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**LAND TO THE EAST OF MOORGATE POINT
ALCHEMY WAY, KNOWSLEY BUSINESS PARK**

PRELIMINARY ECOLOGICAL APPRAISAL

Prepared for: Indurent Management Limited

Date: July 2025

Report Reference: JN00457/D02

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1. INTRODUCTION

Background

- 1.1 SK Environmental Solutions Limited was commissioned by Indurent Management Limited to undertake a Preliminary Ecological Appraisal (PEA) of land at Moorgate Point, Moorgate Road, Knowsley, Merseyside. The site is approximately centred on Ordnance Survey (OS) Grid Reference: SJ 42556 97216; the nearest postcode is L33 7AQ.

Aims and Objectives

- 1.2 The purpose of the PEA is to identify:
- the major habitats present within the site and the immediate vicinity;
 - the potential for legally protected and / or notable species to be present; and
 - the need for additional specialist ecological surveys.
- 1.3 A PEA does not constitute a full survey for protected species to standard survey methodologies, but is used as a tool to determine the potential of a site to support protected/notable species and whether any additional specialist species surveys are likely to be required to inform a mitigation strategy.
- 1.4 These results have been used to assess the nature conservation importance of the site and immediate surroundings, with regards to the habitats and species present.
- 1.5 The site has been subject to previous survey, historically to support a planning application in 2004 and more recently in 2020.

Definition of Terms

- 1.6 For the purpose of this report, the term 'site' is used to describe the location of main proposed working areas as denoted by the red line boundary on Figure 1, below.



Figure 1: Site Location.

Site Description

- 1.7 The proposed application site (the 'Site') measures approximately 4.5 hectares and comprises land situated on the eastern side of Moorgate Road North, within Knowsley Business Park. Moorgate Point (also within the ownership of the Applicant) lies immediately to the west. The Site is located approximately 1.5 miles east of Kirkby and 6.5 miles north east of Liverpool
- 1.8 The Site is trapezoidal in shape, and features predominantly flat, low-lying land with a landscaping bund adjacent to the southern boundary. Alchemy Way extends almost to the south-eastern boundary. The western portion of the Site is currently used as a haulage yard, comprising areas of hardstanding surrounded by soft landscaping, with a terrace of small industrial units at the south-western boundary, accessed from Moorgate Road North, via Moorgate Point. The eastern portion of the Site is undeveloped, consisting predominantly of grassland and scattered scrub and is designated as a Local Wildlife Site (known as Otis Meadows).
- 1.9 Directly to the north, north east, south east, west and north west of the Site are existing industrial buildings in a range of size from small, medium and large-box units. To the east is an Amazon

van park that has recently commenced operations. Land immediately to the south comprises an open area of land which was granted outline planning permission in April 2024 for the erection of two units (Use Class E (g) (ii) (iii) or B2 or B8 Use) with ancillary office space, car parking and vehicular, pedestrian circulation with access onto Alchemy Way (App Ref: 23/00456/FUL).

1.10 Whilst access is currently limited, The Site has excellent connectivity by virtue of its adjacency to the M57 Motorway and East Lancashire Road (A580), connecting the Site to Liverpool, Manchester and beyond.

1.11 The Site lies in Flood Zone 1 (low risk of flooding) and is not within a Conservation Area. There are no Listed Buildings or structures on Site, and it is not in an area that is at High Risk of coal mining. There are no other known planning constraints to development.

Development Proposals

1.12 The proposal seeks full planning permission for the development of 18,384 sq. m (197,880 sq. ft) of industrial and logistics floorspace, arranged across two units. The largest of the units (Unit K135) is located to the north-west of the Site, whilst the smaller unit (Unit K72) is located to the south-west, both of which are provided with dedicated access, servicing and staff parking areas. Access is proposed to be made from Alchemy Way, at the south-east corner of the Site. The application also seeks permission for landscaping and all associated works.

2. METHODOLOGY

Desk Study

2.1 The desktop study involved conducting database searches for statutory and non-statutory designated sites and features of interest within and surrounding the proposed site, up to 2km from its red line boundary. Records for legally protected / notable species or habitats, were obtained from Merseyside BioBank (MBB). The baseline conditions are based on a review of the following:

- Multi-Agency Geographical Information for the Countryside (MAGIC) website - to identify statutory designated sites and Priority Habitats;
- Ordnance survey mapping (to identify potentially notable habitats);
- Aerial photography (to identify potentially notable habitats);
- North Merseyside Biodiversity Action Plan (NM BAP); and
- Merseyside BioBank (MBB) records centre.

UK Habitat Classification (UKHab) Survey

2.2 SK Environmental Solutions Limited undertook survey of the site and immediate surroundings on 8th May 2025 to inform the PEA. An experienced ecologist conducted the survey.

2.3 The UKHab is a habitat classification system for the UK that has been developed to provide a rapid system for recording and classifying habitats which can be used for field-based surveys. It is intended to assist ecologists to identify and map habitats in a consistent and unified way and has been designed to provide outputs that are suitable for ecological impact assessment, habitat metrics and better data integration and sharing between organisations.

2.4 The field survey broadly followed the methodology as set out in Data Collection and Mapping, Chapter 3 of 'The UK Habitat Classification User Manual, Version 2.01' and The Chartered Institute of Ecology and Environmental Management's (CIEEM's) Guidelines for Preliminary Ecological Appraisal (2017). It provides information on the habitats within the survey area, as well as identifying the actual or potential presence of legally protected or otherwise notable species in or immediately adjacent to the site. The main habitats within the site were mapped and are shown on Drawing Number – JN00457/DW02 - Habitat Plan.

2.5 Plant names follow 'New Flora of the British Isles' (Stace 2019). The common and scientific names of all botanical species identified are provided when first mentioned in the text, but only the common name is stated thereafter.

2.6 In addition to establishing the baseline ecological interest within the site, it was intended that the survey should identify areas where further surveys may be required during the appropriate season. Habitat potential for legally protected or national / local BAP species including, but not limited to, bats, badger, breeding birds, flora, amphibians, and reptiles was recorded.

Supporting Information

2.7 Appendix 1 contains more extensive details of the habitats present with the site boundary than are given in this report. This appendix also contains details of other features of ecological interest recorded during the survey.

Limitations

2.8 Ecological surveys are limited by factors that affect presence of plants and animals such as time of year, weather, migration patterns and behaviour. May is considered to be an optimal time of year to carry out a survey. The aim of the survey is not to present an exhaustive list of vegetation present, but to provide an indication of broad habitat types and whether there is the potential to support notable or protected species.

2.9 As the site is designated as a Local Wildlife Site (LWS), a more detailed structured walk was undertaken, to capture the majority of species throughout the recorded habitats.

2.10 The building located to the south west of the site could not be accessed at the time of survey.

Personnel

2.11 All survey work was carried out on 8th May 2025 by experienced SK Environmental Solutions Limited ecologist Emma Jennings, who also undertook the 2020 survey, so direct comparison was possible. Weather conditions were overcast with sunny spells, warm and dry, with a gentle breeze.

3. STATUTORY PROTECTION & POLICY

Legislative Framework

3.1 The following legislation and guidance documents have been used to underpin the ecological impact assessment reported in this Section:

- The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019;
- Bern Convention (on the Conservation of European Wildlife & Natural Habitats; and on the Conservation of Migratory Species of Wild Animals) 1979;
- The Birds Directive 2009;
- Wildlife & Countryside Act 1981 (and subsequent amendments);
- Countryside and Rights of Way Act 2000;
- Natural Environment and Rural Communities (NERC) Act 2006. Section 41 includes lists of habitats and species recognised as of 'principal importance' for the conservation of biodiversity. Section 40 of the NERC Act 2006 requires all public bodies to have regard for biodiversity conservation when carrying out their function. This is commonly referred to as the 'biodiversity duty';
- Protection of Badgers Act 1992;
- Environment Act 2021; and
- The Hedgerow Regulations 1997.

3.2 How the legislation relates to protected species is set out in Appendix 2.

Planning Policy

3.3 Chapter 2 of the National Planning Policy Framework (NPPF, 2023) describes the Government's objectives on achieving sustainable development. The environmental objective is *"to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy."*

3.4 The NPPF Chapter 15 sets out the Government's objectives for planning in regard to the protection of habitats and biodiversity. The planning objectives in relation to biodiversity and the natural environment are laid out in paragraph 180 as follows:

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

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate."

