



## Connah's Quay Low Carbon Power

# Environmental Statement Volume IV Appendix 5-B: Environmental Screening of the Hardstanding Expansion at Connah's Quay North Jetty

Planning Inspectorate Reference: EN010166  
Document Reference: EN010166/APP/6.4  
Planning Act 2008 (as amended)  
Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations  
2009 - Regulation 5(2)(a)  
Revision 00

March 2026

Prepared for:  
Uniper UK Limited

Prepared by:  
AECOM Limited

© 2026 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

## Table of Contents

1. Introduction .....	3
2. Location and Setting .....	4
3. Description of the Change .....	7
4. Environmental Screening Exercise .....	9
5. Conclusion .....	1
Annex A – Figures.....	2
Annex B – Ecological Walkover .....	3
Annex C – Tree Constraints Plan.....	28

## Tables

Table 2-1: Summary of the potential environmental effects .....	9
---	---

# 1. Introduction

- 1.1.1 This appendix supports **Chapter 5: Construction management and Programme (EN010166/APP/6.2.5)** and describes the environmental screening exercise of the Hardstanding Expansion at Connah's Quay North Jetty (hereafter referred to as the Hardstanding Expansion) during the construction period for the Connah's Quay Low Carbon Power project. To facilitate deliveries at Connah's Quay North Jetty, an expansion to the existing area of hardstanding is required. As described in **Chapter 3: Location of the Proposed Development (EN010166/APP/6.2.3)**, the Hardstanding Expansion forms part of the Construction and Operation Area within the Order limits shown in **Figure 3-2: Areas described in the ES (EN010166/APP/6.3)**.
- 1.1.2 This exercise identifies if the Hardstanding Expansion has the potential to result in significant effects on the environment, therefore noting where further assessment of these works is required in the **Environmental Statement (ES)**.
- 1.1.3 This screening exercise outlines the location of the Hardstanding Expansion and provides a commentary on potential environmental effects, considering embedded mitigation detailed in the **Framework Construction Environmental Management Plan (CEMP) (EN010166/APP/6.5)** and the **Framework Construction Traffic Management Plan (CTMP) (EN010166/APP/6.6)**. Any further required assessment is detailed and referenced, as appropriate.

## 2. Location and Setting

2.1.1 This section of the Appendix provides a description of the existing conditions of the land within which the Hardstanding Expansion would be delivered.

2.1.2 The Hardstanding Expansion is approximately centred at national grid reference 329069, 370627. The Hardstanding Expansion is wholly within the administrative area of Flintshire County Council (FCC). The location of the Hardstanding Expansion in the context of the Order limits and its immediate surroundings is shown in the following figures which are included in **Annex A**:

- Location of the Hardstanding Expansion at Connah's Quay North Jetty (Figure 3-1: Order Limits Sheets 7 and 8 of 8 (EN010166/APP/6.3))
- Figure 5B-A1: Environmental Context of the Hardstanding Expansion at Connah's Quay North Jetty

### Surrounding Land-Use

2.1.3 The Hardstanding Expansion comprises an area of hardstand and low-lying vegetation adjacent to the existing area of hardstanding at Connah's Quay North Jetty. The River Dee is located to the south beyond the existing areas of hardstanding at Connah's Quay North.

2.1.4 The Hardstanding Expansion has National Grid Overhead Lines directly above it, going in an east to west direction. There is one National Grid Pylon adjacent to the east of the Hardstanding Expansion and one to the west of the Hardstanding Expansion, on the western bank of the River Dee.

### Residential Receptors

2.1.5 There are no residential receptors in the vicinity of the Hardstanding Expansion.

### Ecological Receptors

2.1.6 A UK Habitat Classification Survey was undertaken on 18 November 2025 (see **Annex B**). The UK Habitat Classification survey confirmed that the site comprises areas of other neutral grassland, dense scrub, individual trees and bare ground.

2.1.7 With respect to statutory designated ecological sites, the Hardstanding Expansion is located 30 m north of the Dee Estuary SAC and SSSI and 110 m north of the Dee Estuary SPA and Ramsar site.

2.1.8 There are no non-statutory designated ecological sites within the vicinity of the Hardstanding Expansion.

2.1.9 There is Coastal and Floodplain Grazing Marsh Priority Habitat (Natural Resource Wales Priority Habitat) adjacent to the south-east of the Hardstanding Expansion. On the western bank of the River Dee, there is Saltmarsh Priority Habitat.

## Transport Receptors

- 2.1.10 The Hardstanding Expansion is accessed via a private road network leading to the A548. The A458 is a dual carriageway providing a strategic link along the alignment of the North Wales Main Line railway, extending as far west as Pensarn. The A548 crosses (via Flintshire Bridge crossing the Dee Estuary) the south-eastern part of the Order limits (across the Alternative Access to the Main Development Area and Access to C&IEA). The A548 connects to the Strategic Road Network including M56 and M53 to the north-east of the Order limits.

## Air Quality Management Areas

- 2.1.11 There are no Air Quality Management Areas (AQMAs) designated within the administrative boundary of FCC, or in the neighbouring areas of Denbighshire, Wrexham and Wirral and therefore none within the vicinity of the Hardstanding Expansion.

## Geological and Hydrogeological Receptors

- 2.1.12 The Hardstanding Expansion is underlain by superficial deposits consisting of Tidal Flat Deposits (Clay, Silt and Sand). Beneath this is bedrock of mainly Pennine Lower Coal Measures Formation.
- 2.1.13 The Hardstanding Expansion is located within the Shotton Works historic landfill site.
- 2.1.14 According to published sources and as described in **Chapter 13: Water Environment and Flood Risk (EN010166/APP/6.2.13)**, the underlying superficial Tidal Flat Deposits are classified as a Secondary Undifferentiated Aquifer and the bedrock of Pennine Lower Coal Measures Formation - mudstone, siltstone and sandstone is classified as a Secondary A aquifer. The Hardstanding Expansion does not contain or lie within or in close proximity (<1 km) to any groundwater Source Protection Zones (SPZ).

## Hydrological Receptors

- 2.1.15 The Hardstanding Expansion is within 30m of the River Dee, which is a designated Main River. It is also in the Dee Estuary Water Framework Directive (WFD) Operational Catchment, within the Dee Management Catchment.

## Flood Risk

- 2.1.16 There is a very minimal extent of land to the east of the Hardstanding Expansion which is in Flood Zone 2 regarding risk from Surface Water and Small Watercourses.
- 2.1.17 The Hardstanding Expansion is in Flood Zone 3 regarding risk from Rivers within the River Dee, and on the eastern bank of the River Dee (where the Hardstanding Expansion connects to the land) there is also land within Flood Zone 2 and 3 regarding risk from Seas.

## Terrestrial Heritage Receptors

- 2.1.18 There are no World Heritage Sites, scheduled monuments, grade I, II\*, or II listed buildings, conservation areas, registered parks and gardens, registered battlefields or protected wreck sites within the vicinity of the Hardstanding Expansion.
- 2.1.19 With regards to non-designated terrestrial heritage receptors, on the eastern bank of the River Dee, approximately 150 m to the south of the Hardstanding Expansion is Hawarden Bridge Iron Works later Shotton Steelworks (HER 34288). Going across the River Dee there is one non-designated terrestrial heritage receptor, Connah's Quay Road Bridge (HER 268138).
- 2.1.20 Historic boreholes have been undertaken in the vicinity of the Hardstanding Expansion as recorded on the BGS online resource. The potential for palaeoenvironmental remains to be present is unknown although it is possible peat deposits will be present within the terrestrial environment alongside the estuary. The potential remains are at a depths of 2 m – 4 m below ground level.

## Landscape and Visual Receptors

- 2.1.21 The Hardstanding Expansion is located within National Landscape Character Area 13: Glannau Dyfrdwy a Wrecsam /Deeside and Wrexham (NLCA13), defined by Natural Resources Wales (NRW). 'Character areas' are defined by the relevant authority based on their distinct, recognisable character and natural boundaries. The lowland around the mouth of the River Dee was reclaimed from the sea in the 18th century and the area has since become heavily industrialised.
- 2.1.22 There is one public right of way on the eastern bank of the River Dee (footpath 32) which goes from east to west and stops approximately 300 m east of the Hardstanding Expansion. On the western bank of the River Dee there are also footpaths 28, 42 and 43 which overlook the Hardstanding Expansion.
- 2.1.23 There are no Landscape Character Designations covering the industrial complexes along the banks of the Dee Estuary, however, nationally important industries continue to dominate, including the existing Connah's Quay Power Station.
- 2.1.24 The expansive intertidal sand, mudflats, and saltmarsh of the Dee Estuary to the north and north-west of the Construction and Operation Area contain inland views and urban/industrial influence, creating a contrasting maritime character with expansive views along the coast and out to the Irish Sea.

## Agricultural Land Classification

- 2.1.25 The Hardstanding Expansion is surrounded to the north by land provisionally mapped as grade 5 agricultural land as per **Appendix 14-D: ALC Report (EN010166/APP/6.4)**. The area to the south is an existing area of hardstanding associated with Connah's Quay North jetty.

## 3. Description of the Change

### Overview

- 3.1.1 The Hardstanding Expansion involves an expansion to the existing area of hardstanding at Connah's Quay North Jetty. The expansion would be divided into two sections: one approximately 50 m by 16 m (800 m<sup>2</sup>) and another 62.5 m by 16 m (1,000 m<sup>2</sup>).
- 3.1.2 The existing off-loading area within the Hardstanding Expansion measures approximately 16 m by 16 m, providing 256 m<sup>2</sup> of space. The proposal is to extend this area by roughly 1,800 m<sup>2</sup>. The assumed excavation depth for the expansion is approximately 0.3-0.5 m.
- 3.1.3 The Hardstanding Expansion would provide the necessary flexibility for equipment deliveries during the construction phase once final delivery sizes are confirmed. The off-loading area on the northern side of Connah's Quay North Jetty is proposed to be extended to make it easier and quicker to unload equipment delivered by barge. When the barge is positioned end-on to the jetty, a ro-ro ramp is used to move items directly onto the hardstanding, and the extra space will help this process run safely and smoothly. The extended area may also be used as a temporary laydown space for equipment before it is moved off-site.
- 3.1.4 Once AIL deliveries are complete, the area will be vacated by the Applicant and made available for future use by the landowner, Tata Steel UK Limited. The land may or may not be reinstated to its current condition at that stage. Should the area be reinstated, these works would include the excavation of the imported stone, placement of soil and re-seeding of the area. Should the land not be reinstated it is assumed that the expansion area would be maintained appropriately by the landowner. The final approach will be subject to a commercial agreement between the parties.

