ENVIRONMENTAL RISK ASSESSMENT

A2B House, Orwel Crossing, Nacton, Ipswich, IP10 0DD

A2B Online Limited

Version:	1.0	Date:	07 March 2025			
Doc. Ref:	ORW-3301-D	Author(s):	EG Checked:		СР	
Client No:	3301	Job No:	001			



Oaktree Environmental Ltd

Waste, Planning & Environmental Consultants



Oaktree Environmental Ltd, Lime House, Road Two, Winsford Industrial Estate, Winsford, Cheshire, CW7 3QZ
Tel: 01606 558833 | E-Mail: sales@oaktree-environmental.co.uk | Web: www.oaktree-environmental.co.uk
REGISTERED IN THE UK | COMPANY NO. 4850754

Document History:

Version	Issue date	Author	Checked	Description
1.0	07/03/2025	EG	СР	Application copy

Contents

DOCU	JMENT HISTORY:	I
CONT	ENTS	11
LIST C	DF APPENDICES:	
1	INTRODUCTION	8
1.1	Note	8
2	SITE LOCATION AND RECEPTORS	10
2.1	SITE LOCATION	10
2.2	Sensitive Receptors	10
3	ENVIRONMENTAL RISK ASSESSMENT MODEL	12
3.1	FUNDAMENTAL CONSIDERATIONS	12
3.2	Ратнwау	12
3.3	Consequences	13
3.4	EFFECTS OF CONSEQUENCES	13
3.5	RISK ESTIMATION AND EVALUATION (PROBABILITY/FREQUENCY OF OCCURRENCE OF HAZARD)	14
3.6	RISK ASSESSMENT OUTCOME (COMBINATION OF PROBABILITY & CONSEQUENCE)	14
4	RISK ASSESSMENT TABLE	16

List of Appendices:

Appendix I - Drawings

1 Introduction

1.1 Note

- 1.1.1 Oaktree Environmental Ltd have been instructed by A2B Online Limited (the Operator) to prepare this Environmental Risk Assessment (ERA) to support an Environmental Permit application at A2B House, Orwel Crossing, Nacton, Ipswich, IP10 0DD. The site will be operated as a non-hazardous waste transfer station comprising the acceptance, storage and transfer of predominantly SDF / RDF bales for export. The Operator may also store bales of other household, commercial and industrial (HCI) waste types such as paper/cardboard, plastic, ferrous/non-ferrous metals etc. No physical / mechanical treatment will take place at the site.
- 1.1.2 The site will be operated by A2B Online Limited in accordance with an Environmental Management System (EMS) and other associated management plans which will form part of the Environmental Permit (EP) regulated by the Environment Agency (EA).
- 1.1.3 All site staff should be provided with a copy of this ERA and be aware of where it is located on site.
- 1.1.4 All environmental risks identified in this document should be acted upon accordingly by site management to ensure all environmental risks can be appropriately managed/controlled.
- 1.1.5 This document primarily considers environmental risks associated with the site. This does not aim to provide detailed Health and Safety risk assessments as required separately through the necessary legislation.

- 1.1.6 Specified waste management operations include waste disposal and waste recovery operations listed Annex IIA and IIB of The Waste Framework Directive 2008/98/EC and are listed in summary below:
 - R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced)
 - D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced).

Site Location and Receptors

2.1 <u>Site Location</u>

- 2.1.1 The site is located at A2B House, Orwel Crossing, Nacton, Ipswich, IP10 0DD as shown on Drawing Nos. ORW/3301/01 & 02. The national grid reference for the site is TM 21173 41324 and can be accessed via the A14.
- 2.1.2 The site is situated within a predominantly industrial area with other commercial / industrial properties immediately surrounding the site. A full list of receptors within 1km of the site have been included in Table 2.1. overleaf. A Receptor Plan illustrating these receptors has also been prepared, see Appendix I, Drawing No. ORW/3301/04.

2.2 <u>Sensitive Receptors</u>

- 2.2.1 Sensitive receptors within 1km of the site are illustrated on Drawing No. ORW/3301/04 Receptor Plan, see Appendix II.
- 2.2.2 Table 2.1 shows the approximate distance and orientation of sensitive receptors from the site.