3.5 Knowsley Local Plan: Core Strategy January 2016 states that the site is allocated as a Primarily Industrial Area (LP - CS4 / UDP - EC3) where B8 uses will be accepted; however, the site is also designated as a Local Wildlife Site (Otis Meadows LWS) under CS8.

The site has also been identified in the Knowsley Replacement Unitary Development Plan: Adopted June 2006 under Policy EC2: Sites Allocated for Employment Development.

3.6 Maintenance and Enhancement of Knowsley's Existing Green Infrastructure

1) Knowsley's existing Green Infrastructure and its beneficial functions will be protected, managed and/or enhanced, primarily to:

- a) Ensure more attractive and cleaner residential neighbourhoods;
- b) Sustain and promote biodiversity (including designated sites, priority habitats and protected and endangered species) in accordance with importance and contribution to ecological networks;
- c) Preserve the character and function of historic environments and valued landscapes;
- d) Mitigate the effects of climate change and flood risk;
- e) Mitigate air, water and noise pollution;
- f) Provide local opportunities for sport, recreation and allotments; and
- g) Provide sustainable transport linkages between residential neighbourhoods and easy access to employment and services.

3.7 Policy CS21: Greenspaces and Trees

3.8 Knowsley's Green Space Strategy provides the following vision for greenspaces:

'A linked, preserved and enhanced network of good quality greenspaces that excite and inspire communities and contribute towards the creation of vibrant, healthy and sustainable neighbourhoods across Knowsley.'

Greenspace protection

1) In supporting the wider Green Infrastructure functions of urban greenspace in accordance with Policy CS8, the Council will provide and maintain quantitative, qualitative and accessibility standards for different types of public open space.

2) New development which would result in the loss of urban greenspace, will not be permitted unless at least one of the following criteria are met:

- a) A surplus of provision for all types of greenspace would be maintained relative to local standards;
- b) The land is considered unsuitable in terms of size, location or character to prevent or address individual deficiencies of different types of greenspace relative to local standards;

- c) Appropriate mitigation is provided through replacement facilities of at least an equal quantity, quality and accessibility;
 - d) The development is required to improve greenspace provision or for ancillary facilities to support sport or recreation; or
 - e) Where the proposal relates to the loss of indoor or outdoor sports provision, and there is no evidence of future or continuing need for sports use, or alternatively only land incapable of forming a playing pitch or sporting facility is affected and its release accords with either clause 2)a) or 2)b).
- 3) Irrespective of whether criteria in 2) are met, unless the benefits of a proposal clearly outweigh the loss of urban greenspace, development will be resisted where it would significantly harm any existing or potential special qualities of greenspace in the area in terms of:
- a) Visual amenity;
 - b) Residential amenity;
 - c) Biodiversity and environmental benefits;
 - d) Historical, cultural or community value;
 - e) Recreational benefits; or
 - f) Physical and/or visual linkages between adjoining urban greenspaces.

3.9 Local Greenspace Standards

- 4) The quantitative and accessibility standards for the provision of public open spaces within Substantial Residential Areas are set out in Table 9.1: Substantial Residential Area (SRA) Standards for Greenspace Quantity and Accessibility for the following greenspace typologies:
- a) Park and Garden;
 - b) Amenity Greenspace;
 - c) Provision for Children and Young People; and d) Allotments.
- 5) The Council's quantitative standards for Outdoor Sports Provision are set out in Table 9.2: Community Area Standards for Outdoor Sports Provision Quantity and Accessibility and seek to

maintain an appropriate range of sites and address quantitative needs for individual sports at a Community Area level.

6) The Council will keep the standards of provision referred to above under review and if necessary, publish revised standards in a future Local Plan document or Supplementary Planning Document.

3.10 Accessible and Quality Greenspaces

7) The Council will support improvements to existing and new areas of greenspace in accordance with best practice standards, to achieve the following requirements:

- a) Accessible, safe and secure locations for all members of the community to use;
 - b) Clean and well-maintained facilities, equipment and open spaces; and
 - c) Conservation of natural features, wildlife, fauna, landscapes, buildings and other structural features, as appropriate.
- 8) When considering proposals for new residential development, the Council will seek enhancements to greenspaces via on-site provision, new offsite provision or enhancement of existing off-site provision through developer contributions secured by legal agreement in accordance with Policy CS27: Planning and Paying for New Infrastructure, the Developer Contributions Supplementary Planning Document and/or a Community Infrastructure Levy Charging Schedule, as appropriate.

3.11 Local Green Spaces

9) Any Local Green Spaces Designations which are formally designated will be identified in the Local Plan: Site Allocations and Development Policies or future Neighbourhood Plans (if applicable). This designation will only be used where the greenspace concerned is:

- a) Reasonably close to the community it serves;
- b) Demonstrably special to a local community and holds a particular local significance, for example because of its beauty, historic significance, recreational value (including as a playing field), tranquillity or richness of its wildlife; and
- c) Local in character and not an extensive tract of land.

3.12 Enhancement of Natural and Semi-Natural Greenspace and Tree Protection

10) The Council will encourage proposals for new development to incorporate:

- a) Retention of existing trees, woodland, vegetation and other habitat features which offer a positive contribution to the local environment in terms of visual amenity, recreation value or biodiversity/wildlife interest;
- b) Appropriate planting of trees, other soft landscaping and installation of habitat features for the benefit of biodiversity; and
- c) Adequate replacement provision where tree loss is unavoidable, comprising two additional trees for every tree lost and taking account of species and size.

3.13 Please refer to Protected Species Legislation detailed in Appendix 2.

4. DESK STUDY RESULTS

Aerial Photography and OS Maps

- 4.1 Aerial photography and Ordnance Survey (OS) maps were used to identify any waterbodies or watercourses within 500m of the site, shown in Figure 2, below.



Figure 2: Water features within 500m of the site (scale as a guide only).

- 4.2 No waterbodies were identified within the Site boundary from aerial photography. There were however, two waterbodies identified to the east and southeast of the Site along with a series of linear drains/ditches for the surrounding warehousing.
- 4.3 No other waterbodies / watercourses were identified within 500m of the Site boundary from the aerial imagery.

Statutory & Non-Statutory Designated Sites for Nature Conservation

Statutory Designated Sites

- 4.4 Natural England's Magic Map identified two statutory designated sites located within 2km of the Site boundary. The statutory sites are shown in Figure 3, below.



Figure 3: Statutory sites within 2km of the Site. Scale as a guide only.

- 4.5 Acornfield Plantation Local Nature Reserve (AP LNR) covers an area of 12.26ha and is located approximately 1km north east of the Site. This is predominantly a mature woodland of birch, oak and sycamore. The centre of the Site has a lowland basin mire dominated by sphagnum moss *Sphagnum sp.* and soft rush *Juncus effusus*. Other habitats present include a pond, stream, drainage channels, acidic and neutral grasslands, bracken *Pteridium aquilinum* and rhododendron *Rhododendron ponticum* thickets.
- 4.6 Croxteth Local Nature Reserve (C LNR) covers an area of 86.45ha and is located approximately 1.5km south west of the Site. This LNR was created from the former Mull Woods along with other

woodland areas being Cocked Hat Woods, Dam Woods, The Wilderness and Ice House Woods with the inclusion of some agricultural land. Vegetation includes woodland, grassland and pasture with several ponds and bounded by the River Alt.

Non-Statutory Designated Sites

- 4.7 The Site itself is designated as a Site of Biological Interest (SBI), Otis Meadow, and the citation describes it as a mix of damp and dry grasslands with developing scrub and unusual habitats within the Knowsley Industrial Estate
- 4.8 Merseyside BioBank (MBB) identified a further thirteen non-statutory designated sites located within 2km of the Site boundary:
- Kraft Operational Land Local Wildlife Site (LWS) is a wetland with a good diversity of species and areas of drier grassland located approximately 26m south of the Site;
 - Knowsley Brook LWS is an open water course located approximately 520m to the south of the Site;
 - Acornfield Plantation LWS is a small woodland located approximately 930m northeast of the Site boundary at its closest point;
 - Willowbed Plantation, Kirby Local Geological Site (LGS), located approximately 1050m southwest of the Site;
 - Croxteth Brook LWS is an open watercourse approximately 1.3km west of the Site boundary;
 - Knowsley Park LWS is an ancient parkland estate expanding over 1000ha located approximately 1.3km southeast of the Site boundary at its nearest point;
 - Howard's Pits LWS is located approximately 1.3km south of the Site boundary at its nearest point;
 - Croxteth Park, River Alt and adjacent sites LWS is located approximately 1.4km southwest of the Site at its nearest point;
 - Charley Wood LWS is located approximately 1.5km northeast of the Site boundary at its nearest point;

- Meakin's Pits LWS is a plantation woodland predominantly of Scot's pine *Pinus Sylvestris* and broadleaved trees which had been split into two sections for the construction of the M57 located approximately 1.7km south of the Site;
- Kirkby Brook Northwood LWS is an open water course located approximately 1.8km north of the Site;
- Kirkby Brook LWS is an open water course located approximately 1.8km north west of the Site; and
- Little Brook, Kirkby LGS is located approximately 2km west of the Site boundary at its closest point.