### Construction Method and Sequencing

- 3.1.5 In total, the construction of the Hardstanding Expansion is anticipated to take up to five weeks.
- 3.1.6 Setting-out activities would first be undertaken to define the clearance area, excavation limits, and finished levels, requiring around one to two days. Vegetation clearance, limited to shrubbery and small trees, would take place in line with the provisions for nesting birds set out in the **Framework CEMP (EN010166/APP/6.5)** and is expected to take about one week, delivered by a specialist contractor.
- 3.1.7 Topsoil would then be removed and either stockpiled within the Order limits or taken off-site for reuse or recycling. This phase is expected to take two to three weeks and would generate roughly two two-way HGV movements per day. Excavation would be carried out using a tracked or mobile 360-degree excavator. Depending on ground conditions and detailed design, a geotextile layer may be installed before stone placement. Imported stone would then be laid and compacted across the temporary expansion area over an estimated two-week period, again involving around two two-way HGV

deliveries per day. A 360-degree excavator fitted with a wide bucket or blade and a self-propelled vibrating roller would be used for this activity.

Throughout construction, the workforce is anticipated to be between three and five personnel. These workers and vehicle movements are not additional to those already considered within the ES and would therefore not change the information provided in Section 5.4 and Section 5.6 of **ES Volume II Chapter 5: Construction Management and Programme (EN010166/APP/6.2.5)**.

- 3.1.8 As required within the **Framework CEMP (EN010166/APP/6.5)** topographical survey, fauna, flora and ornithological checks, and ground contamination testing surveys will be completed within the expansion area.

## 4. Environmental Screening Exercise

4.1.1 This Appendix applies the principles of the Rochdale Envelope to maintain necessary flexibility. Therefore, each technical topic has considered the relevant worst-case scenario for the expansion noting it could be either retained or reinstated, subject to landowner agreement.

4.1.2

4.1.3 **Table 4-1** considers each of the terrestrial environmental topics that were scoped into the Environmental Impact Assessment (EIA). The Hardstanding Expansion is not located within the marine environment and as such there is no potential for any effects to arise on marine receptors considered within the following environmental topics:

- Marine Ecology;
- Physical Processes; and
- Marine Historic Environment.

**Table 4-1: Summary of the potential environmental effects**

Topic	Consideration	Further assessment required?
Air Quality	The construction of the Hardstanding Expansion will be undertaken over a short period. Following the implementation of measures in the <b>Framework CEMP (EN010166/APP/6.5)</b> there is no potential for significant air quality effects to arise during its construction or removal and reinstatement (if undertaken prior to the Applicant vacating the land).	No
Noise and Vibration	The construction of the Hardstanding Expansion will be undertaken over a short period. Following the implementation of measures in the <b>Framework CEMP (EN010166/APP/6.5)</b> and considering its distance from noise sensitive receptors, there is no potential for significant noise and vibration effects to arise during its construction or removal and reinstatement (if undertaken prior to the Applicant vacating the land).	No
Traffic and Transport	The construction of the Hardstanding Expansion will be undertaken over a short period and would not change the construction vehicle movements or staff numbers already considered and outlined	No

Topic	Consideration	Further assessment required?
	<p>within <b>ES Volume II Chapter 5: Construction Management and Programme (EN010166/APP/6.2.5)</b>. Further to this, the controls set out within the <b>Framework Construction Traffic Management Plan (EN010166/APP/6.6)</b> and <b>Framework Construction Worker Travel Plan (EN010166/APP/6.7)</b> apply.</p>	
<p>Terrestrial and Aquatic ecology</p>	<p>The construction and removal and reinstatement (if undertaken prior to the Applicant vacating the land) of the Hardstanding Expansion at Connah's Quay North Jetty would be controlled by the measures detailed in the <b>Framework CEMP (EN010166/APP/6.5)</b>. Measures relevant to these works include:</p> <ul style="list-style-type: none"> <li>• Pre-commencement surveys (such as bat surveys on impacted trees and buildings);</li> <li>• Presence of an Ecological Clerk of Works (ECoW) on site for works such as (but not limited to) vegetation clearance and pruning of trees;</li> <li>• Precautionary methods of work; and</li> <li>• Protected Species Licences would be obtained from Natural Resources Wales (NRW) (where applicable).</li> </ul> <p>There is no potential for significant effects to arise on protected or notable species from these works. However, the expansion would result in vegetation removal and hardstanding creation, which results in the loss of habitat and as it could be retained as permanent, these losses (whilst small) require further consideration in the context of the Proposed Development as a whole.</p> <p>An Ecological Walkover Survey has been undertaken to inform these conclusions and the associated report is provided in <b>Annex B</b>.</p> <p>A Tree Survey has been undertaken to identify tree constraints. The Tree</p>	<p>Protected and notable species - No</p> <p>Habitats - Yes</p> <p>An Ecological Walkover Survey and Tree Survey of expansion area has been undertaken to identify ecological and tree constraints. The Ecological Walkover Report is presented in <b>Annex B</b>. The Tree Constraints Plan for the Hardstanding Expansion is presented in <b>Annex C</b>.</p>

Topic	<i>Consideration</i>	<b>Further assessment required?</b>
	<p>Constraints Plan for the Hardstanding Expansion is presented in <b>Annex C</b>.</p>	
<p>Water Environment and flood risk</p>	<p>No direct works are required to the River Dee. However noting the proximity of the Hardstanding Expansion to the River Dee and the presence of hardstanding further consideration of effects on the water environment is required.</p> <p>As the Hardstanding Expansion could be retained as permanent by the landowner consideration in terms of flood risk is also required.</p>	<p>Yes, further assessment of the Hardstanding Expansion is provided within <b>ES Volume II: Water Environment and Flood Risk (EN010166/APP/6.2.13)</b> and <b>ES Volume IV: Appendix 13-B Water Framework Directive (EN010166/APP/6.4)</b>.</p>

Topic	Consideration	Further assessment required?
Geology and Ground Conditions	It is considered that earthworks / excavations / cutting may be required as part of the Hardstanding Expansion. Furthermore, it is located within a Historic Landfill site.	Yes, further assessment of the Hardstanding Expansion is provided with <b>ES Volume II Chapter 14: Geology and Ground Conditions (EN010166/APP/6.2.14)</b> .
Landscape and Visual Amenity	Changes to views from A548 may be present during construction works, use (deliveries) and removal and reinstatement works, however, these will be negligible. From other publicly accessible locations, there is not expected to be any visibility of the Hardstanding Expansion.	No
Terrestrial Heritage	There are no historical assets (designated or non-designated) within the vicinity of the Hardstanding Expansion. Furthermore, whilst there is potential for archaeological remains at a depth of 2 m – 4 m below ground level, it is not anticipated that the Hardstanding Expansion would reach such depths.	No
Socio-Economic, Recreation and Tourism	The construction, removal and reinstatement works (if undertaken prior to the Applicant vacating the land) associated with the Hardstanding Expansion would be undertaken by workers included within the estimates provided in <b>ES Volume II Chapter 5: Construction Management and Programme (EN010166/APP/6.2.5)</b> . There is no potential for significant environmental effects in relation to socio-economics, recreation and tourism.	No
Climate Change	The works associated with the Hardstanding Expansion have the potential to result in the release of landfill gas due to ground disturbance within a Historic Landfill Site. Landfill gas typically consists of a mixture of carbon dioxide and methane, and the magnitude of emissions	No

Topic	Consideration	Further assessment required?
	<p>depends on factors such as the landfill's age, condition, and waste composition.</p> <p>In this case, the excavation of 1,800 m<sup>2</sup> is unlikely to produce significant additional emissions of landfill gases. When viewed in the context of the Proposed Development's overall lifecycle carbon impact, any such emissions would be negligible.</p>	
Human Health	<p>The construction of the Hardstanding Expansion will be undertaken over a short period. Following the implementation of measures in the <b>Framework CEMP (EN010166/APP/6.5)</b> there is no potential for significant air quality effects to arise during its construction or removal and reinstatement (if undertaken prior to the Applicant vacating the land)..</p>	No
Major Accidents and Disasters	<p>It is not anticipated that the Hardstanding Expansion has the potential to result in a major accident or disaster or will be particularly vulnerable to such an event. There is no potential for significant environmental effects in relation to major accidents and disasters during its construction or removal and reinstatement.</p>	No
Materials and Waste	<p>Whilst the Hardstanding Expansion is located within an area of Historic Landfill, and therefore could present additional hazardous waste beyond that considered within the original assessment, <b>Chapter 23: Materials and Waste (EN010166/APP/6.2.23)</b> already concludes a significant adverse effect in this regard. The quantities of additional waste arising at this location (900m<sup>3</sup>) would be negligible and not change the conclusions of the original assessment.</p>	No

## 5. Conclusion

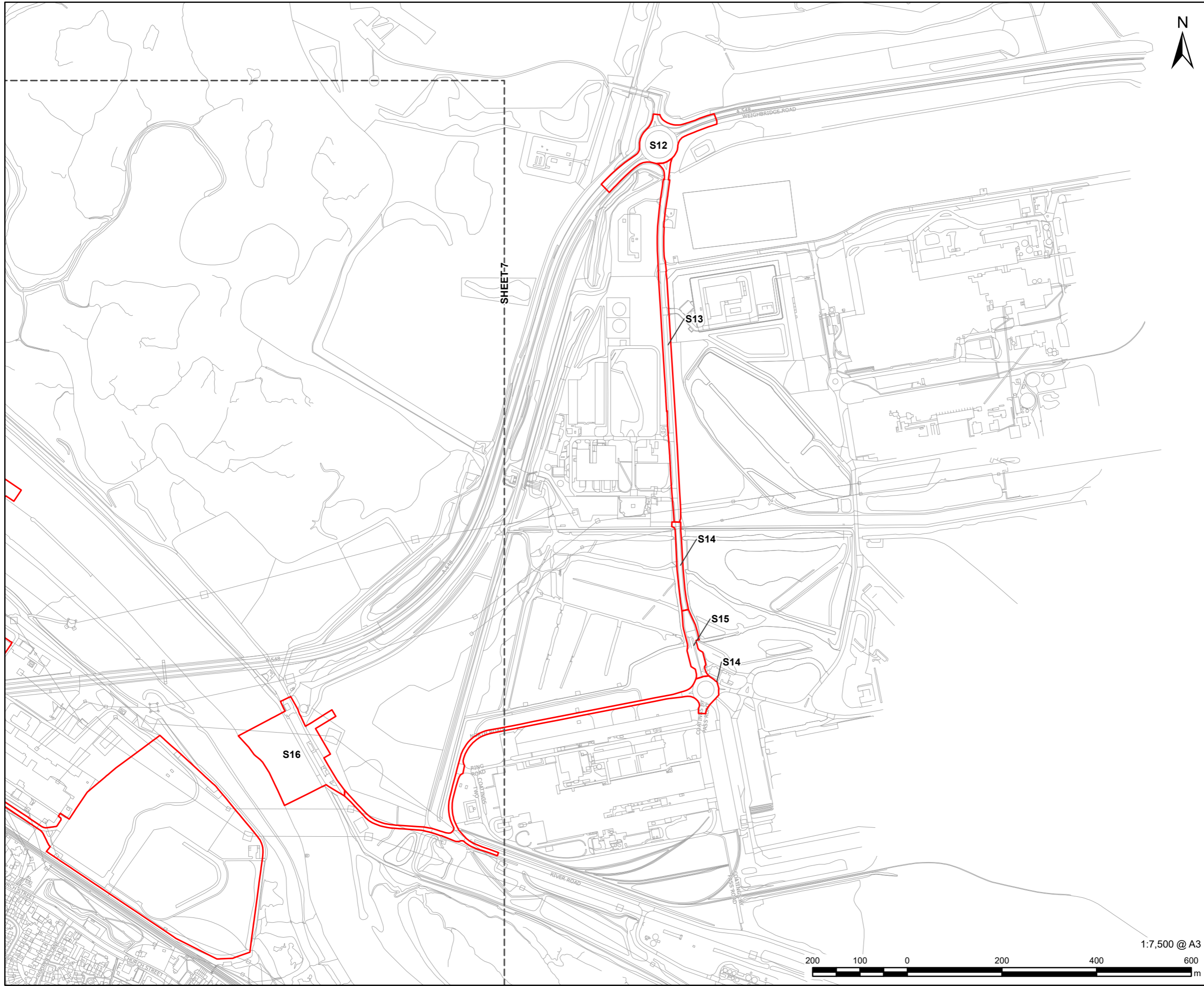
5.1.1 Following a review of the Hardstanding Expansion at Connah's Quay North Jetty it is concluded that for most environmental topics, no significant environmental effects are expected to occur and thus can be screened out of requiring further assessment. The only topics which require further assessment are:

- **ES Volume II Chapter 11: Terrestrial Ecology and Ornithology (EN010166/APP/6.2.11)** (in addition to **Annex B** and **Annex C** of this Appendix);
- **ES Volume II Chapter 13: Water Environment and Flood Risk (EN010166/APP/6.2.13)**;
- **ES Volume IV: Appendix 13-B Water Framework Directive (EN010166/APP/6.4)**;
- **ES Volume II Chapter 14: Geology and Soils (EN010166/APP/6.2.14)**;
- **ES Volume IV: Appendix 14-A: Geo Environmental Desk Based Assessment**; and
- **ES Volume IV: Appendix 14-C: Potential Areas of Contamination Further Risk Impact Assessment.**

## Annex A – Figures

- Location of the Hardstanding Expansion at Connah's Quay North Jetty (Figure 3-1: Order Limits Sheets 7 and 8 of 8 (EN010166/APP/6.3))
- Figure 5B-A1: Environmental Context of the Hardstanding Expansion at Connah's Quay North Jetty





This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

**LEGEND**

- Order limits
- Hardstanding Expansion at Connah's Quay North Jetty
- 1km Buffer of the Hardstanding Expansion at Connah's Quay North Jetty
- Local Authority Boundary
- National Grid Pylon
- National Grid Overhead Line
- Railway Line
- Historic Landfill
- Local Wildlife Site (LWS)
- Local Nature Reserve (LNR)
- Site of Special Scientific Interest (SSSI)
- Special Protection Area (SPA)
- Special Area of Conservation (SAC)
- Ramsar

**NOTES**

© Crown Copyright 2025. All rights reserved. Ordnance Survey Licence AC0000808122. Contains OS data © Crown copyright 2025. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains public sector information licensed under the Open Government Licence v3.0. © Environment Agency copyright and/or database right 2018. All rights reserved. Contains information © Local Authorities. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains Ordnance Survey Data. Ordnance Survey Licence number AC0000849444. Crown Copyright and Database Right. © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2024. © National Grid UK

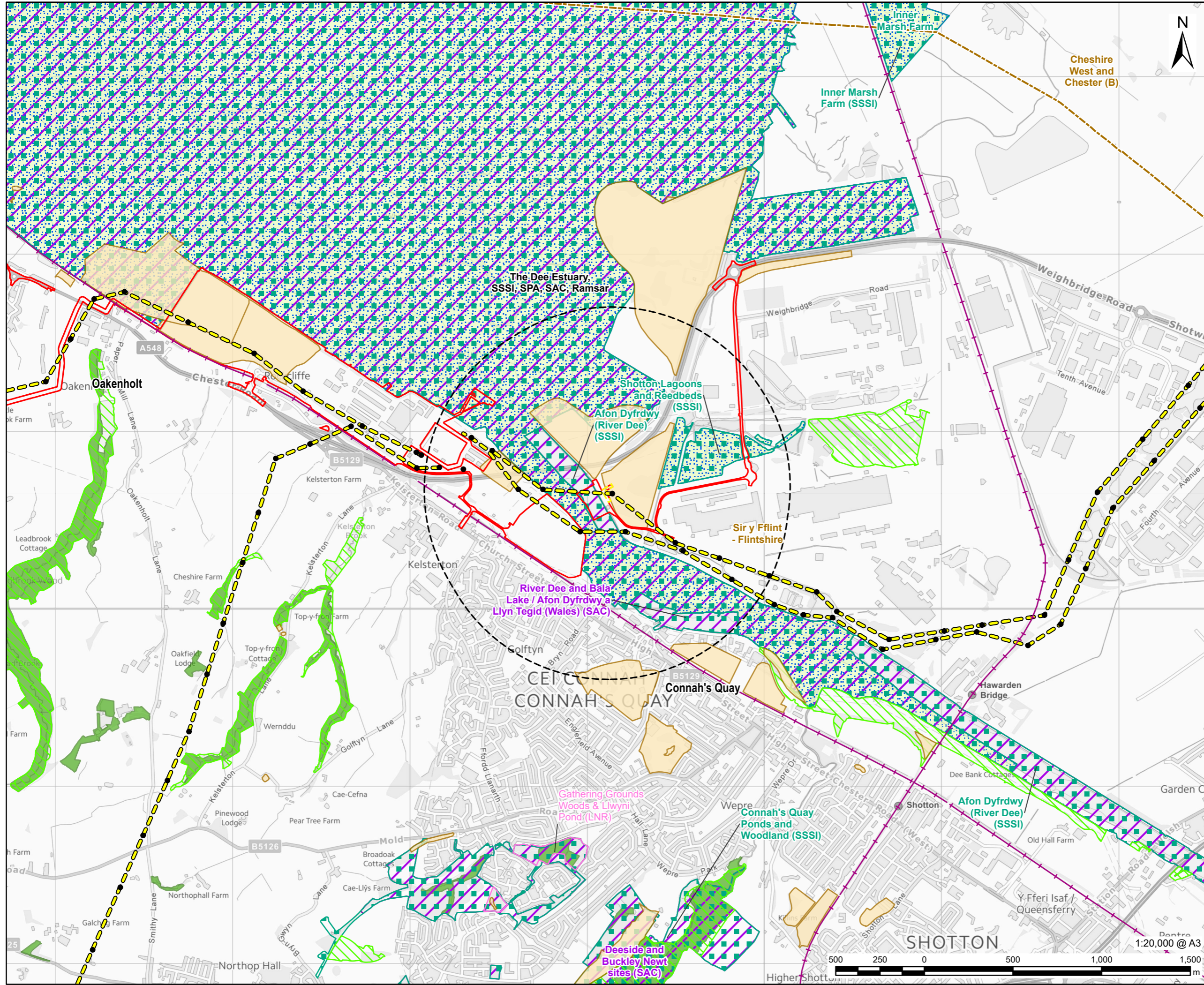
**ISSUE PURPOSE**  
Environmental Statement

**DATE**  
March 2026

**PROJECT NUMBER**  
60768754

**FIGURE TITLE**  
Environmental Context of the  
Hardstanding Expansion at Connah's  
Quay North Jetty  
Sheet 1 of 2

**FIGURE NUMBER**  
Figure 5B-A1



This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

## PROJECT Connah's Quay Low Carbon Power

**CONSULTANT**  
AECOM Limited  
The Colmore Building  
Colmore Circus, Queensway  
Birmingham, B4 6AT  
www.aecom.com

- LEGEND**
- Order limits
  - Hardstanding Expansion at Connah's Quay North Jetty
  - 1km Buffer of the Hardstanding Expansion at Connah's Quay North Jetty
  - Grade II\* Listed Building
  - Grade II Listed Building
  - Scheduled Monument
  - Watercourse
  - National Cycle Network (NCN)
  - Public Right of Way (PRoW)
  - Footpath
  - Byway Open to All Traffic (BOAT)
  - Bridleway

**Environment Agency (EA) Flood Map for Planning:**

- Flood Zone 2
- Flood Zone 3

**Natural Resources Wales (NRW) Flood Map for Planning:**

**Risk from Surface Water and Small Watercourses**

- Flood Zone 2
- Flood Zone 3

**Risk from Rivers**

- Flood Zone 2
- Flood Zone 3

**Risk from Seas**

- Flood Zone 2
- Flood Zone 3

**ISSUE PURPOSE**

Environmental Statement

**DATE**

March 2026

**PROJECT NUMBER**

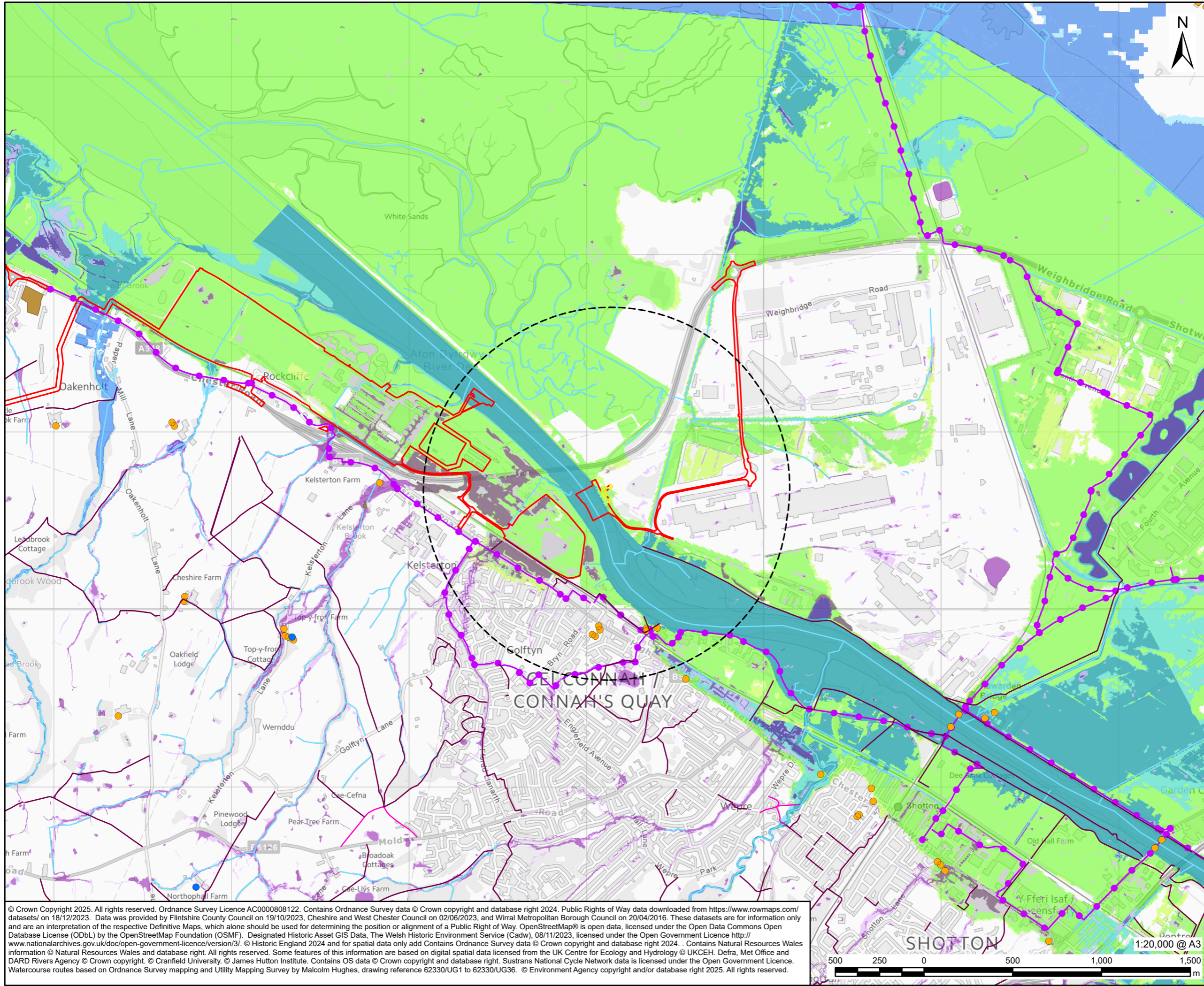
60768754

**FIGURE TITLE**

Environmental Context of the  
Hardstanding Expansion at Connah's  
Quay North Jetty  
Sheet 2 of 2

**FIGURE NUMBER**

Figure 5B-A1



© Crown Copyright 2025. All rights reserved. Ordnance Survey Licence AC0000808122. Contains Ordnance Survey data © Crown copyright and database right 2024. Public Rights of Way data downloaded from <https://www.rowmaps.com/datasets/> on 18/12/2023. Data was provided by Flintshire County Council on 19/10/2023, Cheshire and West Chester Council on 02/06/2023, and Wirral Metropolitan Borough Council on 20/04/2016. These datasets are for information only and are an interpretation of the respective Definitive Maps, which alone should be used for determining the position or alignment of a Public Right of Way. OpenStreetMap® is open data, licensed under the Open Data Commons Open Database License (ODbL) by the OpenStreetMap Foundation (OSMF). Designated Historic Asset GIS Data, The Welsh Historic Environment Service (Cadw), 08/11/2023, licensed under the Open Government Licence <http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>. © Historic England 2024 and for spatial data only add Contains Ordnance Survey data © Crown copyright and database right 2024. . Contains Natural Resources Wales information © Natural Resources Wales and database right. All rights reserved. Some features of this information are based on digital spatial data licensed from the UK Centre for Ecology and Hydrology © UKCEH, Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right. Sustrans National Cycle Network data is licensed under the Open Government Licence. Watercourse routes based on Ordnance Survey mapping and Utility Mapping Survey by Malcolm Hughes, drawing reference 62330/UG1 to 62330/UG36. © Environment Agency copyright and/or database right 2025. All rights reserved.

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as signed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

# Annex B – Ecological Walkover

## Table of Contents

1.	Introduction .....	5
1.1	Background .....	5
2.	Method .....	6
2.1	Desk Study .....	6
2.2	Field Survey .....	6
2.3	Limitations and Assumptions .....	7
3.	Ecological Baseline, Constraints and Recommendations .....	8
3.1	Desk Study .....	8
3.2	Field Survey .....	10
4.	Conclusion .....	18
5.	Figure 5B-B1 .....	19
6.	Photographs .....	20
7.	References .....	27

## Tables

Table 1:	Designated Sites within the Study Area .....	8
Table 2:	Notable habitats within the Study Area .....	10
Table 3:	Roost Suitability of the Trees and Structures/Buildings within the Site .....	13

# 1. Introduction

## 1.1 Background

- 1.1.1 The Hardstanding Expansion at Connah's Quay North Jetty (the Hardstanding Expansion) was not included within the Order limits at the point of submission of the DCO Application and is now introduced by the Change Application. On this basis the Hardstanding Expansion was not considered within ecological surveys reported in **Appendices 11-C to 11-M** of the **ES (EN010166/APP/6.4)**.
- 1.1.2 **Figure 5B-B1** (Section 5) shows the approximate boundary of the Hardstanding Expansion (dashed red line). The expansion would be divided into two sections: one approximately 50 m by 16 m (800 m<sup>2</sup>) and another 62.5 m by 16 m (1,000 m<sup>2</sup>). This Hardstanding Expansion area, along with adjacent accessible areas, is hereafter referred to as the Survey Area.
- 1.1.3 The Hardstanding Expansion is located to the east of Flintshire Bridge, A548, Kelsterton, Connah's Quay, Flintshire, Wales, CH5 2UL, and to the north of the River Dee (the central Ordnance Survey Grid Reference is SJ 29096 70670).
- 1.1.4 This report provides details following a high-level ecological desk-study and an ecology walkover survey undertaken on 18 November 2025 to identify relevant ecological features of interest within the Survey Area and to make recommendations for any further survey requirements or mitigation measures. The methods and results of the survey are provided within Section 2 and Section 3 respectively.

## 2. Method

### 2.1 Desk Study

- 2.1.1 A high-level ecological desk study was undertaken in November 2025 using freely available web-based data (i.e. Multi Agency Geographic Information for the Countryside (MAGIC) (Ref 1) website and the Joint Nature Conservation Committee (JNCC) (Ref 2) website), including mapping and aerial photography, to identify the presence of notable habitats<sup>1</sup> and designated sites of nature conservation importance (statutory sites only) within 1 km of the Hardstanding Expansion. This was extended to 5 km for international statutory designated sites: Special Protection Areas (SPAs), Wetlands of International Importance (Ramsar sites) and Special Areas of Conservation (SACs) to assist in determining the likelihood for notable species<sup>2</sup> to occur within 1 km of the Hardstanding Expansion. The area covered by the desk study is hereafter referred to as the Study Area.

### 2.2 Field Survey

- 2.2.1 The ecology walkover survey was conducted on 18 November 2025 and comprised a walkover survey of the Survey Area, broadly following the UKHab survey methodology (UKHab, 2018) (Ref 3) and with reference to current good practice (CIEEM, 2017) (Ref 4).
- 2.2.2 An appraisal was made of the potential suitability of the habitats present within the Survey Area to support protected and notable species of plants or animals. Field signs, habitat features with potential to support protected species, and any sightings or auditory evidence were recorded when encountered, but no detailed surveys were carried out for any particular species with the exception of a preliminary bat roost appraisal which is presented below.
- 2.2.3 [REDACTED]
- 2.2.4 Photographs were taken where considered appropriate to provide supplementary information, in particular of notable ecological features. These are provided in Section 6.

#### Preliminary Bat Roost Appraisal

- 2.2.5 A preliminary bat roost appraisal (PRA) survey of the suitable trees and buildings/structures in the Survey Area was carried out alongside the ecology walkover. Surveys followed guidance published by Collins (2023) (Ref 6). Potential Roost Features (PRF) were identified from the ground

<sup>1</sup> Notable habitats are taken as principal habitats for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; habitats listed under the Flintshire Biodiversity Action Plan (BAP); hedgerows identified as being 'important' under the wildlife criteria of the Hedgerow Regulations 1997, ancient woodlands and veteran trees.

<sup>2</sup> Notable species are taken as principal species for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; any species listed in an IUCN Red Data Book; and any other species listed under the Flintshire BAP.

(using torch and binoculars as necessary) and the structures classified as having Negligible, Low, Moderate or High bat roost suitability, in accordance with Collins (2023).

- 2.2.6 Trees were examined from the ground using close focusing binoculars and a high-powered torch for PRFs such as loose bark, cavities and ivy that could be utilised by bats. Trees were also checked for any signs of bats such as droppings. The trees were classified as having None, [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

## 2.3 Limitations and Assumptions

- 2.3.1 Information obtained during the course of a desk study is dependent upon people and organisations having made and submitted records for the area of interest. As such, a lack of records for particular habitats or species does not necessarily mean that the habitats or species do not occur in the Study Area. Likewise, the presence of records for particular habitats and species does not automatically mean that these still occur within the area of interest or are relevant in the context of the Hardstanding Expansion.
- 2.3.2 An ecological survey represents a snapshot in time of the ecological condition of a site. The ecological character of a site can change substantially throughout both the course of a year, and from year to year impacting on the extent and quality of habitats' potential to support protected species.
- 2.3.3 Ecological surveys are limited by factors which affect the presence of animals such as the time of year, migration patterns and behavior.
- 2.3.4 The survey was conducted outside the optimal survey season, however, due to the types of habitats present, this is not considered to affect the outcome of the ecology field survey and conclusions of this report.
- 2.3.5 Some habitats and buildings/structures within the Survey Area were not accessed due to health and safety reasons or due to being located on the opposite side of a metal chain link fence and therefore, where possible, were surveyed from vantage points and with the aid of satellite imagery. Where these habitats could not be accessed, habitats have been assumed as a continuation of surveyable habitats.
- 2.3.6 None of these limitations either singly or in combination are significant enough to affect baseline, assessments and resulting mitigation referenced in this report.

## 3. Ecological Baseline, Constraints and Recommendations

### 3.1 Desk Study

- 3.1.1 There are seven statutory designated sites for nature conservation within the Study Area. **Table 1** summarises the designated sites (statutory only) situated within the Study Area. There are no non-statutory designated sites with 1 km of the Hardstanding Expansion.

**Table 2: Designated Sites within the Study Area**

Designated Site	Reason for Designation	Location of Designated Site <sup>3</sup>
Dee Estuary / Aber Dyfrdwy Site of Special Scientific Interest (SSSI)	This SSSI is of special interest for its total populations of internationally important wintering waterfowl; its populations of individual waterfowl and tern species whose numbers reach national and, in some cases, internationally important levels; its intertidal mud and sandflats, saltmarsh and transitional habitats; the hard rocky sandstone cliffs of Hilbre Island and Middle Eye with their cliff vegetation and maritime heathland and grassland; its assemblage of nationally scarce plants; and its populations of sandhill rustic moth <i>Luperina nickerlii gueneei</i> , a Red Data Book species.	Approximately 30 m from the Hardstanding Expansion.
Dee Estuary / Aber Dyfrdwy SAC (England and Wales)	Designated for its mudflat and sandflat habitats, not covered by seawater at low tide: <i>Salicornia</i> and other annuals colonising mud and sand; Atlantic salt meadows <i>Glaucopuccinellietalia maritima</i> ; estuaries; annual vegetation of drift lines; vegetated sea cliffs of the Atlantic and Baltic Coasts; embryonic shifting dunes; shifting dunes along the shoreline; fixed dunes with herbaceous vegetation and humid dune slacks.  Annex II qualifying features for selection of the SAC include sea lampreys <i>Petromyzon marinus</i> and	Approximately 30 m from the Hardstanding Expansion.

<sup>3</sup> Where designated sites are situated outside of the Hardstanding Expansion, the distance and direction is given at the closest point of the designated site from the Hardstanding Expansion.

Designated Site	Reason for Designation	Location of Designated Site <sup>3</sup>
	river lampreys <i>Lampetra fluviatilis</i> and petalwort <i>Petalophyllum ralfsii</i> .	
Dee Estuary / Aber Dyfrdwy Ramsar	Designated for wintering and passage waterfowl populations. The estuary supports internationally important numbers of waterfowl and waders. Estuarine and maritime habitats including mud flats, sand flats and salt marsh; and breeding colonies of natterjack toad <i>Epidalea calamita</i> .	Approximately 110 m from the Hardstanding Expansion.
Dee Estuary / Aber Dyfrdwy SPA (England and Wales)	Designated for supporting over wintering bird species. The site also supports breeding common tern <i>Sterna hirundo</i> and little tern <i>Sterna albifrons</i> , as well as supporting on passage <sup>4</sup> sandwich tern <i>Sterna sandvicensis</i> and redshank <i>Tringa totanus</i> . The SPA regularly supports >20,000 waterfowl.	Approximately 110 m from the Hardstanding Expansion.
River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC	Designated for the presence of the Annex 1 habitat Watercourses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-batrachion</i> vegetation; and its populations of the Annex II species Atlantic salmon <i>Salmo salar</i> and floating water-plantain <i>Luronium natans</i> . Annex II qualifying features for selection of the site include sea Lamprey <i>Petromyzon marinus</i> , river lamprey <i>Lampetra fluviatilis</i> , brook lamprey <i>Lampetra planeri</i> , otter <i>Lutra lutra</i> , petalwort <i>Petalophyllum ralfsii</i> , and bullhead <i>Cottus gobio</i> .	Approximately 30 m from the Hardstanding Expansion.
Shotton Lagoons and Reedbeds SSSI	This SSSI is of special interest for its breeding population of common tern, <i>Sterna hirundo</i> and their reedswamp vegetation characterised by common reed <i>Phragmites australis</i> .	Approximately 300 m northeast of Hardstanding Expansion.
Deeside and Buckley Newt Sites SAC	Designated for its great crested newt <i>Triturus cristatus</i> population, one of the largest in Great Britain.	Approximately 1.8 km south of the

<sup>4</sup> On passage refers to birds that pass through an area on route to another wintering or breeding ground and do not necessarily breed within the area.

Designated Site	Reason for Designation	Location of Designated Site <sup>3</sup>
		Hardstanding Expansion.

3.1.2 Table 2 summarises the records of notable habitats within the Study Area.

**Table 3: Notable habitats within the Study Area**

Habitat / Flora Feature	Reason for Conservation Interest	Nearest Location of Habitat / Flora <sup>5</sup>
Intertidal Substrate	UK Biodiversity Action Plan (BAP) Priority Habitats	Within the River Dee 30 m from the Hardstanding Expansion
Saltmarsh	UK BAP Priority Habitats	80 m west of the Hardstanding Expansion (on opposite side of River Dee)

## Constraints and Recommendations

3.1.3 Due to the nature, scale and location (not in the River Dee) of the Hardstanding Expansion impacts on designated sites are considered highly unlikely.

3.1.4 The proposed works involves some vegetation removal and hardstanding creation approximately 50 m inland from the River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid SAC at its closest, separated from the SAC by the existing operational quay and the river wall. The proposed works are also a minimum of 130 m from the Dee Estuary / Aber Dyfrdwy SAC / SPA / Ramsar, on the opposite bank of the river. This is sufficiently distant that no impact pathways exist and no changes to the **Report to inform Habitats Regulations Assessment (EN010166/APP/6.12)** is required.

## 3.2 Field Survey

### Habitats

3.2.1 Summary descriptions of the habitats from the survey are provided below and photographs are provided within Section 6.

#### *Developed land, sealed surface – u1b*

3.2.2 Hardstanding is found throughout the Survey Area including the jetty, roads and gravelled areas and tracks. An area of gravel covers part of the Hardstanding Expansion.

#### *Buildings – u1b5*

3.2.3 No buildings are located within the Hardstanding Expansion. Three brick buildings including a pump house are located within the Survey Area, along

<sup>5</sup> Where designated sites are situated outside of the Hardstanding Expansion, the distance and direction is given at the closest point of the nearest notable habitats, protected and notable flora from the Hardstanding Expansion.

the jetty edge within areas of hardstanding. A single storey brick building is located to the north of the Hardstanding Expansion, on the opposite side of a metal chain link fence. Three buildings have flat roofs, and one has a corrugated pitched metal roof. A large concrete cylindrical tower with large metal pipes and metal staircases on the sides is located to the north of the Hardstanding Expansion. Scattered buddleia *Buddleja davidii* is present around the edges of the buildings.

### Other neutral grassland – g3c

- 3.2.4 Neutral grassland forms a large part of the Survey Area and appears to be subject to occasional cutting. Species within the grassland include cock's-foot *Dactylus glomerata*, tufted hair grass *Deschampsia cespitosa*, ribwort plantain *Plantago lanceolata*, creeping thistle *Cirsium arvense*, common knapweed *Centaurea nigra*, nettle, creeping buttercup *Ranunculus repens*, bramble, white clover *Trifolium repens* and dandelion *Taraxacum* sp.. Areas of bare ground and scattered buddleia are present within the grassland. A National Grid pylon is located within the grassland, adjacent to the Hardstanding Expansion.

### Dense scrub - h3

- 3.2.5 Large areas of dense bramble *Rubus fruticosus* scrub (h3d) are located within the Survey Area, including within the Hardstanding Expansion. Dense bramble scrub covering a gravel/earth mound located within the Hardstanding Expansion leads into the neutral grassland towards a metal pylon and fence line. Other species within the habitat include common ragwort *Senecio jacobaea*, dandelion *Taraxacum* sp, greater plantain *Plantago major*, thistle *Cirsium* sp. and tall ruderals including nettle *Urtica dioica* and dock *Rumex* sp.. Scattered buddleia is present within the bramble scrub. An area of mixed scrub (h3h) adjacent to the bramble scrub leading into the grassland includes bramble, young silver birch *Betula pendula*, rose *Rosa* sp., young elderberry *Sambucus nigra* and willow *Salix* sp. trees.
- 3.2.6 An area of dense bramble scrub between a gravel track and the concrete structure to the north of the Hardstanding Expansion also includes elderberry, cotoneaster *Cotoneaster* sp. and cleavers *Galium aparine*.
- 3.2.7 A patch of sea-buckthorn *Hippophae rhamnoides* scrub (h3c) is located between the bramble scrub and the neutral grassland.

### Urban tree

- 3.2.8 Scattered trees including saplings, young and semi mature species are found within the Survey Area including within the neutral grassland, adjacent to the Hardstanding Expansion and adjacent to the buildings and concrete structure. Species include silver birch and willow.

### Other broadleaved woodland – w1g

- 3.2.9 A small broadleaved woodland predominantly comprised of semi-mature willow trees is adjacent to the Hardstanding Expansion. The ground layer is comprised of leaf litter with some ivy *Hedera helix* and bramble, otherwise bare ground. Mature, very dense bramble forms a partial boundary around the edges and leads into the bramble scrub within the Hardstanding Expansion. Dead wood is present and no INNPS or browsing damage was

identified. Rabbit *Oryctolagus cuniculus* burrows with four active holes and at least three collapsed holes were identified amongst the trees and bank within the woodland. Rabbit droppings were also present.

### *Rivers and streams – r2*

- 3.2.10 The River Dee runs adjacent to the Connah's Quay North Jetty, within the Survey Area. There are multiple designated areas associated with the River Dee including the Dee Estuary Ramsar, the Dee Estuary SSSI and the Dee Estuary SAC and SPA. The river is approximately 150 m wide at the point where it is adjacent to the jetty, with intertidal substrate present along the edges of both sides of the river including mud, rock and sand.

## Constraints and Recommendations

- 3.2.11 All habitats within the Survey Area including the Hardstanding Expansion are common and widespread. The Hardstanding Expansion would result in the loss of the scrub covered earth/gravel mound, an area of neutral grassland, some scattered trees and a section of the woodland within the Hardstanding Expansion.
- 3.2.12 The hardstanding, buildings, and scrub habitats present within the Hardstanding Expansion and Survey Area are considered to be of limited ecological value, and therefore, the loss of these habitats would not require specific habitat mitigation. Their value with respect to protected/ notable species they potentially support and necessary considerations is discussed below.
- 3.2.13 Measures included within the **Framework Construction Environmental Management Plan (CEMP) (EN010166/APP/6.5)** related to dust management and guidance for pollution control provide suitable mitigation for any potential impacts on the River Dee.
- 3.2.14 Where habitats adjacent to the Hardstanding Expansion are to be retained, caution should be taken to avoid any tree root protection areas, particularly if heavy plant is used on site. Standard protection outlined in *BS 5837 (2012) Trees in relation to design, demolition and construction* (Ref 7) should be followed (see **Annex C: Tree Constraints Plan**).
- 3.2.15 There are no other notable, protected or rare habitats present within or immediately adjacent to the Survey Area that potentially represent a constraint.
- 3.2.16 No further survey work for habitats/flora is recommended.

## Potential for Protected/Notable Species

### *Bats*

- 3.2.17 No trees within the Survey Area were identified as having features potentially suitable for roosting bats. Therefore, no further surveys for bats on the trees are required.
- 3.2.18 [REDACTED]

structures and buildings within the Survey Area were considered to offer Negligible suitability for roosting bats. None of these buildings would be removed as part of the Hardstanding Expansion.

3.2.19 **Table 3** provides a summary of the roost suitability of the structures and buildings within the Survey Area.

**Table 4: Roost Suitability of the Trees and Structures/Buildings within the Survey Area**

Building/ Structure Name	Description	Potential Roost Features	Bat Roost Suitability
B1	Single storey brick building with pitched corrugated metal roof, plastic guttering and boarded up windows. Possibly suitable for birds.	Gaps in brickwork at both ends of the building, open entrance on porch and gaps in window boards	Moderate suitability
B2	Brick building "Cw Make-up Pumphouse" with metal doors and grills/vents. Flat roof.	Large gaps in vents	Low suitability
B3	Single storey brick building with flat roof and metal doors. Not suitable for birds.	None present	Negligible
B4	Concrete cylindrical tower with large metal pipes and metal staircase on sides. No PRF but may be suitable for birds nesting under pipes and within shrubs on tower.	None present	Negligible
B5	Single storey brick building with flat roof and glass windows. Appears to be used as an office. Not suitable for birds.	None present	Negligible

3.2.20 Some habitats present within the Survey Area including scrub, trees and woodland are suitable for foraging and commuting bats, however no bat activity surveys are recommended due to the nature and limited footprint of the works. However, there is a risk of disturbing bats during the works through light disturbance. Therefore, if night working is required, lighting should follow standard practice guidance within the Bat Conservation Trust & Institution of Lighting Professionals Guidance Note 08/18 (Ref 8) as detailed in the **Framework CEMP (EN010166/APP/6.5)**.

### *Birds*

3.2.21 The trees, woodland, scrub, buildings/structures and grassland habitats within the Survey Area provide opportunities for nesting, foraging and

sheltering birds. The National Grid pylon within the grassland could also be used by nesting birds, e.g. crows *Corvus* or peregrine falcon *Falco peregrinus*.

- 3.2.22 The core works associated with the Hardstanding Expansion should be completed between April and June inclusive. However, as detailed in the **Framework CEMP (EN010166/APP/6.5)**, where practicable, all clearance of vegetation suitable for breeding birds should be undertaken outside the breeding bird season (typically March to August inclusive for most species). If not possible, the Ecological Clerk of Works (ECoW) would check the working area for nests before works commence. If active nests are discovered through this process, then the ECoW would advise on appropriate mitigation to ensure that these are not impacted by construction activities. All relevant works would be completed in accordance with this advice and under an ecological watching brief (in the presence of the ECoW). Birds may be dissuaded from nesting in the Order limits by removing vegetation from the desired area before the breeding season commences. Where this is not possible bird deterrent measures would be deployed to deter birds from nesting, followed by the completion of a pre-works survey to check for the presence of nests. In some cases a combination of measures may be required (to be advised by the ECoW) such as to prevent ground nesting species nesting on bare ground after vegetation removal. If Schedule 1 bird species are found breeding within the working area, or close enough to the working area that works would result in disturbance of the breeding birds, works would stop immediately and the advice of an ornithologist would be consulted to ensure that measures are put in place to avoid disturbance occurring.
- 3.2.23 Construction materials associated with the works, left for long periods of time during the breeding bird season, might be used by nesting birds. For example, pallets of equipment and rubble piles may be used by species such as wren *Troglodytes troglodytes* or robin *Erithacus rubecula*. Therefore, care should be taken when moving equipment during the breeding season, particularly if it has been in situ for several days.
- 3.2.24 Additionally, the measures related to the use of artificial lighting discussed above for bats are relevant to birds.

#### **Badger**

- 3.2.25 No setts or evidence of badger *Meles meles* was identified within the Survey Area, however, the habitats within the Survey Area have suitability for badger, including some areas of scrub, grassland and the woodland.
- 3.2.26 Due to there being potentially suitable habitat for badger within the Hardstanding Expansion and directly adjacent it is recommended that a pre-construction check for badger setts is undertaken prior to the commencement of any work. This requirement is detailed in the **Framework CEMP (EN010166/APP/6.5)**.

#### **Great Crested Newt**

- 3.2.27 There are no waterbodies or other water features suitable to support breeding great crested newt *Triturus cristatus* or other amphibians within the Survey Area. However, the terrestrial habitats present within the Survey Area

may provide shelter and foraging habitat for great crested newt and other amphibians, namely scrub, trees, grassland and wooded habitat for shelter and hibernaculum material.

- 3.2.28 A review of the 1:25,000 Ordnance Survey map indicates several waterbodies within 500 m of the Survey Area (with the majority over 250 m from the Hardstanding Expansion and associated with the Dee Estuary to the north and east of the Hardstanding Expansion). The nearest waterbody is approximately 105 m to the north of the Hardstanding Expansion. There is therefore a risk that this species, if present within ponds/ waterbodies within 500 m, could be present within terrestrial habitats within the Hardstanding Expansion.
- 3.2.29 Due to the suitable terrestrial habitat and presence of waterbodies within 500 m of the Survey Area, the presence of great crested newt cannot be ruled out. Due to the absence of waterbodies within the Survey Area and the scale and localised nature of the Hardstanding Expansion, it is recommended to proceed with works under guidance of a Precautionary Working Method Statement (PWMS) supervised by an appropriately experienced ecologist without a need for a preceding presence/absence survey. The principles of the PWMS are detailed in the **Framework CEMP (EN010166/APP/6.5)**.
- 3.2.30 As detailed in the **Framework CEMP (EN010166/APP/6.5)**, an ECoW should be appointed prior to and during any vegetation clearance of scrub, grassland or woodland if they are to be carried out during the species' terrestrial phase (October to February) (CIEEM, 2016) (Ref 9).
- 3.2.31 If great crested newt are identified as being present, then a Natural Resources Wales European Protected Species Mitigation Licence (EPSML) may be required. The mitigation licence would include the measures necessary to maintain the favourable Conservation Status of great crested newt, including the appropriate timing of works and provision of replacement habitat.

#### **Natterjack Toads**

- 3.2.32 The habitat requirements for natterjack toad *Epidalea calamita* are specific, typically confined to coastal sand dune systems, coastal grazing marshes and sandy heaths which are absent from the Survey Area. Although they are known to be present in the wider environment, namely along the Dee Estuary, the habitats present within the Survey Area are not considered to be suitable to support natterjack toads which rely upon sparsely vegetated habitats with shallow, ephemeral ponds. Therefore, natterjack toad are not considered further in this report, and no further surveys are considered necessary for these species.

#### **Reptiles**

- 3.2.33 Relevant species of reptile refers to common lizard *Zootoca vivipara*, slow worm *Anguis fragilis*, adder *Vipera berus* and grass snake *Natrix helvetica*. No field signs or sightings of common species of reptile were recorded during the field survey. However, the neutral grassland, woodland and scrub within the Survey Area have potential to support common species of reptile.

3.2.34 It is therefore recommended that works within suitable habitat should be undertaken in accordance with a PWMS as detailed in the **Framework CEMP (EN010166/APP/6.5)**.

3.2.35 No further surveys are considered necessary for these species.

#### *Terrestrial Invertebrates*

3.2.36 The grassland, woodland, scrub and tree bark crevices/splits within the Survey Area have potential to support common terrestrial invertebrates. Given the scale of the Hardstanding Expansion and the availability of suitable habitats in the immediately adjacent area no significant effects are anticipated.

3.2.37 No further surveys are considered necessary for these species.

#### *Other Notable Species*

3.2.38 No evidence of hedgehog *Erinaceus europaeus* or common toad *Bufo bufo* was identified during the field survey. The woodland, grassland and scrub offer low potential for hedgehog and common toad and there could be low numbers of hedgehogs and/or common toad which use or pass through the Survey Area. As detailed in the **Framework CEMP (EN010166/APP/6.5)**, care should be taken during any vegetation removal through a two-stage cut, including a visual check for animals prior to removal. Given the limited footprint and confined nature of the works, any potential impacts on hedgehog and common toad can be managed by the implementation of standard practice mitigation measures, including caution during site clearance. Any animals found should be moved out of the works area with gloved hands and released in similar habitat to where they were found outside the area of works

3.2.39 No further surveys are considered necessary for these species.

#### *Invasive Non-Native Plant Species (INNPS)*

3.2.40 Cotoneaster was identified within an area of dense bramble scrub, adjacent to the concrete structure to the north of the Harstanding Expansion. Some species of cotoneaster are listed in Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). It is illegal to plant or otherwise cause to grow in the wild any plant listed in Schedule 9, Part II pursuant to Section 14(2) of the Wildlife and Countryside Act 1981 (as amended).

3.2.41 Scattered individual buddleia was recorded within the scrub, grassland and adjacent to the buildings and hardstanding during the field survey.

3.2.42 A patch of sea-buckthorn scrub was identified near the Hardstanding Expansion, between the bramble scrub and neutral grassland.

3.2.43 As detailed in the **Framework CEMP (EN010166/APP/6.5)** an Invasive Species Management Plan (ISMP) survey would be updated prior to construction to determine the current location and extent of plant INNS, and to inform specification of the ISMP.

### Otter

3.2.44 The River Dee runs adjacent to the Survey Area. No signs of otter *Lutra lutra* were recorded during the survey. The Hardstanding Expansion and the section of the River Dee within the Survey Area does not support suitable features for otter (such as tall bankside vegetation and scrub to allow otter to breed or create holts), so their presence within the Hardstanding Expansion is unlikely. However, otter may use the River Dee to commute and forage between more suitable areas of the river upstream/downstream, therefore, appropriate mitigation will be required to prevent disturbance to commuting and foraging otter as detailed in the **Framework CEMP (EN010166/APP/6.5)**.

3.2.45 No further surveys are considered necessary for these species.

### Water Vole

3.2.46 No signs of water vole *Arvicola amphibius* were recorded during the survey. The Hardstanding Expansion and the section of the River Dee within the Survey Area does not support suitable features for water vole (such as soft banks for burrowing and herbaceous vegetation to provide food and cover).

3.2.47 No suitable habitat for water vole is present within the Hardstanding Expansion so their presence is considered unlikely, and no further surveys or recommendations are required for this species.

## 4. Conclusion

4.1.1 This report is based on a desk study and ecological surveys undertaken in November 2025 to assess the ecological baseline and potential constraints to the Hardstanding Expansion. Due to the relatively small nature and scale of the proposed works in terms of footprint, the expected impacts of the Hardstanding Expansion on the ecology within the Survey Area are considered likely to be low.

4.1.2 Measures outlined within the **Framework CEMP (EN010166/APP/6.5)** include:

- where artificial lighting is required, direct it only towards the required area of works, to avoid light-spill into adjacent areas, particularly the River Dee and the woodland. Additionally, the lighting should be no brighter than required to safely carry out the works task, particularly for the protection of bats, birds and otter;
- the core works associated with the Hardstanding Expansion should be completed between April and June inclusive;
- where practicable carry out vegetation removal works outside the breeding bird season (March to August, inclusive); if vegetation clearance is required in the nesting bird season, the ECoW would check the working area for nests before works commence. If active nests are discovered through this process, then the ECoW would advise on appropriate mitigation to ensure that these are not impacted by construction activities;
- a pre-construction check of the Survey Area for badger setts will be undertaken prior to the commencement of any work;
- visual checks of woodland, scrub and grassland habitats will be undertaken for hedgehog and amphibians prior to removal and implement a staged vegetation removal approach;
- works within suitable habitat for reptiles including the neutral grassland, scrub and woodland to be undertaken in accordance with a PWMS;
- works within suitable habitat for great crested newt including the neutral grassland, scrub and woodland to be undertaken in accordance with a PWMS; and
- an ISMP survey would be updated prior to construction to determine the current location and extent of plant INNS, and to inform specification of the ISMP.

4.1.3 Mitigation through creation and/or enhancement of similar habitats is detailed in the **Green Infrastructure Statement (EN010166/APP/6.11)**.

## 5. Figure 5B-B1 UK Habitat Data

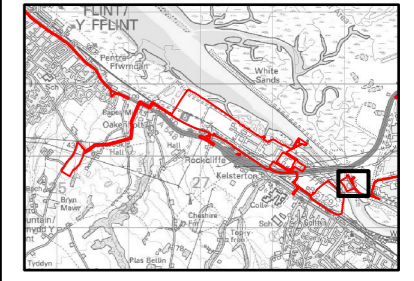


**PROJECT**  
Connah's Quay Low  
Carbon Power

**CONSULTANT**  
AECOM Limited  
The Colmore Building  
Colmore Circus, Queensway  
Birmingham, B4 6AT  
www.aecom.com

- LEGEND**
- Order limits
  - Hardstanding Expansion at Connah's Quay North Jetty
  - Survey Extent

- Baseline UK Habitat Type**
- g3c - Other Neutral Grassland
  - h3c6 - Other Sea-buckthorn Scrub
  - h3d - Bramble Scrub
  - h3h - Mixed Scrub
  - u - Urban
  - u1b5 - Buildings
  - w1 - Broadleaved and Mixed Woodland



**NOTES**  
© Crown Copyright 2025. All rights reserved.  
Ordnance Survey Licence AC0000808122.

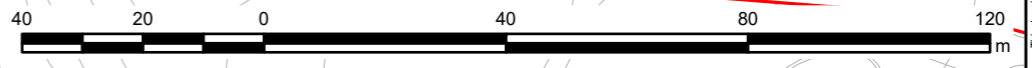
**ISSUE PURPOSE**  
Environmental Statement

**DATE**  
March 2026

**PROJECT NUMBER**  
60768754

**FIGURE TITLE**  
UK Habitat Data




**FIGURE NUMBER**  
Figure 5B-B1



This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as signed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

## 6. Photographs

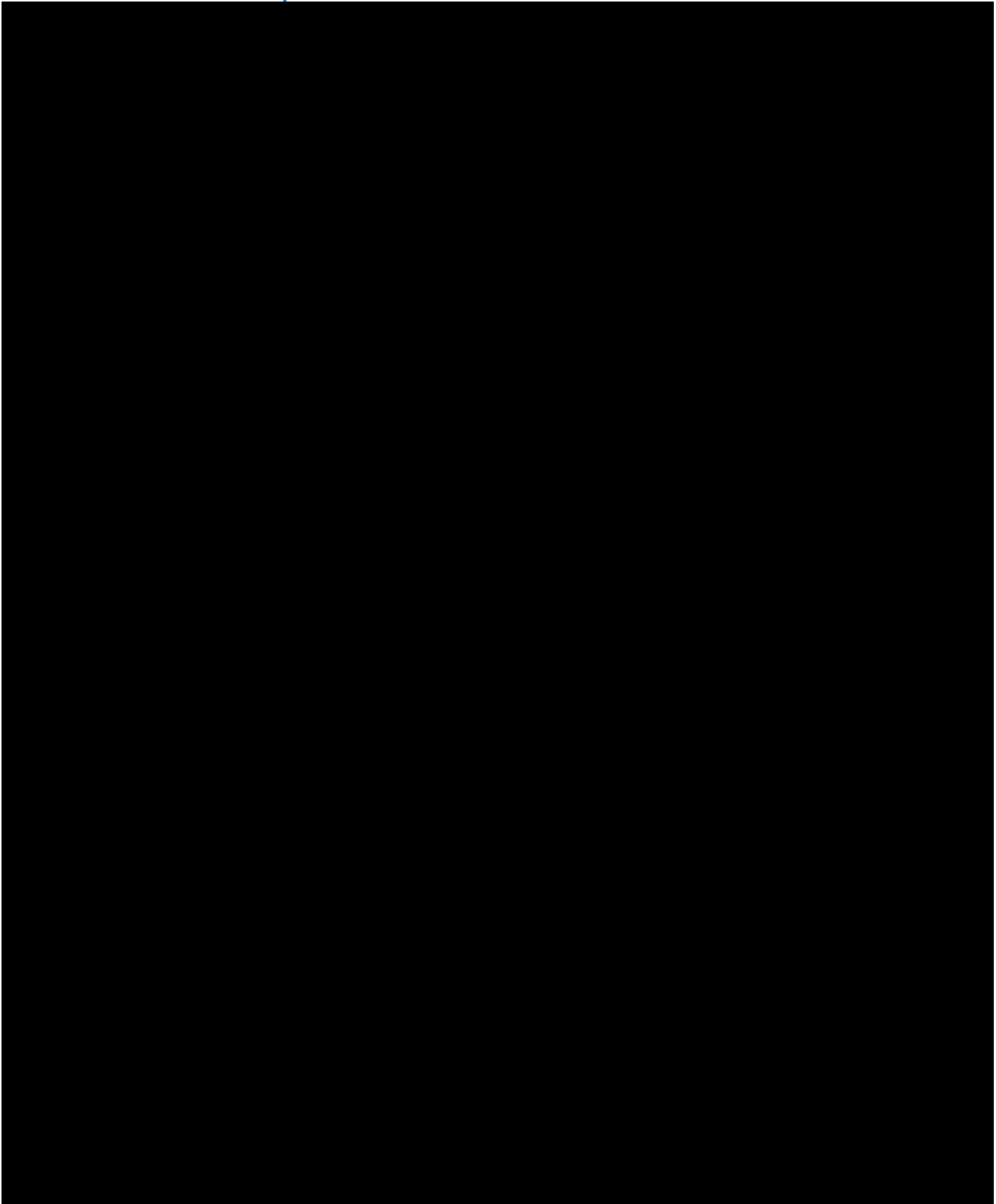
6.1.1 All photographs included within this Section were taken on 18 November 2025 using an iPhone SE.

Reference/ Description	Photographs
<p>Hardstanding found throughout the Survey Area and forms the jetty, roads and gravelled areas and tracks. First photograph shows the gravelled section of the Hardstanding Expansion, leading into the gravel/earth mound and scrub, still within the Hardstanding Expansion. Neutral grassland, woodland, scattered trees and buddleia are all immediately adjacent or within the Hardstanding Expansion.</p>	  

---

Reference/

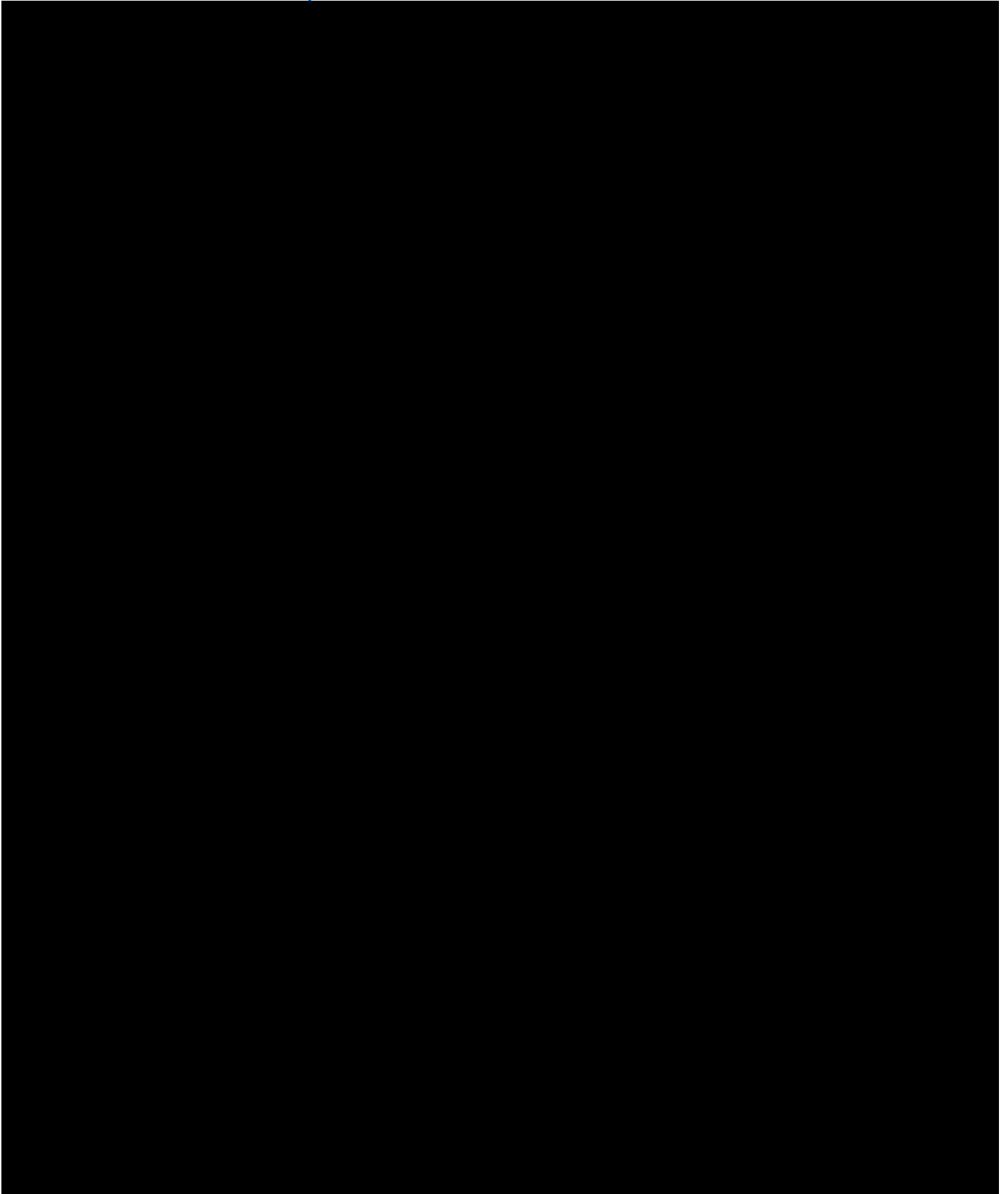
Photographs



---

Reference/

Photographs



Reference/

Photographs

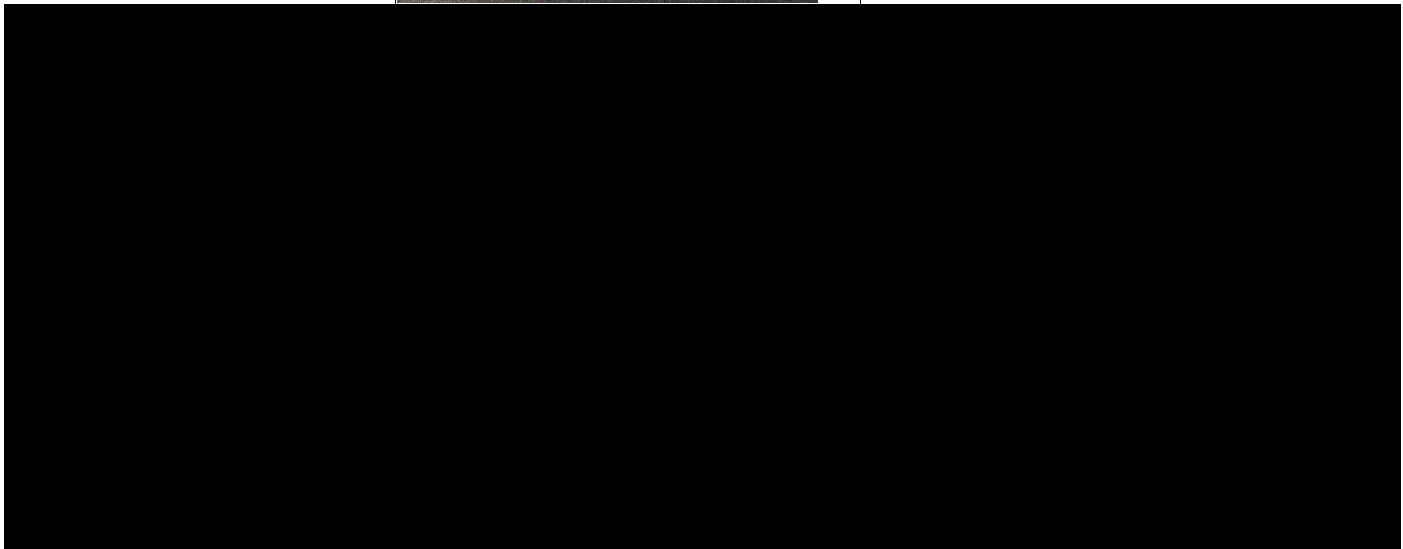
Neutral grassland which forms a large part of the Survey Area.



Scattered trees are found within the Survey Area including within the neutral grassland and adjacent to buildings.


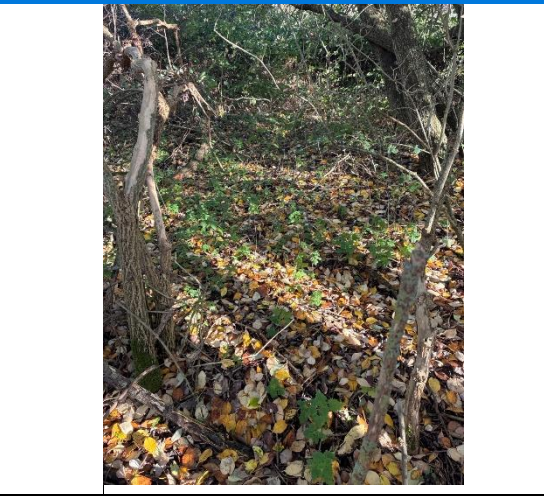






Reference/ Description	Photographs
---------------------------	-------------



Small woodland  
comprised of  
predominantly  
willow *Salix* sp.,  
immediately  
adjacent to the  
Hardstanding  
Expansion



Reference/ Description	Photographs	
		
<p>Scattered <i>Buddleia davidii</i> was recorded within the grassland and adjacent to the buildings and hardstanding. Although buddleia is not listed in Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) it is considered to be invasive. Scattered buddleia is immediately adjacent to the Hardstanding Expansion.</p>		
<p>A patch of sea-buckthorn <i>Hippophae rhamnoides</i> scrub located between the bramble scrub and the neutral grassland. Although sea-buckthorn is not listed in Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)</p>		

Reference/ Description	Photographs	
it is considered to be invasive.		
<p>Bramble scrub. First photograph shows area of scrub on gravel/earth mound within Hardstanding Expansion. Second photograph shows scrub behind mound within Hardstanding Expansion.</p>		

## 7. References

- Ref 1 Defra, (2026). Magic Map, <https://magic.defra.gov.uk/MagicMap.html> (Accessed 09/03/2026)
- Ref 2 Joint Nature Conservation Committee, (2006). <https://jncc.gov.uk> (Accessed 09/03/2026)
- Ref 3 UKHab (2018). UK Habitat Classification Guidelines.
- Ref 4 CIEEM (2017). Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Ref 5 Wildlife and Countryside Act 1981. <https://www.legislation.gov.uk/ukpga/1981/69> (Accessed 09/03/2026)
- Ref 6 Collins (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4<sup>th</sup> edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6
- Ref 7 BSI (2012). BS 5837:2012. Trees in relation to design, demolition and construction – Recommendations. London: British Standards Institution.
- Ref 8 BCT and ILP (2023) Bats and artificial lighting in the UK. Bats and the Built Environment Series. Guidance Note 08/23.
- Ref 9 CCIEEM (2016). Guidelines for Ecological Mitigation and Compensation. Chartered Institute of Ecology and Environmental Management, Winchester.

# Annex C – Tree Constraints Plan

North Jetty Clearance Area

High Level Tree Survey Schedule

Plan Ref. No	Species Common Name (Scientific name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Spread (m)				First Significant Branch & direction (m)	Canopy Clearance Height (m)	Physiological Condition	Life Stage	Structural Condition	Observations	Preliminary Management Recommendations (based on CA of 6m x 6m)	Estimated Remaining Contribution (yrs)	Category	Root Protection Area Radius (m)
				N	S	E	W										
G58*	Willow ( <i>Salix sp</i> )	5	<90#	1	1	1	1	n/a	0	Good	Y-SM	Good - Fair	Presumably self-sown multi-stemmed trees on top of mound beyond fence. No access to base.	Fell section of group within Order Limits only.	10+	C1,2	1.08m
G59*	Goat Willow ( <i>Salix caprea</i> )	10	<460	8	8	8	8	n/a	0	Good	M	Good - Fair	All forming one canopy and one-sided towards the edge of the group.		20+	B1,2	5.52m
T60*	Goat Willow ( <i>Salix caprea</i> )	8	220, 220, 130, 200, 230, 180	5	4	7	0.2	0.5/E	0.5	Good	EM	Fair	Multi-stemmed from ground level. One sided with stems leaning to the east.		20+	B1,2	5.78m
T61*	Goat Willow ( <i>Salix caprea</i> )	4	280	0.2	7	1.2	2	0.5/S	0.2	Good	EM	Fair	One stem horizontal approx 0.5m above ground extending southeast.	Prune back to the boundary of the Order limits to provide necessary clearance area.	10+	C1,2	3.36m
T62*	Goat Willow ( <i>Salix caprea</i> )	10	330, 230, 130, 140	0.2	8	1.2	4	1.5/S	0.2	Good	M	Fair	Four stems from ground level, two significantly larger than the other two. One sided form due to tree to north.	Prune back to the boundary of the Order limits to provide necessary clearance area.	20+	B1,2	5.34m
G63*	Sea-buckthorn ( <i>Hippophae rhamnoides</i> )	4	<100#	0.5	0.5	0.5	0.5	n/a	0	Good	SM	Good	Forming a dense cluster across a brownfield area of the site.	Fell in part back to the boundary of the Order limits.	10+	C1,2	1.2m
T64*	Goat Willow ( <i>Salix caprea</i> )	3	140	3	3	3	3		0	Good	SM	Good - Fair	Growing at the edge of land through the old jetty.		10+	C1,2	1.68m
T65*	Elder ( <i>Sambucus nigra</i> )	5	210, 110, 80, 150, 80, 80	2	2	2	2		0	Good	M	Good	Buttswept from land and growing through the timbers of the old jetty. Attractive, even canopy.		20+	B1,2	3.48m
G66*	River birch ( <i>Betula nigra</i> )	7	<90	1.5	1.5	1.5	1.5	n/a	0	Good	Y	Good	Young, individual trees forming a small group.	Fell as necessary to provide clearance area.	10+	C1,2	1.08m
T67*	Elder ( <i>Sambucus nigra</i> )	6	120, 170, 90, 90, 90, 70	2	1.5	2	2	0.5/N	0	Good	M	Good - Fair	Dense, multi-stemmed tree with epicormic shoots on limbs.	Fell.	10+	C1,2	3.27m
T68*	Birch ( <i>Betula sp</i> )	10	190, 180	3	3	2	2	0.5/S	0	Good	SM	Good	Twin-semmed from base.	Fell.	20+	B1,2	3.14m
T69*	Birch ( <i>Betula sp</i> )	12	320, 290	4	4	3	4	2.0/W	0.5	Good	EM	Good	Two stems from ground level. Possibly two trees but growing together and forming one crown. Attractive tree adjacent to building with canopy over roof.		20+	B1,2	5.18m

