of 365metres) and extended 1013 metres upstream from the culvert beneath the A506 (Valley Road) northwards and downstream for a length of 794 metres beyond the culvert beneath Bewley Drive southwards and towards the M57 (i.e. a total length of approximately 2.172 kilometres of open channel).
- 12.4 The survey was carried out in October 2024 by experienced ecologists and in accordance with standard, recognised survey methods as described in *Water Vole Field Signs and Habitat Assessment: A Practical Guide to Water Vole Surveys* (Dean, 2021) and *The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series)* Eds. Fiona Mathews and Paul Chanin (Dean, et al., 2016), and *Monitoring the Otter Lutra lutra. Conserving Natura 2000 Rivers Monitoring Series No 10* (Chanin, 2003) and current Natural England guidance (Natural England, 2022).
- 12.5 The habitats at Kirkby Brook are assessed to be 'good suitability' or 'suitable but poor' for use by water vole. The corridor is assessed to support suitable 'lying up' habitat for use by otter and may provide a migratory corridor.
- 12.6 No evidence of water vole or otter activity was detected at the surveyed section of Kirkby Brook. Importantly, no evidence of water vole activity was detected at the proposed location of the surface water outfall.
- 12.7 Subject to the implementation of the mandatory actions in relation to the protection of the brook corridor during works to prepare the land and install the surface water outfall, there are currently no constraints in relation to otter and water vole on works that will affect the brook corridor.
- 12.8 Based on the current site proposals (i.e. retention of the whole length of Kirkby Brook and the installation of one small surface water outfall only), the installation of the surface water outfall and its presence in the long-term is not likely to significantly adversely affect the integrity of the Kirkby Brook corridor and Local Wildlife Site nor the future suitability of the relevant section of Kirkby Brook for colonisation by water vole. It is advised that water vole is removed from the list of Important Ecological Features (IERs) identified in the EclA at Chapter 12 of the Environmental Impact assessment (EIA).
- 12.9 As water vole is reported to be present at the wider Kirkby Brook corridor and catchment, the recommendations outlined in **Section 4.2 of Appendix 12,3** are

appropriate to the proposals and works and comprise a proportionate approach to ensure the works are carried out in accordance with relevant wildlife legislation, planning policy and best practice.

- 12.10 There have been no amendments to the proposed development such that an update to the ecological assessment within the March 2024 is required. As such, the March 2024 ES remains valid and there are no additional significant effects associated with ecology. No update to the assessment of cumulative effects is required.
- 12.11 A summary of the ecology assessment submitted with the March 2024 ES is provided below for reference.

March 2024 ES – Ecology Summary

- 12.12 It is concluded that residential development can be achieved at the site with no significant adverse effect on designated sites for nature conservation and ecologically valuable habitats, including Priority Habitat and irreplaceable habitats.
- 12.13 Adverse effects on protected species are reasonably discounted and measures for the protection of bats, nesting birds and hedgehog during the construction period can be achieved by the implementation of actions as outlined in the CEMP for Biodiversity.
- 12.14 By protection of existing habitats and the creation of new and diverse habitats, the proposed development achieves compliance with the requirements of the NPPF and policies CS8 of the Knowsley Local Plan Core Strategy.
- 12.15 The proposed development will secure management in the long-term of all retained and created habitats in accordance with conservation objectives. Mitigation to address identified potential indirect adverse effects on off-site statutory designated sites as a result of recreational pressures and the risk of adverse effects on the features interest at the nearby Kirkby Brook LWS is feasible and will be secured via planning obligations, as needed.
- 12.16 In addition to the landscape planting, the proposed development will secure beneficial measures within the built environment for breeding and feeding birds and roosting bats.
- 12.17 Collectively and in the long-term it is concluded that the proposed development will deliver measurable gains and additionality for biodiversity, particularly for Priority Species and bird species of conservation targets, in accordance with the principles of the NPPF.

13. Summary and Conclusions

13.1 Since the planning application was submitted in February 2024, the Applicant and their design team have undertaken extensive engagement with KMBC and a series of comments have been provided on the submitted proposals. In response to these comments, design amendments have been made to the proposed layout. As a result of these changes, the assessments within the March 2024 ES have been reviewed to identify where new or altered significant effects are anticipated and a summary of each is provided below.

13.2 Incorrect versions of the assessments within the EIA were uploaded to the Knowsley Council planning portal and consulted upon. They have been re-submitted to KMBC since validation. In addition, new environmental information has submitted and is included within this ES addendum. This ES addendum therefore includes the latest versions of the documents, the new environmental information submitted and assess the amendments to the scheme. The ES addendum will need to be re-consulted upon by Knowsley Council in accordance with the requirements of Regulation 25 of the EIA Regulations 2017.

Traffic and Transport

13.3 The reduction from 807 to 800 units will have a minimal impact on the forecasted number of vehicle trips generated by the proposed development. As the March 2024 Environmental Statement (ES) assessed a higher number of dwellings and associated vehicle trips, with no residual effects identified, the conclusions of that assessment remain robust and valid. Therefore, no updates to the assessment are necessary, and no additional environmental information related to traffic and transport is required.

Air Quality

13.4 There have been no amendments to the proposed development such that an update to this assessment is required, and no additional environmental information is required with regards to air quality. As such, the March 2024 ES remains valid and there are no additional significant effects associated with air quality. No update to the assessment of cumulative effects is required.

Noise and Vibration

13.5 This Site Suitability Assessment (Appendix 8.3) supporting the March 2024 ES has been updated to reflect slight changes to the proposed layout, respond to the consultation responses received and supplements Chapter 8 of the updated ES.

13.6 The overall number of proposed dwellings has reduced from 807 to 800. This will not result in a material reduction in construction or operational traffic flows compared to those assessed in the March 2024 ES. Consequently, there are no changes in likely significant effects identified in the ES as a result of traffic associated with Proposed Development. The likelihood of significant effects remains negligible, and therefore not significant. There have been no material changes to the site boundary or layout of the proposed development since the

March 2024 ES. Therefore, the likelihood of significant effects during operation remains as not significant.

Heritage

- 13.7 Since the submission of the original ES in March 2024 the heritage assessment has been updated to reflect the fact that an apartment block is proposed in the northwestern part of the site. Therefore, an updated ES chapter and updated Appendix 9.1 Heritage Impact Assessment was submitted to the Council in September 2024. The updated chapter and Heritage Impact Assessment has been submitted with this addendum.
- 13.8 The revised proposals and the layout in the northwestern part of the Site (closest and most relevant to the heritage assets) has only been altered very slightly with some building types having been replaced. The larger apartment block on the corner remains as previously proposed. Therefore, there have been no amendments to the proposed development such that an update to this assessment is required, and no additional environmental information is required with regards to heritage. As such, the September 2024 ES Chapter (which is included as chapter 9 of this ES addendum) remains valid and there are no additional significant effects associated with heritage. No update to the assessment of cumulative effects is required.

Geology, Ground Conditions and Contaminated Land

- 13.9 Since the submission of the original ES in March 2024 further site investigation has been undertaken in the northwest of the site. Therefore, an updated ES chapter and updated Appendix 10.1 Phase 1 and 2 Geotechnical Assessment and Appendix 10.2 Remediation and enabling works strategy has been submitted with this addendum.
- 13.10 The conclusions remain the same as in the March 2024 ES and there are no additional significant effects associated with geology, ground conditions or contaminated land. No update to the assessment of cumulative effects is required.

Climate Change

- 13.11 There have been no amendments to the proposed development such that an update to this assessment is required, and no additional environmental information is required with regards to climate change. As such, the March 2024 ES remains valid and there are no additional significant effects associated with climate change. No update to the assessment of cumulative effects is required

Ecology

- 13.12 Water Vole surveys have been undertaken and the report included as appendix 12.3 of this ES addendum. No evidence of water vole or otter activity was detected

at the surveyed section of Kirkby Brook. There have been no amendments to the proposed development such that an update to the ecological assessment within the March 2024 is required. As such, the March 2024 ES remains valid and there are no additional significant effects associated with ecology. No update to the assessment of cumulative effects is required.

Summary

- 13.13 This Environmental Statement Addendum has confirmed that no new significant effects have been identified. The changes to the design of the Proposed Development are insufficient to alter any of the conclusions or significant effects of the assessments submitted in the March 2024 ES.