4.9 A map of the non-statutory sites and any ancient woodland within 2km can be found in Appendix 3.

Trees and Woodland

4.10 Natural England's Magic Map identified no areas of ancient woodland on, or adjacent to, the Site.

4.11 The Woodland Trust's database of notable, veteran and ancient trees identified no such trees within, or adjacent to, the Site.

Local Biodiversity Action Plan

4.12 The Section 41 of NERC and the North Merseyside Biodiversity Action Plan (NM BAP) list key national and local species/habitats considered to be rare or declining. Some may be of national concern, while others may only be locally rare. Some are statutorily protected, although the great majority are not. Table 1 identifies the Habitats listed on the NM BAP and their analogous SECTION 41 of NERC habitats that may be present on Site.

Table 1 – SECTION 41 of NERC & NM BAP Priority Habitats	
North Merseyside Priority Habitat	UK BAP Priority Habitats
Lowland Acid Grassland	Lowland Dry Acid Grassland
Lowland Heathland	Lowland Heathland
Lowland Raised Bog	Lowland Raised Bog
Neutral Grassland	Incorporates the UK BAP habitat Lowland Meadows but also, in North Merseyside, includes a lot of amenity grassland, road verges

Table 1 – SECTION 41 of NERC & NM BAP Priority Habitats	
North Merseyside Priority Habitat	UK BAP Priority Habitats
Calcareous Grassland	Calcareous Grassland
Ponds	Ponds
Lakes	Eutrophic lakes
Reedbeds	Reedbeds
Hedgerows	Hedgerows
Saltmarsh	Coast Saltmarsh
Sand Dune	Coastal Sand Dune
All Woodland	It is not possible from the available data, to produce separate inventories for different woodland types in North Merseyside, so this inventory incorporates elements of several UK BAP priority habitats such as Lowland Mixed Deciduous Woodland, Wet Woodland and Wood Pasture & Parkland.

4.13 The MBB has also provided the North Merseyside Biodiversity Action Plan (NM BAP) which was published in September 2001 and last reviewed in 2008. Like other Local Biodiversity Action Plans (LBAPs), NM BAPs purpose is to focus local conservation on national priority species and habitats. However, LBAPs also support the idea of 'local distinctiveness' and species which are not considered UK conservation priorities can be catered for by LBAPs if they are of particular local significance. North Merseyside BAP partnership defines the LBAP species / species groups which are listed on the Merseyside Biodiversity Group website (<http://www.merseysidebiodiversity.org.uk/species-plans/>):

Birds

- Song thrush *Turdus philomelos*.
- Corn bunting *Miliaria calandra*
- Grey partridge *Perdix perdix*
- Lapwing *Vanellus vanellus*
- Skylark *Alauda arvensis*
- Urban birds including but not exclusive to
 - House sparrow *Passer domesticus*;
 - Starling *Sturnus vulgaris*;
 - Peregrine falcons *Falco peregrinus*;

- Ravens *Corvus corax*;
- Black redstart *Phoenicurus ochruros*;
- Nuthatch *Sitta europaea*;
- Long-tailed tit *Aegithalos caudatus*; and
- Jay *Garrulus glandarius*.

Mammals

- Bats (6 species);
- Brown hare *Lepus europaeus*;
- Red squirrel *Sciurus vulgaris*; and
- Water vole *Arvicola amphibius*.

Amphibians and Reptiles

- Common lizard *Zootoca vivipara*;
- Sand lizard *Lacerta agilis*;
- Great crested newt *Triturus cristatus*; and
- Natterjack toad *Epidalea calamita*.

Invertebrates

- Dark green fritillary *Argynnis aglaja*;
- Dragonflies (twenty-one species);
- Grayling butterfly *Hipparchia semele*;
- Vernal mining-bee *Colletes cunicularius*;
- Northern dune tiger beetle *Cicindela hybrida*; and
- Sandhill rustic moth *Luperina nickerlii*.

Plants

- Bluebell *Hyacinthoides non-scripta*;
- Purple ramping-fumitory *Fumaria purpurea*;
- Petalwort *Petalophyllum ralfsii*;
- Sand-grass *Triplasis purpurea*;
- Sefton coast plants (Thirty species including Dune Helleborine *Epipactis dunensis* and Isle of Man cabbage *Coincya monensis* subsp. *monensis*); and
- Stonewarts (Five species).

- 4.14 All the above species are known to occur within the Merseyside region and are in a state of decline. They are all therefore, locally important with some being afforded national and / or European protection.

Sites of Priority (BAP) Habitat

- 4.15 Natural England's Magic Map identified areas of deciduous woodland and good quality semi-improved grassland priority habitat mapped within 500m of the Site boundary.

Notable Species Records

- 4.16 Consultation with MBB identified a number of protected and / or notable species records located within 2km of the central grid reference for the Site. For the purpose of this desk study only records from the past ten years are considered relevant (i.e. 2015 to present).
- 4.17 Protected and notable species records are summarised in Table 2 below.

Table 2. Protected Species Records

Species	Number of Records	Most Recent Date	Distance and Direction of Closest Record	Notes
Badger	2	29/04/2022	N/A	No location data was given for the two records within the last ten years.
<i>Bats</i>				
Bat species	3	02/06/2020	60m NE	
Common pipistrelle	7	25/05/2022	N/A	
Daubentons bat	1	05/2017	290m SE	
<i>Myotis</i> species	2	22/05/2018	2km NE	
Noctule	4	18/05/2022	180m S	
Pipistrelle species	3	12/06/2021	1.6km SE	
Soprano pipistrelle	9	18/05/2022	990m N	
Otter	NA	NA	NA	No records of otter were recorded in the

				last ten years. The latest record of Otter was dated July 2011.
Water Vole	1	14/10/2015	1.6km S	
White-clawed crayfish	NA	NA	NA	
Red Squirrel	1	30/07/2017	1.5km SE	
<i>Other Notable Mammals</i>				
Brown Hare	4	10/10/2021	NA	
Hedgehog	43	10/10/2022	140m N	
<i>Birds</i>				Only BoCC Red List, Wildlife and Countryside Act Schedule 1, NERC s41 or European Birds Directive Annex I designated species considered to have potential to be present within the habitats on, or immediately adjacent to, the site have been included in this table.
Barn owl	3	26/06/2019	Within RLB	
Brambling	1	24/03/2021	N/A	
Bullfinch	5	02/04/2022	980m S	
Dunnock	18	15/10/2022	340m SE	
Fieldfare	1	24/03/2021	N/A	
Goshawk	1	03/10/2019	1.8km NW	
Grey partridge	2	26/04/2017	1.7km W	
Herring gull	5	24/06/2022	1.6km S	
House martin	11	02/06/2022	1.3km NE	
House sparrow	24	03/06/2022	1.6km SE	
Kingfisher	7	05/03/2021	1.7km W	
Lapwing	11	11/04/2021	1.1km SW	
Linnet	7	15/03/2021	60m N	
Long tailed duck	4	23/01/2020	NA	
Peregrine	3	25/03/2020	190m S	
Red kite	1	01/07/2020	NA	
Reed bunting	8	05/07/2022	60m N	
Skylark	4	01/05/2021	1km SW	
Song thrush	12	15/05/2022	1km NE	
Starling	15	04/07/2022	1.6km SE	
Swift	9	09/06/2022	1.8km SW	