Table 2.1 - Sensitive Receptors

Receptor	Direction from Site	Approx distance from the site boundary to the receptor boundary (m)				
Commercial / Industrial						
Ransomes Industrial Estate	West	0				
Orwell Logistics Park	East	0				
CP Transportation Services Limited	South	0				
Lytham Road Waste Transfer Station (operated by FCC)	West	15				
Basetek (mechanical engineering)	Northwest	40				
Fryers Transport	Northwest	135				
Clip 'n Climb Ipswich – Indoor Rock-Climbing Centre	West	230				
Drax Energy Solution Ltd	West	270				
Ipswich East Fire Station	West	310				
Residential						
Residential properties (Felixstowe Road)	North	370				
Residential properties (Penny Lane)	Northwest	755				
Residential properties (Mill Piece)	Southeast	940				
Care homes (residential)						
n/a	n/a	n/a				
Schools						
n/a	n/a	n/a				
Watercourses						
n/a	n/a	n/a				
Infrastructure (major roads and transport links)						
A14 and its users	South	65				
Felixstowe Road (A1156)	North	360				
Ecological Sites						
Priority habitat (Deciduous Woodland)	West	110				

3 <u>Environmental Risk Assessment Model</u>

3.1 <u>Fundamental considerations</u>

- 3.1.1 **Source/Hazard:** A property or situation that in particular circumstances could lead to harm.
- 3.1.2 **Consequences:** The adverse effects or harm as the result of realising a hazard which causes the quality of human health or the environment to be impaired in the short or long term.
- 3.1.3 **Risk:** A combination of the probability of occurrence of a defined hazard and the magnitude of the consequences of the occurrence.

3.2 Pathway

- 3.2.1 Important in the assessment of a particular risk(s) and to inform the subsequent management of the risk(s) is the identification of the pathway(s) through which the risk may affect the identified receptor(s). The following are examples of pathways:
 - Air
 - Ground
 - Water
 - Direct contact / exposure

3.3 <u>Consequences</u>

3.3.1 The following table highlights the consequences of the hazard(s) identified and the abbreviations for each as used in the Risk Assessment Table in Section 3:

Abbreviation	Consequences
Α	MINOR INJURY
В	MAJOR INJURY
С	DEATH
D	AIR POLLUTION
E	WATER POLLUTION
F	POLLUTION OF LAND

3.4 <u>Effects of consequences</u>

3.4.1 In order to quantify the level of risk and identify the appropriate management procedures, the potential effects must be considered, as outlined in the table below:

Abbreviation	Effect of Consequences	Management Required?
S	SEVERE	In all cases
Мо	MODERATE	In most cases
Mi	MILD	Occasionally
N	NEGLIGIBLE	No

Note: "Management" is the action required to reduce the risk of a hazard causing a problem on site. Contingency measures are procedures which are in place to reduce the consequences of a hazard.

3.5 Risk estimation and evaluation (probability/frequency of occurrence of hazard)

3.5.1 The following table allows the likelihood of an occurrence of an identified risk to be assessed:

	Probability	Evaluation
1	Very likely	Could occur during any working day
2	Likely	Could occur regularly
3	Possible	Event possible
4	Unlikely	Event very unlikely

3.6 Risk assessment outcome (combination of probability & consequence)

3.6.1 The following table shows the resultant risk of an identified hazard or potential situation. This uses the hierarchy of both probability and consequence to assess the level of risk. The level of risk determines what level of management would be required in order to reduce the risk of occurrence and/or scale.

		Consequence								
		S	Мо	Mi	N					
>	1	High	High	Medium	Low					
bilit	2	High	Medium	Low	Negligible					
Probability	3	Medium	Low	Negligible	N/A					
	4	Low	Negligible	N/A	N/A					

3.6.2 Where the risk assessment outcome is high, first-level management of the risk is essential, i.e. removal of hazard, implementation of major infrastructure/structural design measures to contain the risk/hazard and company policy changes to incorporate the management of the risk. All risk management measures must be supplemented with detailed induction training, spot training and tool-box talks to ensure all site staff

and users are made fully aware of the risk/hazard, all potential consequences and necessary management and contingency procedures.