Tree pipit	1	27/04/2021	NA	
Tree sparrow	1	01/05/2021	2km E	
Yellow wagtail	1	20/08/2019	1.1km N	
Yellowhammer	5	01/05/2021	1.3km E	
<i>Reptiles</i>				
NA	NA	NA	NA	
<i>Amphibians</i>				
Common toad	5	21/08/2021	1.5km S	
Great Crested Newt	4	26/4/2020	1.9km NW	
<i>Fish</i>				
European eel	6	19/07/2022	1.9km W	
<i>Invertebrates</i>				Only records of species listed under Schedule 5 of the Wildlife and Countryside Act, NERC s41 or the Local BAP are included in the table.
Alder leaf beetle	31	24/6/2022	980m NE	
Azure damselfly	3	08/07/2021	850m NE	
Black tailed skimmer	1	07/2017	280m SE	
Blood-vein	8	12/08/2022	1.4km S	
Blue-tailed damselfly	2	01/07/2017	280m SE	
Brown hawk	7	12/07/2017	280m SE	
Buff ermine	8	22/07/2022	1.7km W	
Cinnabar	17	11/07/2022	320m S	
Common blue damselfly	2	11/07/2020	280m SE	
Common darter	10	20/08/2020	140m E	
Common hawk	2	13/09/2015	1.3km NE	
Dark-barred twin-spot carpet	1	03/10/2022	1.7km W	
Dusky thorn	3	01/09/2022	1.6km SE	
Emperor dragonfly	1	07/2017	280m SE	
Ghost moth	2	02/07/2022	1.6km SE	
Green brindled crescent	1	23/10/2022	1.7km W	
Large red damselfly	5	19/05/2022	1.1km NE	
Large wainscot	2	23/10/2022	NA	
Latticed heath	1	17/06/2015	1.8km SW	

Migrant hawk	4	20/08/2020	1.2km NE	
Mottled rust	2	16/07/2022	1.7km W	
Mouse moth	1	30/08/2021	1.6km SW	
<i>Parakontikia ventrolineata</i>	1	27/05/2022	1.6km SW	
<i>Polydrusus formosus</i>	5	02/06/2022	1.5km S	
Rosy rust	2	30/08/2022	1.7km SW	
Sallow	2	19/08/2022	1.7km SW	
Shaded broad bar	1	22/07/2022	1.7km SW	
Small phoenix	1	23/06/2015	1.8km SW	
Small square spot	1	23/06/2015	1.8km SW	
Southern hawk	4	19/09/2016	1.2km NE	
White ermine	1	23/06/2015	1.8km SW	
<i>Invasive Species</i>				
Himalayan balsam	30	15/05/2022	850m E	Historic records show presence of Japanese knotweed on site.
Japanese knotweed	5	16/6/2022	850m E	
<i>Notable Flora</i>				
NA	NA	NA	NA	

5. SURVEY RESULTS

General Site Description

- 5.1 The Site is flat, trapezoidal in shape and extends to approximately 4.5ha. It comprises modified grassland verges, a commercial building, tarmac internal roads, car parking and haulage yard with an area of informal open space to the east. This area comprises a mixture of scrub with damp and dry grasslands, seasonally wet depressions caused by machine rutting, bounded by a linear mix of trees and scrub with seasonally wet ditches. The Site is palisade fenced to the north, east and south, with a defunct post and rail fence and scrub line demarking the boundary between the active waste storage facility and the disused land.
- 5.2 The surrounding landscape is light industrial/commercial in character, with a mixture of units of varying size, with associated parking, storage, formal/informal landscaping and other outdoor spaces. The M57 is located c. 1km to the south west of the Site. Knowsley is located c. 1.7km to the south east. The township of Kirkby is located 2km to the north west. The Site is under intermittent management, which has prevented it from becoming totally colonised by scrub; aerial photography indicates the east of the Site was subject to clearance likely during the winter of 2023/2024.

Field Survey

Habitats

Overview

- 5.1 The results of the UKHab survey are presented on JN00457/DW02 and full habitat descriptions are given in Appendix 1. The main habitats recorded during the field survey are:
- g3c other neutral grassland;
 - g4 modified grassland;
 - h3h mixed scrub;
 - h3j willow scrub;
 - r1f6 other temporary ponds and scrapes;
 - u1b developed land, sealed surface;
 - u1b5 building;
 - u1f sparsely vegetated urban land;

Off Site Habitats:

- r2b other rivers and streams;
- r1g other standing water;

g3c - other neutral grassland

g3c 15 other neutral grassland, rushes dominant (TN5)

- 5.2 To the north east and north of the Site are areas where Yorkshire fog *Holcus lanatus*, hard rush *Juncus inflexus* and soft rush *Juncus effusus* become more dominant. Other species recorded were broadleaf dock *Rumex obtusifolius*, nettle *Urtica dioica*, Michaelmas daisy *Symphyotrichum novi-belgii*, creeping thistle *Cirsium arvense*, hairy willowherb *Epilobium hirsutum*, common fleabane *Pulicaria dysenterica*, common spike-rush *Eleocharis palustris*, celery-leaved buttercup *Ranunculus sceleratus*, yellow flag iris *Iris pseudacorus*, cuckooflower *Cardamine pratensis*, and frequent ragged-robin *Silene flos-cuculi*. Abundant silverweed *Potentilla anserina* and frequent sweet vernal grass *Anthoxanthum odoratum*, creeping thistle and creeping buttercup *Ranunculus repens* were all recorded to the centre of the site. Bramble *Rubus fruticosus* agg. scrub is a constant. No orchids were recorded in this area during the 2025 survey.

g3c 16, 523 tall forbs, non-native (TN6)

- 5.3 Much of the eastern half of the Site is covered by a dense sward of Michaelmas daisy, in places to the exclusion of nearly all other species, save hardy ruderals such as nettle and ribwort plantain *Plantago lanceolata*.

g3c 523 other neutral grassland, non-native

- 5.4 Elsewhere, particularly in the western and southwestern parts of the Site, silver birch *Betula pendula* and grey willow *Salix cinerea* scrub encroachment is less dense. However, low-growing bramble. is prevalent in the sward. Michaelmas daisy was also recorded abundantly.

g3c, 10, 14, 523 other neutral grassland, scattered scrub, scattered rushes, non-native (TN1)

- 5.5 Areas to the centre of the Site comprise false oat-grass *Arrhenatherum elatius*-dominated neutral grassland, with a diversity of forbs that decreases toward the east. Other grass species include perennial ryegrass *Lolium perenne*, cocksfoot *Dactylis glomerata*, Yorkshire fog, annual meadow-grass *Poa annua*, creeping bent *Agrostis stolonifera* and rough meadow-grass *Poa trivialis*; rushes are rare. Herbaceous species include frequent creeping cinquefoil *Potentilla*

reptans, meadow vetchling *Lathyrus pratensis*, Michaelmas daisy, common vetch *Vicia sativa*, yarrow *Achillea millefolium*, creeping buttercup meadow buttercup *Ranunculus acris*, ribwort plantain, common knapweed *Centaurea nigra*, common fleabane, hop trefoil *Trifolium campestre*, silverweed, dandelion *Taraxacum officinale*, prickly sow-thistle *Sonchus asper*, cut-leaved cranesbill *Geranium dissectum*, common mouse-ear *Cerastium fontanum*, square-stalked willowherb *Epilobium tetragonum*, ragged-robin, red campion *Silene dioica* and lesser swine-cress *Coronopus didymus*. Bramble., dog rose *Rosa canina*, and grey willow scrub are occasional locally frequent. Garden escapees montbretia *Crocsmia* × *crocsmiiflora* and snowberry *Symphoricarpos albus* were also recorded.

g4 - modified grassland

g4 106 modified grassland, mown (TN12)

- 5.6 A slightly rank linear area of modified grassland separates the car park from Units 7A – 7E. Ribwort plantain *Plantago lanceolata* is abundant, along with bramble., dandelion., bluebell *Hyacinthoides hispanica*, and smooth sow-thistle *Sonchus oleraceus*. This area is not managed as intensively as other grassy strips.

g4, 108 modified grassland, frequently mown (TN15)

- 5.7 A frequently mown linear strip of modified grassland bounds the Site to the east and north-east; sweet vernal grass is abundant, with daisy *Bellis perennis*, dandelion., hoary willowherb *Epilobium parviflorum*, wild barley *Hordeum murinum*, square-stalked willowherb *Epilobium tetragonum*, cut-leaved cranesbill, ragwort *Jacobaea vulgaris*, creeping cinquefoil, springy turf moss *Rhytidiadelphus squarrosus*, and bird's-foot-trefoil *Lotus corniculatus*. Only very low growing species can flower due to the height of the sward.

h3h mixed scrub

h3h mixed scrub (TN2)

- 5.8 The central boundary between the active and non-active areas of the Site comprises a fenced linear mix of scrub, climbers, and grassland species. Recorded species include hawthorn *Crataegus monogyna*, hazel *Corylus avellana*, silver birch *Betula pendula*, ash *Fraxinus excelsior*, field maple *Acer campestre*, osier *Salix viminalis*, English oak *Quercus robur*, Japanese rose *Rosa rugosa*, bramble., field rose *Rosa arvensis*, and honeysuckle *Lonicera periclymenum*. Grasses and tall herbs such as false oat grass, Yorkshire fog, cocks' foot, common reed *Phragmites australis*, nettle, common hogweed *Heracleum sphondylium*, rosebay willowherb *Chamerion angustifolium* and hairy willowherb are occasional to frequent. Ash dieback

symptoms were noted on the ash trees. The small stand of Japanese knotweed *Reynoutria japonica* previously observed in 2020 (and noted as being treated with herbicide at the time), was not recorded during this survey, though access was limited due to the vegetation.

h3h mixed scrub & trees (TN3)

- 5.9 A locally visually dominant oak is present, with understorey scrub comprising willow *Salix* species, bramble, and birch. This scrub continues along the northern and eastern boundaries and comprises grey willow, whitebeam *Sorbus aria*, hawthorn, blackthorn *Prunus spinosa*, dog rose, and young naturally regenerating common alder *Alnus glutinosa*.
- 5.10 The southern boundary comprises a dense linear group of hawthorn, grey willow, guelder rose *Viburnum opulus*, and sycamore *Acer pseudoplatanus* scrub and trees (TN7). Bracken *Pteridium aquilinum* was recorded rarely. Tall herbs such as Michaelmas daisy, nettle hairy willowherb common fleabane, Canadian fleabane *Erigeron canadensis* and broadleaf dock are frequent to abundant under and adjacent to the canopy with prickly sow-thistle, common hogweed also recorded.

h3j, willow scrub

h3j, 14 willow scrub, scattered rushes (TN10)

- 5.11 Much of the eastern portions of the Site are dominated by grey willow and silver birch scrub, largely to the exclusion of grass and herbaceous species. In gaps, and to the edges, red clover *Tifolium pratense*, perfoliate St. Johns' wort *Hypericum perforatum*, birds' foot trefoil and ragged robin were recorded.

r1f6 other temporary ponds and scrapes

- 5.12 Ditches cut across the northern and southern parts of the eastern side of the Site (TN4). Both ditches were dry at the time of the survey. Hard rush was frequently recorded, along with common spike-rush *Eleocharis palustris*, silverweed, creeping buttercup, and hairy willowherb.
- 5.13 Numerous dry depressions are present elsewhere across the eastern side of the Site (TN8), caused in the main by machine tire rutting but also presumably where past excavations have occurred. Many of these are being colonised by tall herbs such as hairy willowherb and Michaelmas daisy, although rushes *Juncus* species, reedmace *Typha latifolia*, and common reed *Phragmites australis* remain present.

u1b developed land, sealed surface

- 5.14 The west of the Site is dominated by a large area of tarmac / hardstanding in use as refuse vehicle and bin storage (TN14).

u1b5 building

u1b5 815 building, commercial building (TN13)

- 5.15 Unit 7E bounds the southeast of the Site. It comprises a metal and blockwork structure with a metal, shallow pitched roof. Large, shuttered entrances front the building.

u1f sparsely vegetated urban land

- 5.16 A small area of vegetated hardstanding is located to the centre of the southern boundary (TN9). Some moss species, biting stonecrop *Sedum acre*, coltsfoot *Trussilago farfara* and creeping cinquefoil were recorded on the concrete slabs.

Off Site Habitats

r2b 48 other rivers and streams, freshwater, heavily modified (TN17)

- 5.17 A heavily modified watercourse/drain is located ~35m southeast of the Site. It is mapped on OS maps as a short section of drain linked to a pond and other drains in woodland to the northeast. It has steep earth banks, a shallow, intermittent flow and is inundated by bankside vegetation.

r1g 42 other standing water, pond (TN18)

- 5.18 A pond is located in the woodland ~350m east of Site. The pond is dammed, and water quality was recorded as poor at the time of survey.

Protected and Notable Species

Badger

- 5.19 The habitats within the survey area provide potential foraging and commuting habitat for badger. The banks on the north and south perimeters may also provide potential for sett building. However, no signs of badger such as setts, foraging, dung pits, footprints or hairs were recorded within the survey area, nor adjacent to it during the survey.

Bats

Roosting Bats

- 5.20 Numerous trees and shrubs were recorded throughout the Site boundary. None of the trees were considered to have features likely to support bats due to combined factors of age, form and growing conditions.
- 5.21 The building housing Units 7A - 7E bounds the southwest of the Site. The building is in relatively good condition with minor gaps where flashing is lifting on the roof and walls and may have low potential to support roosting bats.

Commuting and Foraging Bats

- 5.22 The Site is considered to provide moderate foraging and commuting habitat for bats as per Table 4.1, of the Bat Survey Guidelines (2023). The trees and scrub provide continuous habitat connected to the wider landscape that could be used by bats for commuting. They also provide foraging habitat in their own right.

Otter & Water Vole

- 5.23 There is no suitable habitat for either of these species within the survey area and as such they will not be referred to further in this report.

Other Mammals

- 5.24 There is a good mixture of urban, scrub and grassland habitats, which will provide hedgehog *Erinaceus europaeus* with hibernacula, foraging and communing habitat. The unmanaged nature of the Site also means it provides other small mammals with good quality habitat.

Birds

- 5.25 Willow warbler *Phylloscopus trochilus*, blackbird *Turdus merula*, bullfinch *Pyrrhula pyrrhula*, wren *Troglodytes troglodytes*, whitethroat *Curruca communis* and goldfinch *Carduelis carduelis* were all recorded on Site during the survey.
- 5.26 The trees and scrub habitats will provide nesting and foraging habitat for birds. This is likely to be restricted to small passerine species during the breeding bird season (March to August inclusively).

Reptiles

- 5.27 The survey area does offer some foraging habitat. That said, the Site is isolated and basking opportunities for reptiles are uncommon and it is considered that the survey area may offer only limited value for small number of common reptile species such as common lizard *Zootoca vivipara* and slow worm *Anguis fragilis*.

Amphibians

- 5.28 The Site now contains no waterbodies, although there are drains and depressions and ruts that have a floral structure indicating that they have held water in winter and during high rainfall. The site does contain good terrestrial habitat for great crested newts *Triturus cristatus*, although the nearest records are nearly 2km from the site.

Terrestrial Invertebrates

- 5.29 The Site contains a reasonable assemblage of floral species which suggests it is likely to support a good assemblage of common terrestrial invertebrates.

Invasive Non-Native Species

- 5.30 The small stand of Japanese knotweed *Reynoutria japonica* previously recorded on Site could not be located during the survey. It was showing signs of herbicide treatment in 2020 and is likely to have been eradicated. Non-native garden escapees including Michaelmas daisy, montbretia and snowberry were also recorded on Site during the survey.

Protected & Notable Flora

- 5.31 No protected or notable flora were recorded during the Site survey.

6. DISCUSSION AND RECOMMENDATIONS

Ecological Constraints

Statutory Designated Sites

- 6.3 The Site is peri-urban in nature and lacks connectivity/functional links to the qualifying features and habitats of the nearby SSSI's, SAC's and it is not anticipated that there will be any direct impact on any of their features from the proposed project.

Non-Statutory Designated Sites

- 6.4 The eastern section of the application site is designated as a Site of Biological Interest, Otis Meadows (date of designation, 2003). It has been designated for the following:
- 3 regionally important habitats (neutral grassland unimproved, marshy grassland, standing water);
 - 7 habitats;
 - 109 plant species; and
 - 1 regionally important/locally rare and 1 locally rare plant species.
- 6.5 No standing water was recorded during the 2025 survey, although it is clear the Site becomes seasonally wet; and the remaining areas of unimproved neutral grassland and marshy grassland habitats would be considered to be in unfavourable condition. Scrub is extensive across the Site and past aerial photographs show the site has undergone total site clearance as recently as 2024, leading to scrub/tall herb colonisation. Undesirable species recorded include montbretia, snowberry and Michaelmas daisy, the latter being frequent to dominant across the entire Site. The cover of Michaelmas daisy has increased since the previous survey in 2020 and the Site has become more homogeneous overall.
- 6.6 **Seventy eight** plant species were recorded during a structured walk undertaken as part of the Preliminary Ecological Appraisal. Of these, **21** are tree, shrub or scrambler/climber species, **41** are herbaceous species and **16** are grasses, sedges and rushes; two fern species were recorded. None of the species recorded are currently listed in the Local BAP.
- 6.7 It is considered that the habitats and floral interest of the Site is degraded to a point where it would not currently meet the criteria for SBI selection. Past management of the Site and non-native species colonisation have resulted in the grassland habitats becoming considerably

reduced in both area and quality. Those that remain are rank and becoming colonised by scrub and tall herbs, particularly Michaelmas daisy. Other non-native species such as montbretia and snowberry were recorded on Site and the former is listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) in the UK. Under Schedule 9, it is an offence to plant or otherwise cause to grow these species in the wild in England and Wales (and similarly in Scotland under equivalent legislation). Given the degradation of the eastern portion of the Site and the presence of undesirable species in the sward, translocation is not considered appropriate due to the risk of allowing Schedule 9 species to spread in the wild.

Habitats

- 6.8 The west of the Site comprises habitats of low or negligible ecological value and their loss does not pose a constraint to development. The east of the Site mostly comprises a mosaic of scrub, tall herbs, wet and dry neutral grassland with boundary scrub and lines of trees. The proposals will result in the loss of the majority of these habitats. The condition of these habitats is poor to moderate and their distinctiveness ranges from low to medium and as such they do not unduly pose a constraint to the project. That said, given the current proposals, off-site mitigation will likely be required and indeed is recommended as the appropriate course of action.
- 6.9 The line of trees and scrub (an overgrown hedgerow) that bounds the south of the Site should be retained within the development where possible or replaced, as it forms an important linear habitat, linking green spaces to the east and west of the Site.
- 6.10 The neutral grassland habitats on site are a Local BAP and Sch. 41 NERC habitat (Neutral Grassland). That said, the habitats are in unfavourable condition, having been cleared and recolonised in the past. Ruts are frequent throughout the Site, which have damaged the soil structure. Scrub and tall herb encroachment is abundant and Michaelmas daisy is becoming particularly invasive across the Site, as are other non-native species.

Protected/Notable Species

Badger

- 6.11 No evidence indicating the presence of badger on site was recorded during the site survey.
- 6.12 General mitigation measures, as summarised later in this chapter, are recommended in order to mitigate adverse impacts on individual badgers, should they be encountered during the works.

Bats

- 6.13 There are records of bats within 2km of the site and the habitats on site are all considered to provide *moderate* bat foraging habitat per the Bat Surveys Good Practice for Professional Ecologists Guidelines (2023). The tree and scrub lines that bound the site form an important local ecological network for bats and other species and must be retained within the development where possible.
- 6.14 Numerous trees and shrubs were recorded throughout the site boundary. None of the trees were considered to have features likely to support bats due to their age, form and growing conditions. No further surveys of trees on site are recommended.
- 6.15 The building housing Units 7A - 7E bounds the south west of the Site. The building is in relatively good condition with minor gaps where flashing is lifting on the roof and walls and may have low potential to support roosting bats. The building could not be fully assessed as part of the PEA, therefore it is recommended that a Preliminary Roost Assessment be undertaken to fully assess the building and its potential to support roosting bats.
- 6.16 To minimise risk of disturbance to foraging and commuting bats on the site, it is recommended that the proposed works follow lighting minimisation precautions, including the following:
- No works on site should be conducted after sunset if possible. If necessary and if lighting is required then this should be kept to the minimal level (as necessary for safety and security);
 - Any post-construction lighting necessary should be directed away from boundary trees and vegetation, and away from trees with bat roost potential; and
 - If required any installation of lighting columns will be set at the lowest practical height level with box shield fittings that will minimise glare and light spillage;

Birds

- 6.17 Suitable nesting habitat is present on Site in the trees, scrub and other neutral grassland areas. It is not considered that the habitats on site are suitable for species that nest on open ground that require long sight lines.
- 6.18 Any vegetation removal works outside of the areas of modified grassland identified on JN00457_D02 Habitat Plan will be undertaken outside the breeding bird season (March – August inclusive) as far as possible, to avoid impacts upon breeding birds.

6.19 If this is not possible, an ecologist will carry out a nesting bird check a maximum of 24 hours in advance of vegetation clearance works. If nesting birds are found, an appropriate exclusion zone will need to be set up around any active nests, which will require monitoring to determine when the young have fledged. The ecologist will carry out regular monitoring checks to advise when it is possible for clearance works to proceed. The size of the exclusion zone will depend on the species nesting.

6.20 The following advice will be adhered to at all times:

The Wildlife and Countryside Act 1981 states that, it is an offence for any person to intentionally (subject to Provisions of this Part) -

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird whilst it is in use or being built; or
- take or destroy an egg of any wild bird.

6.21 If any nesting birds are found during works, then works on that area will cease and an ecologist be contacted immediately and advice sought to the best course of action.

6.22 Willow warbler is an Amber Listed species due to their steep population decline in recent decades. This decline is posited to be related to increasing temperatures affecting breeding. Any habitat compensation should include a mix of trees and scrub, habitat preferred by the species.

Reptiles

6.23 Although the Site contains suitable foraging habitat and shelter, there is little basking habitat for reptiles and the site is surrounded by industrial and commercial land, reducing recruitment opportunities. There are also no records of the species group within 2km of the Site and previous surveys undertaken on adjacent sites directly south did not record any reptiles. As the Site is therefore likely to support no or low numbers of common reptiles a Precautionary Method of Working (PMoW) is considered proportionate in order to mitigate the risk of injury / mortality to reptiles.

Amphibians

6.24 The Site now contains no waterbodies, the dry ditches and ephemeral scrapes cause by wheel rutting have no aquatic vegetation, little marginal vegetation and likely only hold water during very wet periods. The Site does contain suitable terrestrial habitat for great crested newt. That said, the amphibian records for nearby ponds with terrestrial connectivity to the site are limited to

smooth newt and common frog. Recent surveys on the Site directly south of Moorgate Point recorded no great crested newts (Wardell Armstrong, 2016). The nearest records to the Site (1km north east), is separated from the Site by a major road. There will be no implications relating to amphibians from the proposed project.

Terrestrial Invertebrates

- 6.25 The Site is unlikely to support any of the rare species identified in the desktop study. That said, it is likely to contain a good assemblage of common terrestrial invertebrates, which should be addressed in any habitat compensation.

Notable & Invasive Plant Species

- 6.26 No notable species of flora were identified during the survey and as such no further survey or mitigation is recommended.
- 6.27 The single, small stand of Japanese knotweed recorded in 2020 to the north east of the eastern portion of the Site, and showing signs of having been treated at the time of survey, was not recorded during the 2025 survey. The stand may have been successfully treated or been subsumed by the surrounding scrub which was difficult to fully access. Prior to any Site clearance a walkover check - when vegetation is lower but when plants have not died back over winter (autumn or spring) - should be undertaken to ensure the stand has been fully eradicated.
- 6.28 No Local BAP species were recorded during the Site survey. The orchid species recorded during the previous survey in the eastern portion of the Site could not be located during the 2025 site visit. Orchids are vulnerable to disturbance and may not have recovered following the site clearance work undertaken in 2024.

General Mitigation Measures

- 6.29 The following good practice measures should be adhered to in order to avoid and mitigate adverse impacts to any animals that may enter the site during the development process:
- Access ramps to be installed each night in any open trench or pit to allow animals which may accidentally fall in to escape;
 - Daily checks of excavations to be made prior to commencing works to ensure no animals have become trapped in the excavations. Should an animal be found, contact should be immediately made with a suitably experienced ecologist;

- All pipes with a diameter greater than 200 mm (stored or installed on site) to be capped/covered at night to reduce risk of animals getting trapped inside; and
- Any animals disturbed by site works should be allowed to disperse of their own accord and should not be caught or handled.