- 3.6.3 Where the risk assessment outcome is medium, the management of the risk should be tackled by management or delegates. If removal of the hazard is not possible, management will normally be met through implementing minor structural design measures or by imposing procedures for the prevention of occurrences which will be conveyed to all site staff through the appropriate training, including any contingency measures/procedures.
- 3.6.4 Where the risk assessment outcome is low, the management of the risk can be done wholly through appropriate training to site staff including any contingency measures/procedures.
- 3.6.5 Where the risk assessment outcome is near-zero, site staff should be made aware of the possibility of an occurrence and contingency measures should be readily available to all staff should they be required.

4 Risk Assessment Table

- 4.1.1 The following pages contain the site-specific risk assessment for the site with appropriate remedial actions, recommendations and comments included for each identified hazard, potential contaminant, or situation.
- 4.1.2 The table also contains references to the appropriate section(s) of the site's EMS for additional management procedures.
- 4.1.3 As discussed in Section 3.6 above, all situations which identify a risk from Low High should be incorporated into the staff/visitor training schedule, where appropriate and acted on as required.

SEE TABLES OVERLEAF

Appendix I RISK ASSESSMENT TABLES

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments
Dust / particulates	Site surfaces (dry and windy weather) Waste delivery vehicles (dry and windy weather)	Air	Local human population, including industrial units, neighbouring businesses, residential dwellings and surface water features, specifically: • Site workers and visitors. • Surrounding road network	A, B, D, E	Mi to Mo	3	Low to negligible	Due to the waste types handled and processed on site, it is not envisaged that dust will be problematic from site operations. However, the operator is aware that the containment of dust on site and the prevention of its escape is paramount to operational compatibility with surrounding receptors. Waste will not be removed from HGV delivery trailers. Trailers are curtain side, the curtains can remain closed if the Operator is concerned about dust. RDF bales are securely wrapped providing a secondary containment measure from dust. Waste is typically stored on site for 24-48 hours prior to delivery to Felixstowe dock for export. No treatment of waste is undertaken on site. Vehicle speed on site is restricted to 5mph. Signs are erected to advise drivers of the speed limit. Vehicle drivers will be instructed to ensure they use main access routes on site and avoid areas which harbour excessive mud/dust build-up. Off and on-site mains water supplies are available. The site manager or designated operative will carry out regular visual inspection for dust emissions and record any findings and action taken in the site diary and/or on inspection form. Site surface comprises concrete and will not create excessive dust. The Operator implements a strict complaints procedure, any complaints will be dealt with within 48 hours.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments
Odour	Biodegradable waste stored on site. Cracks in impermeable concrete pad leading to trapped waste. Dry and hot weather conditions exceeding three days. Prevailing wind towards residential receptor locations transporting odour. Staff negligence leading to odour releases from unauthorised waste.	Air transport then inhalation	Local human population, including industrial units, neighboring businesses, and residential dwellings, specifically: • Site workers and visitors.	A, D	Mi to Mo	3	Low	Strict waste acceptance procedures are implemented to ensure that no malodorous waste is accepted. No treatment of waste is undertaken on site, the site is used for temporary storage only. Waste is typically stored on site for 24-48 hours prior to delivery to Felixstowe dock for export. Significantly reducing the time potential odour has to develop. Waste is stored in secure curtain side trailers; waste is not removed from the trailers and the curtains will remain closed unless waste is being inspected. The storage of waste in trailers significantly reduces the potential for odour to develop from warmer weather and direct sunlight. Not removing waste from trailers significantly reduces the potential for waste to become trapped in the impermeable concrete pad and develop odour. The condition of the impermeable pad is checked weekly by site operatives. Good housekeeping measures are actively maintained on site to reduce the risk of odour. Site operatives will be sufficiently trained and undergo continuous training to identify odorous wastes or non-conforming waste that could lead to trapped waste and developing odour. The Operator implements a strict complaints procedure, any complaints will be dealt with within 48 hours. The requirements of an odour management plan (OMP) are implemented on site. The OMP outlines all mitigation measures to be implemented on site and what to do in the event of odour detection outside the permit boundary (ORW-3301-F).