7. SECONDARY SURVEYS

Bats - Preliminary Roost Assessment

Status and Legislation

- 7.3 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and the Wildlife and Countryside Act 1981 (as amended) provide legal protection to all UK bat species.
- 7.4 In summary, it is an offence to:
- Damage or destroy a breeding or resting place of bats;
 - Deliberately capture, injure or kill a bat or bats;
 - Deliberately disturb bats, and in particular disturbance likely to impair animals' ability to survive, breed or nurture young, their ability to hibernate and migrate and disturbance likely to have a significant effect on local distribution and abundance;
 - Intentionally or recklessly disturb a bat or bats while occupying a structure or place used for shelter and/or protection (Wildlife and Countryside Act 1981 (as amended)); and
 - Intentionally or recklessly obstruct access to any structure or place that a bat or bats use for shelter or protection (Wildlife and Countryside Act 1981 (as amended)).
- 7.5 The legislation applies to bat roosts even when they are not occupied.
- 7.6 Under certain circumstances licences may be granted by the Statutory Nature Conservation Organisation (Natural England in England) to permit actions that would otherwise be unlawful.
- 7.7 Local authorities have obligations under Sections 40 and 41 of the Natural Environment and Rural Communities Act (NERC) 2006 to have regard to the purpose of conserving biodiversity in carrying out their duties. Seven species of bat are listed on Section 41 the NERC Act..

Survey Methodology

- 7.8 SKE undertook the Preliminary Roost Assessment (PRA) survey on 15th July 2025. Rob Nicholson BSc (Hons) MCIEEM is a Class 2 Bat licence holder (2014-4723-CLS-CLS, Natural England), has over 17 years' relevant experience as an ecologist and is a full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM). Rob has been 'named ecologist' on numerous European Protected Species Licences (EPSL) for bats for a range of species and roost types in both England and Wales.
- 7.9 The survey involved an external and internal inspection of the unit for bats and evidence of bats, with survey methods following the 2023 Bat Survey Guidelines. Evidence of bat presence can include:

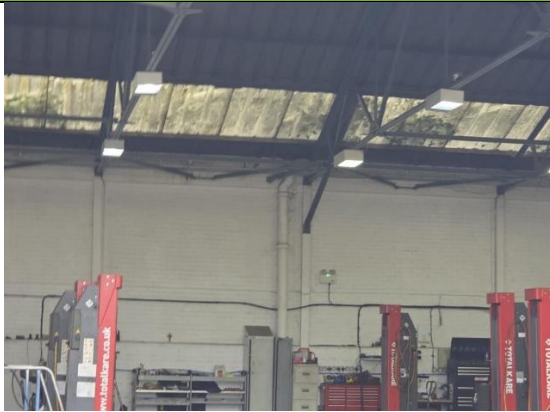
- bats (alive or dead);
- bat droppings;
- signs of feeding; and
- characteristic staining.

Notes & Limitations

- 7.10 Ecological surveys are limited by factors that affect presence of plants and animals such as time of year, weather, migration patterns and behaviour. PRA surveys can be undertaken at any time of year and as such it is considered that there were no seasonal or weather limitations to the survey.
- 7.11 All parts of the building could be accessed.

Survey Results and Recommendations

- 7.12 The survey comprised a buildings inspection which was limited to the building known as Unit 7 located to the south west of the Site.
- 7.13 The buildings were inspected using close-focusing binoculars to determine possible access points such as cavities in brickwork and the roof structure.
- 7.14 An internal inspection within the building was conducted where accessible.
- 7.15 Where required, any cracks, crevices and likely access points or potential roost features were checked for signs of use by bats e.g., droppings, scratch marks and staining.
- 7.16 The building has 'negligible potential' to support roosting bats. The structure comprises a largely single skin metal corrugate and concrete corrugate. There are skylights in the main units (Photograph 1) and sealed located offices to the southern aspect. The building is considered generally thermally unsuitable and lacks discreet potential roost features.
- 7.17 The brick wall that faces the rear of the building is intact and has vegetation pressed up against it, thus restricting access for bats (Photograph 2).

Survey Photographs	
	
Photograph 1	Photograph 2

7.18 No further surveys are recommended.

8. REFERENCES

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APPENDIX 1

Appendix 2 – Habitat Photographs

DRAWING REF	HABITAT DESCRIPTION	PHOTOGRAPH(S)
1 g3c, 10, 14, 523other neutral grassland, scattered scrub, scattered rushes, non- native	Areas to the centre of the site comprise false oat-grass <i>Arrhenatherum elatius</i> -dominated neutral grassland, with a diversity of forbs that decreases toward the east. Bramble <i>Rubus fruticosus</i> agg., dog rose <i>Rosa canina</i> , and grey willow <i>Salix cinerea</i> scrub are occasional to locally frequent. Montbretia <i>Crocsmia</i> × <i>crocsmiiflora</i> and snowberry <i>Symphoricarpos albus</i> were also recorded.	
2 h3h mixed scrub	The site is bisected by a linear mix of scrub, climbers, and grassland species. Recorded species include hawthorn <i>Crataegus monogyna</i> , hazel <i>Corylus avellana</i> , silver birch <i>Betula pendula</i> , ash <i>Fraxinus excelsior</i> , field maple <i>Acer campestre</i> , osier <i>Salix viminalis</i> , English oak <i>Quercus robur</i> , Japanese rose <i>Rosa rugosa</i> , bramble <i>Rubus fruticosus</i> agg., field rose <i>Rosa arvensis</i> , and honeysuckle <i>Lonicera periclymenum</i> .	
3 h3h mixed scrub, tree	A single, notable individual tree (early mature oak <i>Quercus robur</i>) is located on the northern boundary; with an understorey of scrub comprising willow <i>Salix</i> species, bramble, and birch. This scrub continues along the northern and eastern boundaries and comprises grey willow <i>Salix cinerea</i> , whitebeam <i>Sorbus aria</i> , hawthorn <i>Crataegus monogyna</i> , blackthorn	

DRAWING REF	HABITAT DESCRIPTION	PHOTOGRAPH(S)
	<i>Prunus spinosa</i> , dog rose <i>Rosa canina</i> , and naturally regenerating common alder <i>Alnus glutinosa</i> .	
4 r1f6 other temporary ponds and scrapes	Ditches cut across the north eastern and south eastern parts of the site with numerous vehicle track ruts also recorded. Both ditches were dry at the time of the survey. Hard rush <i>Juncus inflexus</i> was frequently recorded, along with common spike-rush <i>Eleocharis palustris</i> , silverweed <i>Potentilla anserina</i> , creeping buttercup <i>Ranunculus repens</i> , and great willowherb <i>Epilobium hirsutum</i> .	
5 g3c 15 other neutral grassland, rushes dominant	Hard rush <i>Juncus inflexus</i> and soft rush <i>Juncus effusus</i> become more dominant toward the north east of the site, accompanied by common spike-rush <i>Eleocharis palustris</i> , celery-leaved buttercup <i>Ranunculus sceleratus</i> , yellow flag iris <i>Iris pseudacorus</i> , cuckooflower <i>Cardamine pratensis</i> , and frequent ragged-robin <i>Silene flos-cuculi</i> .	

DRAWING REF	HABITAT DESCRIPTION	PHOTOGRAPH(S)
6 Michaelmas Daisy g3c 16, 523 tall forbs, non native	Much of the far eastern / south eastern section of the site is covered by a dense sward of Michaelmas daisy <i>Symphyotrichum novi-belgii</i>, in places to the exclusion of nearly all other species.	
7 h3h, 200, 202 mixed scrub & trees, young trees, self set - Southern Boundary	The southern boundary comprises a dense linear group of hawthorn <i>Crataegus monogyna</i>, grey willow <i>Salix cinerea</i>, guelder rose <i>Viburnum opulus</i>, and sycamore <i>Acer pseudoplatanus</i> scrub and trees. Rare occurrences of bracken <i>Pteridium aquilinum</i>, prickly sow-thistle <i>Sonchus asper</i>, and common hogweed <i>Heracleum sphondylium</i> were also recorded.	
8 r1f6 other temporary ponds and scrapes	Numerous dry depressions are present across the east of the site, many of which are being colonised by tall herbs such as hairy willowherb <i>Epilobium hirsutum</i> and Michaelmas daisy <i>Symphyotrichum novi-belgii</i>, though rushes <i>Juncus</i> species, reedmace <i>Typha latifolia</i>, and common reed <i>Phragmites australis</i> remain present.	

DRAWING REF	HABITAT DESCRIPTION	PHOTOGRAPH(S)
9 u1f sparsely vegetated urban land	A small area of vegetated hardstanding is located adjacent to the southern boundary of the site. Some moss species, biting stonecrop <i>Sedum acre</i> , coltsfoot <i>Trussilago farfara</i> and creeping cinquefoil <i>Potentilla reptans</i> are present on the slabs.	
10 h3j, 14 willow scrub, scattered rushes	Much of the eastern half of the site is dominated by grey willow <i>Salix cinerea</i> and silver birch <i>Betula pendula</i> scrub, largely to the exclusion of grass and herbaceous species.	
11 g3c 523 other neutral grassland, non native	Elsewhere, particularly in the central parts of the site, birch and willow scrub encroachment is less dense. However, low-growing bramble <i>Rubus fruticosus</i> agg. is prevalent in the sward. Michaelmas daisy <i>Symphyotrichum novi-belgii</i> was also recorded.	

DRAWING REF	HABITAT DESCRIPTION	PHOTOGRAPH(S)
12 g4 106 modified grassland, mown	A slightly rank linear area of modified grassland separates the car park from Unit 7. Ribwort plantain <i>Plantago lanceolata</i> is abundant, along with bramble <i>Rubus fruticosus</i> agg., dandelion <i>Taraxacum officinale</i> agg., bluebell <i>Hyacinthoides non-scripta</i> , and smooth sow-thistle <i>Sonchus oleraceus</i> . This area is not managed as intensively as other grassy strips.	
13 u1b5 815 building, commercial building	Unit 7 bounds the south east of the site; it is a metal and blockwork structure with a metal, shallow pitched roof. Large shuttered entrances front the building.	
14 u1b developed land, sealed surface	Large area of tarmac hard standing in use as refuse vehicle and bin storage.	

DRAWING REF	HABITAT DESCRIPTION	PHOTOGRAPH(S)
15 g4, 108 modified grassland, frequently mown	A frequently mown linear strip of modified grassland bounds the site to the east and north-east; sweet vernal grass <i>Anthoxanthum odoratum</i> is abundant, with daisy <i>Bellis perennis</i> , dandelion <i>Taraxacum officinale</i> agg., hoary willowherb <i>Epilobium parviflorum</i> , wild barley <i>Hordeum murinum</i> , square-stalked willowherb <i>Epilobium tetragonum</i> , cut-leaved cranesbill <i>Geranium dissectum</i> , ragwort <i>Jacobaea vulgaris</i> , creeping cinquefoil <i>Potentilla reptans</i> , springy turf moss <i>Rhytidiadelphus squarrosus</i> , and bird's-foot-trefoil <i>Lotus corniculatus</i> .	
Off Site Habitats		
16 r2b 48 other rivers and streams, freshwater, heavily modified	Located ~35m south east of site. Mapped on OS as a short section of drain linked to a pond and other drains in woodland to the north east. Steep earth banks, shallow, intermittent flow and inundated by bankside vegetation. Water quality poor. No observable functional link to site.	

DRAWING REF	HABITAT DESCRIPTION	PHOTOGRAPH(S)
17 r1g 42 other standing water, pond	Pond located in woodland ~350m east of site, water quality poor. Low amphibian potential.	

APPENDIX 2

Badgers

Badgers and their setts are protected under the Protection of Badgers Act (1992), which consolidated and added to previous legislation. It is illegal to wilfully kill or injure a badger or to interfere with a sett, unless a license is granted. A license may be granted by Natural England for the purpose of development (amongst other reasons) as defined in Section 55 (1) of the Town and Country Planning Act 1990.

Bats

Bats are protected under Schedule 5 of the Wildlife & Countryside Act (1981, as amended) and are also listed under Section 41 of the Natural Environment and Rural Communities Act 2006 (NERC Act). They are protected by law against all of, but not limited to, the following:

- intentional or reckless killing, injuring, taking;
- damage to, destruction of, obstruction of access to any structure or place used by a scheduled animal for shelter or protection; and
- disturbance of animal occupying such a structure or place.

The conservation (Natural Habitats &c.) Regulations (1994) provide additional protection for the breeding sites and resting places of bats.

Red Squirrel

Red squirrels receive full protection under the Wildlife and Countryside Act 1981 (as amended).

Red squirrels and their resting places are fully protected in Britain; it is an offence to:

- deliberately, capture, injure or kill them;
- to damage, destroy or obstruct their breeding or resting places; and
- disturb them in their breeding or resting places.

Great crested newt

Great crested newt and their habitats, both aquatic and terrestrial, are protected under the Wildlife & Countryside Act 1981 (amended by the Environmental Protection Act 1990), and under the Conservation (Natural Habitat, &c.) Regulations 1994. For any development that affects great crested newts it must be first demonstrated that:

- there are no alternatives;
- there are over-riding reasons of public interest or safety;

- it will not adversely affect the conservation status of the species.

Any works affecting the breeding or foraging habitat of the species is subject to a license from Natural England. A license is only granted where compliance with these tests is demonstrated.

Breeding Birds

Under the Wildlife & Countryside Act (1981), a wild bird is defined as any bird of a species that is resident in or is a visitor to the European Territory of any member state in a wild state. Game birds, however, are not included in this definition (except for limited parts of the Act). They are covered by the Games Acts, which fully protect them during the closed season.

All birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, to;

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird whilst it is in use or being built;
- intentionally take or destroy the egg of any wild bird;
- have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act or the Protection of Birds Act 1954;
- have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act or the Protection of Birds Act 1954;
- use traps or similar items to kill, injure or take wild birds;
- have in one's possession or control any bird of a species occurring on Schedule 4 of the Act unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations;
- intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs of young, or disturb the dependent young of such a bird.

Rare species listed in Schedule 1 Part1 are given further protection, including special increased penalties under Subsection 1 (5) as amended by the Countryside and Rights of Way Act 2000. If any person intentionally or recklessly disturbs any wild bird included in Schedule 1 while it is building a nest or is in, or near containing eggs or young.

Water vole

From the 6th April 2008 there were changes to the Wildlife and Countryside Act 1981 (Variation of Schedule 5) (England) Order 2008) affecting water voles *in England only*. Water voles now benefit from full protection under the WCA 1981 in England.

Under the previous law (which covered both England and Wales and still remains in Wales), water voles only benefited from protection under s9(4) WCA 1981. This meant that their burrows were legally protected ie it was an offence to intentionally or recklessly:

- Damage, destroy, or obstruct access to, a structure or place which is used by water voles for shelter or protection; or
- Disturb a water vole whilst it is occupying such a structure or place which it is using for that purpose.

Since the 6th April 2008, water voles in England have benefited from full s9 protection. So in addition to the above offences it is now also an offence to:

- Intentionally kill, injure or take a water vole;
- Have in one's possession or control any live or dead water vole or derivatives; or
- Sell, or offer to sell a water vole, or to be found in possession of, or to transport, a water vole for the purpose of sale. This includes publishing any advertisement for the purchase or sale of water voles.

Otter

Otters are fully protected by their inclusion in Annex II of the Habitats Directive (92/43/EEC) and Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) and it is therefore subject to the provisions of Section 9, which makes it an offence to:

- intentionally kill, injure or take an otter [Section 9 (1)];
- possess or control any live or dead specimen or anything derived from an otter [Section 9(2)];
- intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by an otter [Section 9(4) (a)];
- intentionally or recklessly disturb an otter while it is occupying a structure or place which it uses for that purpose [Section 9 (4)(b)];
- sell, offer for sale, possess or transport for the purpose of sale or publish advertisements to buy or sell an otter.

A license is required from Natural England if the potential to commit an offence exists in order for the development to take place.

Reptiles

There are six species of native reptile in the UK. Only two species, smooth snake (*Coronella austriaca*) and sand lizard (*Lacerta agilis*) are fully protected under UK and European Legislation. They are listed on Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) and under Schedule 2 of the Conservation (Natural Habitats &c.) Regulations 1994. Under these legislations it is unlawful to:

- deliberately or intentionally kill, injure or take (capture) or disturb sand lizards and smooth snakes;
- deliberately take or destroy the eggs of sand lizards;
- damage or destroy a breeding site or resting place, or intentionally damage a place used for shelter and protection;
- intentionally obstruct access to places used for shelter; and
- keep, transport, sell or exchange, or offer for sale or advertising.

DRAWING

DRAWING TITLE: Habitat Plan

KEY:

 Red Line Boundary

UKHabs

 Individual trees

 Target notes

 g3c - other neutral grassland

 g4 - modified grassland

 h3h - mixed scrub

 h3j - willow scrub

 u1b - developed land. sealed surface

 u1b5 - buildings

 u1f - sparsely vegetated urban land

 r1g - other standing water

 r2, 50 - ditches

 w, 33 - line of trees

SITE: Moorgate Point
CLIENT: Indurent
JOB NUMBER: JN00457
DRAWING NUMBER: JN00457_DW02
DATE: June 2025
DRAWN/CHECKED: JW / EJ
SCALE: NTS