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments
Waste, litter and mud on local roads	Litter escaping the site boundary (windblown). Vehicles delivering / removing waste including unsheeted / poorly sheeted vehicles. Poor or faulty storage containment. Poor housekeeping. Staff negligence leading to litter escaping off site	Vehicles entering and leaving the site. Air transport (windblown)	Local human population, including adjacent commercial / industrial units, other neighboring businesses, and surrounding transport infrastructure, specifically: • Site workers and visitors.	A to C E,F	Mi to Mo	4	Negligible	All waste is stored in secure curtain side trailers, unless waste is being inspected the curtains of the trailers will remain closed to prevent waste from becoming windblown. RDF / SRF bales are stored in wrapped bales providing secondary containment from wind. Any bales which appear damaged upon inspection will be returned to the site of collection. Site operatives complete daily inspections for litter around the site and at the permit boundary. Good housekeeping measures are actively maintained on site to reduce the risk of litter. In addition to the above, no physical / mechanical treatment of waste is undertaken on site. Waste will not be removed from delivery trailers. There are no free-standing piles of waste on site. Lids of any commercial waste bins on site will remain closed unless being emptied / filled. All vehicles entering and leaving the site will be sheeted to comply with the requirements of the Duty of Care legislation.
Noise / vibration	HGVs travelling to and from the site for delivery/collection of wastes Small vehicles travelling to and from the site (e.g. staff and visitor's cars, courier van deliveries etc.)	Noise through the air or vibration through the ground	Local human population, including industrial units, neighboring businesses, and residential dwellings and surface water features, specifically: • Site workers and visitors.	A, D	Mo	m	Negligible	No physical / mechanical treatment of waste takes place at the site. No waste will be removed from the back of trailers. All vehicles are required to be driven onto and off site with due consideration for neighbouring premises. HGV movements will be spread out evenly throughout the day. Vehicles must be well maintained and operated with silencers. Moving parts to be regularly lubricated. All vehicles must be driven slowly around the site (5mph site speed limit). Reversing alarms to be preferentially fitted with white noise alarms to minimise impacts on neighbouring sites. Engines to be switched off when not in use (no idling policy). Small vehicles will arrive marginally earlier than the main site operating hours.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments
								The Operator implements a strict complaints procedure, any complaints will be dealt with within 48 hours.
Vermin causing leptospirosis and other respiratory diseases	Poor housekeeping. Staff negligence leading to acceptance of unauthorised waste giving rise to pests. Broken bales of waste	Water, direct contact with waste	Local human population, including users of adjacent commercial / industrial units, other neighbouring businesses, residential dwellings and surface water features, specifically: • Site workers and visitors.	A to C	Mi to Mo	4	Negligible	The containment of all waste and the strict waste acceptance criteria presents a very low risk of the site attracting pests. RDF / SRF waste stored is wrapped meaning it will not give off any odours which could attract pests. Waste is not unloaded from the back of delivery trailers. The curtains of the trailers will remain closed unless waste is being inspected. The raised storage of waste will reduce the risk of any pests accessing the bales. Any wastes identified on site which are non-conforming or if any bales are discovered to be damaged during daily inspections, they will be quarantined in a sealed container and removed off site. Wear PPE - gloves and masks as appropriate Good housekeeping measures are actively maintained to reduce the potential of attracting pests. Housekeeping inspections take place daily at the end of each working day (in the sites case prior to the end of manned office hours) to collect any waste produced by site operatives / workers. An appropriate pest controller will be called in the event of pests being present at the site or complaints received relating to pests.
Fire/ smoke / particulates	Arson and or vandalism Staff negligence Discarded smoking materials Hot exhausts Build up of loose combustible waste, dust and fluff Hot loads	Air transport of smoke Surface water runoff of fire water	Local human population, including industrial units, neighboring businesses, and residential dwellings and surface water features, specifically: • Site workers and visitors.	A to F	Mi to	3	Medium	Waste types proposed to be accepted include combustible waste types. Strict waste acceptance procedures are implemented to reduce the likelihood of non-conforming waste being accepted. Combustible waste will be stored in accordance with the Environment Agencies Fire Prevention Plan guidance. Storage times and quantities are significantly less than those in the guidance. A no smoking policy is implemented on site, those wishing to smoke will have to do so in the designated area (6m from combustible waste types). Due to no treatment operations being undertaken on site and the storage of waste (wrapped bales in the back of curtain side trailers) it is not considered a build-up of loose combustible waste, dust and fluff will present an issue at the site.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments
								All site staff are fully trained in recognition of early fire signs and trained to prevent negligence. Fire fighting equipment on site includes mains water, hoses and fire extinguishers. Site security measures to reduce the risk of arson, including lockable gates that remain locked outside of operational hours with drivers being given a code to access the site outside of manned hours. Inspections are undertaken of waste storage areas to ensure combustible waste is not stored more than the time periods stated in the FPP. The requirements of a Fire Prevention Plan (FPP) are implemented on site. The FPP outlines all mitigation measures to be implemented on site and what to do in the event of a fire on site (ORW-3301-B).
Vehicle collision/ accidents including impacts and injury	Poor visibility Spillages of oils/fluids causing vehicles to skid Lack of PPE worn by staff Staff negligence i.e. mobile plant operators Excessive waste storage causing collapse of stored materials / falling materials and reducing accessibility around the site	Direct	Visitors to the site and workers employed by the operator. Pedestrians	A to F	Mi to	3	Low	There is no freestanding stockpiles of waste stored on site, all waste is stored in bale form in the back of curtain side trailers. Spill kits are available on site for the event of a fuel or oil leak / spill. An accident logbook is kept in the site office so all new and existing staff members can review previous accidents. Encouragement for staff for greater number of "accident-free days" to encourage a safer working environment Appropriate signage throughout the site. All staff have radio's and use horns / alarms on equipment to alert them of their presence. The operator has trained staff who control vehicle movements throughout the site. Vehicle movements on site restricted to 5mph. Dedicated staff & visitor parking areas as shown on Drawing No. ORW/3301/03.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments
Leachate	Poor housekeeping Staff negligence leading to acceptance of unauthorised waste giving rise to leachate Overflowing trade waste bins Defects to the concrete surfaces storing waste Defects to the site drainage system	Ground	Surface water features and areas of sensitive ground, specifically:	E, F	Mi to	3	Low	The site does not receive waste types which are liable to give rise to contamination. All waste stored comprise RDF/SRF bales which are securely wrapped or baled HCI waste i.e. plastic, cardboard etc on the back of curtain side trailers. The integrity of the impermeable pad is checked by site operatives as part of the inspection checklists to ensure it is in good condition. Any defects or faults are reported to the site manager. Actions to repair any faults are recorded and undertaken as soon as practicable to prevent further risk. In the event of a spillage a spill containment kit (absorbent pads, booms or granules) will be used to prevent further spillage and the contaminated absorbents placed in a skip for disposal to a suitably permitted facility. The FPP has a dedicated section on firewater containment measures.
Hydrocarbons including release of gases/fumes/vapours/volatiles	Overturned vehicles Reaction between stored wastes	Ground - direct contact, ingestion Inhalation (of volatiles)	Local human population, including industrial units, neighboring businesses, and residential dwellings and surface water features, specifically: Site workers and visitors.	A, B, D, E, F	Mi to S	3	Low	All waste accepted undergoes strict acceptance procedures to ensure any contaminated waste is returned to the producer's vehicle or safely quarantined on site. Spill kits kept off site which are close to source(s) of hazards. Preventative maintenance schedule for vehicles. Very little potential for hydrocarbons to be released from site given the waste types accepted and stored i.e. no ELVs Any spillages identified will be dealt with in accordance with the spillage procedures outlined in the EMS.
Adverse weather conditions	High winds Poor visibility due to fog Freezing weather conditions Droughts, warm, hot weather Long periods of rainfall i.e. excessively for 3 no. days	Direct contact	Site personnel / visitors Vehicle users Pedestrians	A to F	Mi to S	3	Low	High winds – All waste stored comprises bale stacks which are wrapped and as each bale weighs approximately 1.2 tonne, they are unlikely to be affected by high winds. Poor visibility – The site will not operate in conditions of poor visibility such as dense fog to reduce the risk of accident or vehicle collision. Freezing weather – The site has road salt available on site to lay on site surfaces to prevent vehicles and staff skidding causing accidents or injuries. The continuous movement of plant on site will also prevent site surfaces from icing over in winter months.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments
								Droughts / warm weather – FPP in place and no dust is expected given waste stored. Long periods of rainfall or flood events – Due to the site's surface and waste types accepted, there is very limited potential for mud tracking off site. The site is not located within a flood risk zone. The operator will set up a notification alert with the Met Office to receive prior notifications of the above unforeseen adverse weather conditions to ensure mitigation can be put in place prior to the event. The site may be forced to close during events which could cause a significant risk to staff, human health or the environment.
Flooding	Climate change leading to risking sea/river levels Flooding due to heavy rainfall events Blocked drains	Direct contact	Site personnel / visitors Vehicle users Pedestrians	A to F	Mi to S	3	Low	The site is located in flood zone 1 meaning it has a low probability of flooding from rovers and sea. The site is situated over 1km from an area demarcated as flood zone 3. In terms of surface water flooding, there is a suitable drainage system on site to prevent water pooling.

Appendix II Drawings





Scale Bar (1:25,000)

NOTES

Drawing for indication only. Reproduced with the permission of the controller of H.M.S.O. Crown copyright licence No. 100022432. This drawing is copyright and property of Oaktree Environmental Ltd.

REVISION HISTORY

Rev:	Date:	Init:	Description:
-	07.03.25	JH	Initial drawing

KE



Site location

TITLE:

SITE LOCATION MAP

CLIENT:

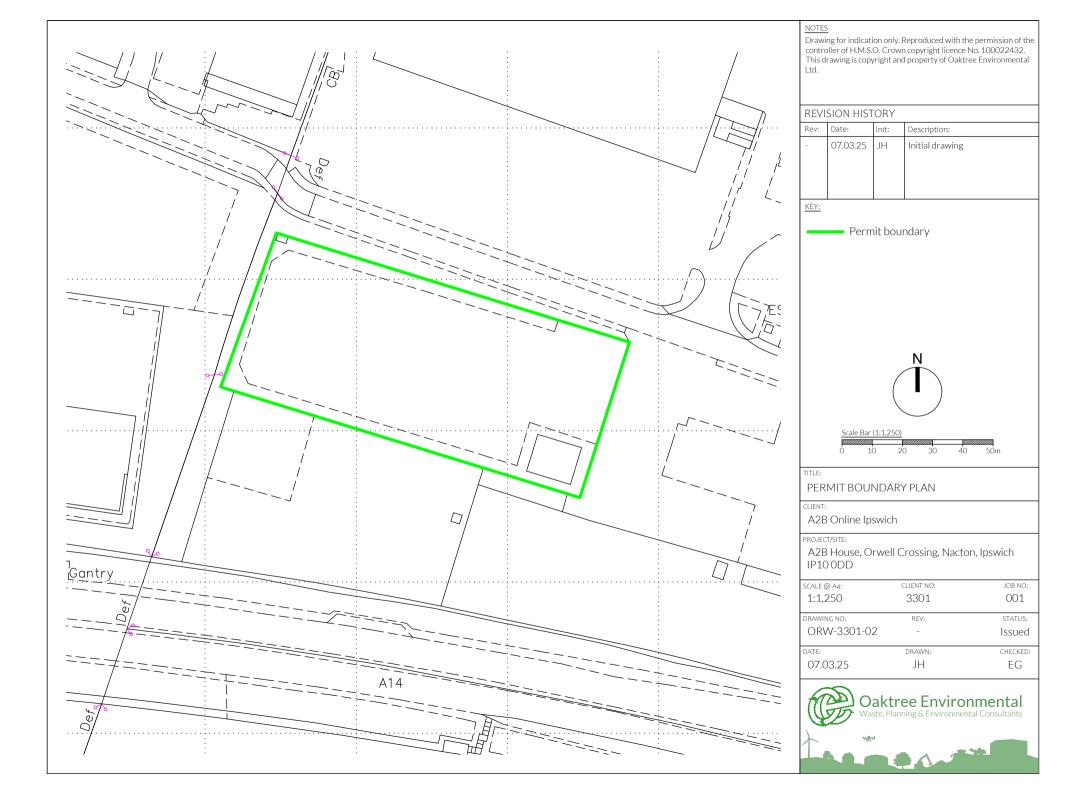
A2B Online Ipswich

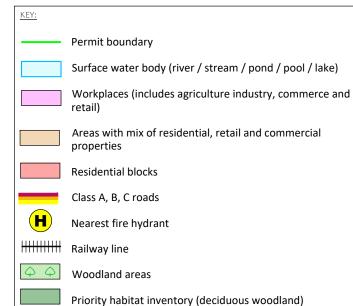
PROJECT/SITE:

A2B House, Orwell Crossing, Nacton, Ipswich IP10 0DD

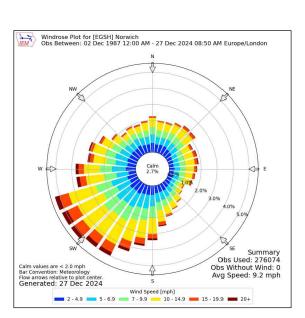
SCALE @ A4:	CLIENT NO:	JOB NO:
1:25,000	3301	001
DRAWING NO:	REV:	STATUS:
ORW-3301-01	-	Issued
DATE:	DRAWN:	CHECKED:
07.03.25	JH	EG



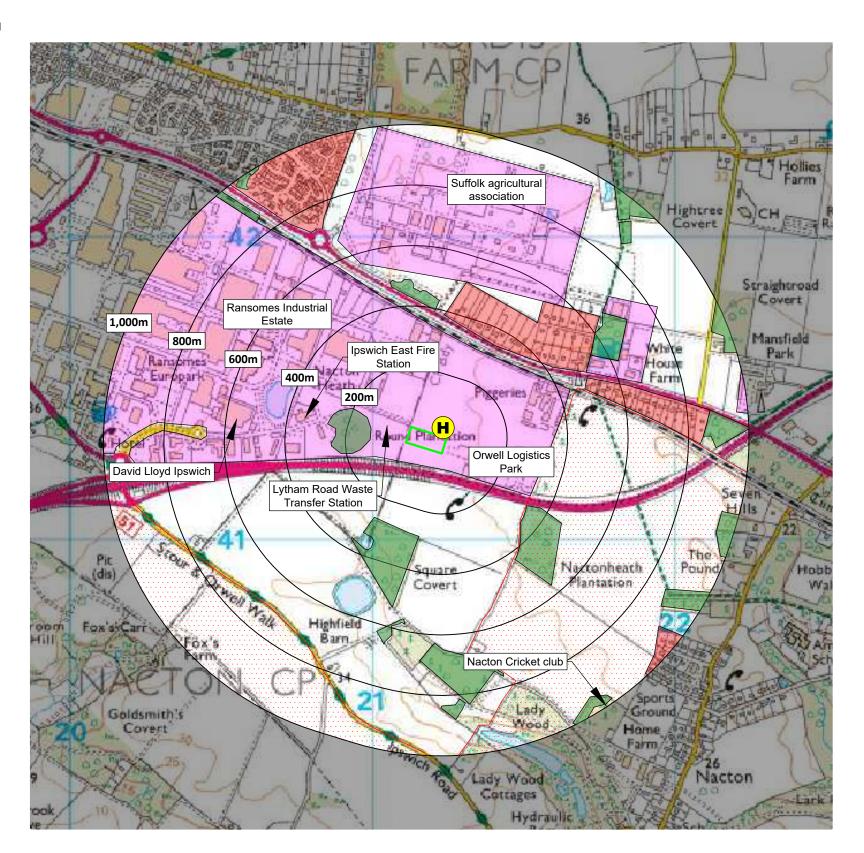




Areas of outstanding natural beauty



Compass Wind Rose for (EGSH) Norwich Period 1987-2024 - source: Iowa State University



NOTES

- 1. Boundaries are shown indicatively.
- 2. Wind rose data shows the prevailing wind direction to be Southerly.

Drawing for indication only. Reproduced with the permission of the controller of H.M.S.O. Crown copyright licence No. 100022432. This drawing is copyright and property of Oaktree Environmental Ltd.

REVISION HISTORY

Rev:	Date:	Init:	Description:			
-	07.03.25	JH	Initial drawing			



100 200 300 400

RECEPTOR PLAN

CLIENT:

A2B Online Ipswich

DJECT/SITE:

A2B House, Orwell Crossing, Nacton, Ipswich IP10 0DD

CLIENT NO:	JOB NO:
3301	001
REV:	STATUS:
=	Issued
DRAWN:	CHECKED:
JH	EG
	3301 REV: - DRAWN:

