



5 Netley Cliffs

Ecological Impact Assessment

Prepared on behalf of Netley Cliffs Management Company

May 2024

5 Netley Cliffs
Ecology 8494
Version 01

Prepared by:	Louisa Standbrook-Jones MCIEEM	V.01	May 2024
Authorised by:	Alex Hannam MCIEEM	V.01	May 2024

Pro Vision Ecology
The Lodge
Highcroft Road
Winchester
SO22 5GU

COPYRIGHT: The contents of this document must not be copied or reproduced in whole or in part without the prior written consent of Pro Vision Ecology.

Contents

	Page
1.0 EXECUTIVE SUMMARY	1
2.0 INTRODUCTION.....	2
PROJECT BACKGROUND.....	2
BRIEF	2
RELEVANT LEGISLATION AND PLANNING POLICY.....	2
3.0 METHODOLOGIES	4
DESK STUDY	4
METHODOLOGY FOR ECOLOGICAL ASSESSMENT.....	6
4.0 BASELINE INFORMATION	8
DESIGNATED SITES	8
ECOLOGICAL ASSESSMENT	9
HABITATS.....	9
PROTECTED AND/OR NOTABLE SPECIES.....	11
5.0 IMPACTS AND MITIGATION.....	14
DESIGNATED SITES	14
PROTECTED AND/OR NOTABLE SPECIES.....	16
6.0 SUMMARY OF IMPACTS AND MITIGATION MEASURES.....	17
7.0 REFERENCES AND BIBLIOGRAPHY	18

Appendices

- Appendix A: Site Location
- Appendix B: Designated Sites Plan
- Appendix C: Legislation

1.0 Executive Summary

- 1.1 The Client is proposing to carry out repair works to the sea defences at 5 Netley Cliffs. The current sheet piling is damaged and the cliff face is being eroded which is destabilising the cliff and threatens to impact the block of flats. Pro Vision Ecology were commissioned in April 2024 to provide the ecological assessment of the site.
- 1.2 The following species were screened out of the assessment following the completion of a desk based assessment and site walkover survey; badgers, great crested newts, dormice, bats and invertebrates.
- 1.3 The site is situated on the edge of the Solent and Southampton Water Special Protection Area, Ramsar and Lee-on-the-Solent Site of Special Scientific Interest. The development will involve temporary impacts to these designated sites during the construction stage and no additional impacts are anticipated once construction is complete. The development will be completed between May and September to avoid the winter months. Works will also be undertaken in line with a Construction Environmental Management Plan and with this mitigation in place there will be no significant impacts to the designated sites.
- 1.4 The site is located within Netley to Hamble Shore Site of Interest for Nature Conservation. There will be no long-term impacts from the works but there is a risk of temporary impacts during the construction phase. The works will be undertaken under a Construction Environmental Management Plan which will detail protection measures for the non-statutory designated site. With this mitigation in place there will be no significant impact to this non-statutory site.
- 1.5 The cliff face and vegetation have the potential to be used by low numbers of reptiles of site value. There is a small risk that these species may be impacted during the works. In line with the mitigation measures for the international designated sites no works will take place in the winter months when reptiles will be hibernating. In the unlikely event reptiles are encountered in the works area they will be moved to retained habitat away from the works.
- 1.6 The remediation works will safeguard the cliff environment by preventing the erosion of the cliff face and securing the habitats that are currently present which provide potential habitat for reptiles and local invertebrates. This will result in a positive impact once complete.

2.0 Introduction

Project Background

- 2.1 Pro Vision Ecology were commissioned in April 2024 to carry out an Ecological Impact Assessment at 5 Netley Cliffs, Netley. For the site location refer to **Appendix A**. This report will contribute to a forthcoming planning application to be submitted by the Client to Eastleigh Borough Council for planning consent to carry out remediation works to the existing sea defences.

Proposals

- 2.2 The proposed works on site include remediation works to the existing sea defences which are failing. The current sheet piling has partially collapsed and has rusted in places. This is resulting in the cliff face being damaged during storms causing destabilisation of the cliff. Due to this subsidence, trees on the cliff face are also being lost and there is the potential for damage to the properties within Netley Cliff if the sea defences are not repaired.
- 2.3 The current proposals are to construct new sheet piling in front of the existing ones to provide sea defences. Access to the site will be from an adjacent public jetty way with vehicles tracked along the shorefront.

Brief

- 2.4 To carry out an Ecological Impact Assessment to inform the Client of the ecological implications of their proposals and provide mitigation measures.

Relevant Legislation and Planning Policy

- 2.5 The key legislative provisions of relevance to this report with respect to the development proposals and their potential effects on ecological features are listed below:
- The Conservation of Habitats and Species Regulations 2017 (As amended)
 - The Wildlife and Countryside Act 1981 (as amended)
 - The Natural Environment and Rural Communities (NERC) Act 2006
 - Protection of Badgers Act 1992
 - Environment Act 2021
- 2.6 The UK Biodiversity Action Plan (BAP) was the Governments response to the 1992 Convention on Biodiversity (The Rio Convention), with the aim of halting the loss of biodiversity in the UK. The new UK post-2010 Biodiversity Framework replaced the previous BAP and is the government's response to the new strategic plan on the United Nations Convention on Biological Diversity (CBD). Although the UK post-2010 Biodiversity Framework supersedes the UK BAP, the UK BAP lists of priority species and habitats still remain an important reference source for identifying habitats and species of principal importance within the UK. Within England, Section 41 of the

NERC Act (2006) lists species and habitats of principal importance for the conservation of biodiversity.

- 2.9 The Environment Act 2021 includes the requirement for developments to provide 10% biodiversity net gain, to be evidenced with the use of the statutory metric. Developments are exempt if they are self-build comprising less than nine dwellings on an area less than 0.5 hectares, householder applications or developments below the threshold of impacts to habitats.
- 2.10 The Government has set out its policies for the protection and enhancement of biodiversity through the planning system in the National Planning Policy Framework Section 15 (NPPF, 2023).
- 2.11 The application site is located within Eastleigh. Policy DM9 of the Eastleigh Borough Local Plan, includes the following aims:

Policy DM9, Nature conservation

Development which is likely to adversely affect the integrity of an international or European nature conservation site will not be permitted. Development which is likely to have a direct or indirect adverse effect on a Site of Special Scientific Interest (SSSI) will not be permitted, unless the Borough Council is satisfied that the reasons for the development clearly outweigh the harm to the nature conservation value of the site. Development will not be permitted if it is likely to have a direct or indirect adverse effect on a Site of Importance for Nature Conservation (SINC) or Local Nature Reserve as shown on the policies map (or on a more recent plan provided by the Hampshire Biodiversity Information Centre), or on protected or priority habitat or species, or on any other feature of importance for wild fauna and flora, unless it can be demonstrated to the satisfaction of the Borough Council that:

i. the benefits of the development clearly outweigh the adverse effects on the nature conservation value of the site;

ii. the adverse impacts are unavoidable; and iii. measures can be taken to mitigate or, if this is not possible, compensate for the adverse effects, such that the development will result in at least no net loss of biodiversity.

In determining planning applications, the Borough Council will:

a. seek opportunities to create or enhance habitats and features of nature conservation interest, having regard to local geodiversity and soils;

b. have regard to the need to protect, and opportunities to enhance the Priority Biodiversity Areas and the Priority Biodiversity Links set out in the Council's Biodiversity Action Plan 2012-2022; and

c. require mitigation measures in connection with new residential development as identified by the Solent Disturbance and Mitigation Project unless it can be demonstrated to the satisfaction of the Borough Council that individually, or in combination with others, the development is not likely to have significant adverse impacts on the integrity of the Solent European marine sites.

3.0 Methodologies

Desk Study

- 3.1 The desk study methodology is based upon guidelines set out by the Chartered Institute of Environmental and Ecological Management (CIEEM, 2017). A data-gathering exercise was undertaken to obtain any available information relating to statutory nature conservation sites and priority habitats and protected species (**Table 1**).

Table 1: Summary of information sources used for the Desk Study

Organisation / Source	Information Sought
Hampshire Biodiversity Information Centre (HBIC)	Records of the presence of key protected and notable species and non-statutory wildlife sites within one kilometres of the site.
MAGIC	Locations of and citations for all national statutory wildlife sites, including SSSI, within two kilometres and all international sites including SAC, SPA or Ramsar sites within five kilometres of the site.
Ordnance Survey Maps	Large scale habitat information and identification of off-site habitats which may require consideration (such as ponds) within 500m.

Baseline Surveys

Habitats

- 3.2 A site visit was carried out on the 22nd April 2024 by ecologist Louisa Standbrook-Jones MCIEEM in overcast weather conditions with a light breeze and an ambient temperature of 12°C. The survey employed techniques based on UK Habitat Classification System.
- 3.3 The collection of botanical information focused on the dominant and/or key indicator species for each habitat, to allow allocation of habitats to hierarchy levels 3 and/or 4 and where relevant to identify any priority habitats which are present on site.

Protected species

- 3.4 The PEA included an assessment of the potential for habitats on or immediately adjacent to the site to support legally protected or conservation-notable species. The location and nature of any signs of the presence of protected species (such as droppings, footprints, burrows, etc.) were documented and mapped accordingly. Indicative survey methods for protected species are outlined below.

Badgers (Meles meles)

- 3.5 The site and where possible 30 metres outside the site boundary was assessed for its suitability to support badgers. A direct search was undertaken for evidence of badgers. Evidence includes
- Active or disused setts;
 - Diggings;
 - Latrines / dung pits;
 - Foraging ('snuffle holes');
 - Footprints; and
 - Badger hairs.

Bats

- 3.6 Bats use features in the landscape to navigate and also habitats may provide key foraging areas. Foraging and commuting habitat was assessed based on based on BCT guidelines (Collins, 2023) shown in **Table 2** below.

Table 2: Assessment of foraging/commuting habitat

Suitability	Criteria
Negligible	Negligible features on site likely to be used by bats
Low	Suitable but isolated habitat that could be used by small numbers of bats.
Medium	Habitat that is well connected to the wider landscape and could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous high-quality habitat that is well connected to the wider landscape and may be used by significant numbers of bats including annex II species.

Birds

- 3.7 Any habitat features, for example, scrub and trees, which could potentially be used by nesting birds, were surveyed and any nesting activity was noted. The habitat was also assessed regarding its potential for bird activity.

Great Crested Newts (Triturus cristatus)

- 3.8 Ponds within the vicinity of the site were noted and the potential of the land to act as a commuting route, shelter or foraging resource for great crested newts was assessed.

Hazel dormouse (Muscardinus avellanarius)

- 3.9 An assessment of the suitability of the habitat to support hazel dormouse was undertaken in accordance with The dormouse Conservation Handbook (Bright *et al*, 2006). Any small mammal feeding signs were checked and assessed, including:
- Examination of hazel nuts; and
 - Evidence of nest building.

Invasive species

- 3.10 During the survey any invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were noted

Invertebrates

- 3.11 An assessment was undertaken to assess the potential of the habitats recorded on site to support diverse communities of invertebrates, or any Biodiversity Action Plan (BAP) species. The assessment was based on the presence of a number of habitat features which may support important invertebrate communities such as:
- An abundance of deadwood;
 - Presence of diverse plant communities;
 - Presence of varied woodland structure and sunny woodland edge;
 - Presence of ponds or watercourses; and
 - Presence of free draining soil exposures.

Reptiles

- 3.12 Habitat features that could be suitable as hibernacula, foraging or basking areas were noted. Extant refugia were lifted and examined for evidence of reptiles, including sloughs (shed skins).

Methodology for Ecological Assessment

- 3.13 The approach to the Ecological Impact Assessment (EcIA) has been undertaken in line with the guidance in the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment in the UK (2019).
- 3.14 The process prescribed by CIEEM's EcIA Guidelines, including an explanation of the key terminology that is used, is described below. In summary, the guidelines advocate the following step-wise approach to EcIA:
- Prediction of the activities associated with a proposed scheme that are likely to generate biophysical changes which may lead to significant effects (either positive or negative) upon ecological features of importance;
 - Identification of the likely Zone of Influence of those activities;

- Scoping to select the ecological features (habitats, species, ecosystems and their functions/processes) that are likely to fall within the predicted Zone of Influence and be affected by the activities;
- Identification of likely impacts (positive and negative) on important ecological features, together with an assessment of the geographic scale at which they are likely to be significant.
- Refinement of the proposed scheme to incorporate impact avoidance and mitigation for negative effects on important ecological features, and enhancements to deliver net gains in biodiversity;
- An assessment of the significance of residual effects and the need for compensation; and
- Advice on conformance with applicable nature conservation related legislation and policy.

3.15 Features of ecological interest are valued on a geographic scale. Value is assigned on the basis of legal protection, national and local biodiversity policy and cultural and/or social significance.

- International
- National
- Regional
- County
- Local: and
- Site (included to quantify features of lesser ecological value)

4.0 Baseline Information

Designated sites

Statutory Designated Sites

- 4.1 The data search identified two internationally Statutory Designated Sites adjacent to the site boundary and one national designated site adjacent to the site boundary:
- **Solent and Southampton Water Special Protection Area (SPA):** The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow with long periods of slack water and high and low tide. It includes many wetland habitats: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs. It supports an important assemblage of rare plants and invertebrates. The site is of international importance for supporting an assemblage of wading birds including dark-bellied Brent goose (*Branta bernicula bernicula*), ringed plover (*Charadrius hiaticula*), Eurasian teal (*Anas crecca*), and black-tailed godwit (*Limosa limosa islandica*). This site is adjacent to the proposed works area.
 - **Solent and Southampton Water Ramsar:** The site is comprised of estuaries and adjacent coastal habitats including intertidal flats, saline lagoons, shingle beaches, reefs, saltmarsh, and reedbeds, damp woodland, and grazing marsh. The site exhibits an "unusual strong double tidal flow" and has long periods of slack water at high and low tide. It supports internationally important numbers of wintering waterfowl (51,361 over the winter) including ringed plover (*Charadrius hiaticula*), Eurasian teal (*Anas crecca*) and dark-bellied Brent goose (*Branta bernicula bernicula*), important breeding gull (*Larus* sp.) and tern (*Sterna* sp.) populations, and black-tailed godwit (*Limosa limosa islandica*); as well as an impressive assemblage of rare invertebrates and plants. This site is adjacent to the proposed works area.
 - **Lee-on-the Solent to Itchen Estuary Site of Special Scientific Interest (SSSI):** The Site of Special Scientific Interest extends along the eastern shore of Southampton Water from Lee-on-the-Solent to the mid-Itchen estuary and includes the lower estuary of the River Hamble. The site comprises extensive intertidal muds with a littoral fringe of vegetated shingle, saltmarsh, reedbed, marshy grasslands and deciduous woodland on alluvium, valley gravels (Hamble Common), and Bracklesham Beds (Hook Links). The site is an integral part of Southampton Water which is of international importance for over-wintering dark-bellied geese, and of national importance for three species of wildfowl (great-crested grebe, teal and wigeon) and five species of wader (black-tailed godwit, dunlin, grey plover, ringed plover, redshank). The SSSI supports an outstanding assemblage of nationally scarce coastal plants. The unit adjacent to the site is in a favourable condition and was last assessed in 2018. The unit has a large, varied sediment resource, including estuarine mud, sandy beaches and mixed sediments. This unit lies adjacent to the proposed area of works.
- 4.2 The site is also located within a positive site for wader and brent geese, site E03. This area has positive records of feeding curlew, oystercatcher and dark-bellied brent geese over the winter months. This is an area functionally linked to Solent and Southampton Water SPA.
- 4.3 This proposed area of works is directly adjacent to the Solent and Southampton Water SPA and Solent and Southampton Water Ramsar and within site E03 which is linked with the Solent and Southampton Water SPA. These are ecological receptors of International Importance and within

the zone of influence of the works. The Lee-on-the Solent to Itchen SSSI is an ecological receptor of National Importance and lies within the Zone of influence of the works.

Non-Statutory Designated Sites

- 4.4 The data search identified two non-statutory designated sites, both Sites of Importance for Nature Conservation (SINC), within one kilometre of the site. The site is located within Netley to Hamble Shore SINC which is classified due to its semi-natural coastal and estuarine habitats.
- 4.5 Netley Lodge SINC is located approximately 130 metres north east of the site and comprises ancient semi-natural woodland, yew woodland and Fens, flushes, seepages, springs and inundation grasslands of floodplains that support a flora and fauna of less-improved wet conditions.
- 4.6 The development site is situated within Netley to Hamble Shore SINC and this non-statutory site will be impacted by the development. This ecological receptor is of county importance.
- 4.7 It is considered highly unlikely the proposed works will impact the citation features of Netley Lodge SINC, therefore impacts to this site have been screened out of the assessment.

Ecological Assessment

- 4.8 The results of the ecological assessment are provided below.

Habitats

- 4.9 The site is located on the edge of Southampton Waters with the Netley cliffs estate comprising blocks of flats and associated gardens. The residential block sits on the cliff face with a steep drop to the shoreline below.
- 4.10 The cliff face has been eroded away from storm events and comprises areas of bare ground and sandy soil. Other sections of the cliff face are stable and vegetated with vegetation comprising maritime species such as sea purslane (*Sesuvium portulacastrum*) and buckshorn plantain (*Plantago coronopus*) alongside dwarf gorse (*Ulex gallii*) and false oat grass (*Arrhenatherum elatius*).



Figure 1: View looking north along the cliff face with eroded sheet piling below.

- 4.11 In the southern end of the works area and at the top of the cliff there is a section of retaining wall which has a noticeable large crack present where the cliff is eroding beneath it.
- 4.12 The current sheet piling is present at the base of the cliff which in a poor condition and includes multiple holes and one section has collapsed towards the shore (**Figure 2**). The area of cliff directly behind the sheet piling is largely eroded.



Figure 2: View looking south along the current sheet piling

- 4.13 The shoreline in front of the piling includes a gravel beach with the area below the tideline at high tide. It is largely flat and does not include any areas of vegetation and forms the seafloor of the hamble estuary.

Protected and/or notable species

Badgers

- 4.14 The HBIC data search did not return any records for badger (*Meles meles*) since 2000.
- 4.15 During the course of the surveys no evidence of badgers was recorded on the site, including setts or latrines. Badgers are therefore considered absent from the site. There are multiple holes within the cliff face but none are characteristic of badger. These holes are also set back from the existing sheet piling and will not be impacted by the works.
- 4.16 Badgers have been screened out of the assessment.

Bats

- 4.17 The HBIC data search returned 30 records within one kilometre of the site for the following bat species:
- Noctule (*Nyctalus noctula*)
 - Daubenton's (*Myotis daubentonii*)
 - Natterer's (*Myotis nattereri*)
 - Common pipistrelle (*Pipistrellus pipistrellus*)
 - Soprano pipistrelle (*Pipistrellus pygmaeus*)
 - Brown long-eared (*Plecotus auritus*)
 - Whiskered / Brant's (*Myotis mystacinus/brandtii*)
 - Serotine (*Eptesicus serotinus*)
- 4.18 The DEFRA run website, MAGIC, was searched for a list of granted European Protected Species Licences (EPSL's). One EPSL for the destruction of a brown long-eared day roost was returned to the north east of the site.
- 4.19 No potential roost features are present in the area, but the cliff face does provide potential foraging and commuting habitat for local bat populations. The species recorded in the area do not include any rare Annex I species with the majority common within the area. The works area is very small in size and therefore it is anticipated only a low number of these species would utilise the site and then in only low numbers.
- 4.20 The assemblage of bats which may use the proposed area of works is therefore only considered to be of site importance. Therefore, bats have been screened out of the assessment.

Birds

- 4.21 The HBIC records include records for the following red list bird species which may utilise the areas around the site: pochard (*Aythya farina*), scaup (*Aythya marila*), ruff (*Calidris pugnax*), long-tailed duck (*Clangula hyemalis*), hawfinch (*Coccothraustes coccothraustes*), cuckoo (*Cuculus canorus*), lesser spotted woodpecker (*Dryobates minor*), yellowhammer (*Emberiza citronella*), pied flycatcher (*Ficedula hypoleuca*), shag (*Gulosus aristotelis*), herring gull (*Larus argentatus*), lesser black-backed gull (*Limosa limosa*), common scoter (*Melanitta nigra*), grey wagtail (*Motacilla cinerea*), spotted flycatcher (*Muscicapa striata*), curlew (*Numenius arquata*), whimbrel (*Numenius*

phaeopus), kittiwake (*Rissa tridactyla*), starling (*Sturnus vulgaris*), redwing (*Turdus iliacus*), song thrush (*Turdus philomelos*), fieldfare (*Turdus pilaris*) and mistle thrush (*Turdus viscivorus*). The records also include the following Schedule I species which may breed in the area: kingfisher (*Alcedo atthis*), little ringed plover (*Charadrius dubius*), little tern (*Sternula albifrons*), peregrine (*Falco peregrinus*), hobby (*Falco Subbuteo*), mediterranean gull (*Ichthyaetus melanocephalus*), red kite (*Milvus milvus*), black redstart (*Phoenicurus ochruros*) and firecrest (*Regulus ignicapilla*). The majority of these records are associated with the SPA.

- 4.22 The site is located within an area of high importance for birds with the tidal mudflats of the estuary providing foraging areas for overwintering species of birds. The estuary is also of importance for breeding populations of mediterranean gull, sandwich tern (*Thalasseus sandvicensis*), common tern (*Sterna hirundo*), little tern and roseate tern (*Sterna dougallii*). The habitats within the works area are not considered suitable for these breeding species as the works area is submerged by the tide daily with no suitable sand bars for breeding. Therefore, there is no suitable habitat for breeding birds within the works area.
- 4.23 The areas of shingle beach provide foraging habitat for overwintering birds within the harbour and comprises area E03. During the survey a small group of turnstone (*Arenaria interpres*) were observed foraging along the tide line. In the winter months these areas will be of importance for overwintering birds within the Solent.
- 4.24 The overwintering bird assemblage utilising the area adjacent to the works area are associated with the Special Protection Area and Ramsar and therefore are of international importance.

Invertebrates

- 4.25 The HBIC records included records for the notable invertebrate species stag beetles (*Lucanus cervus*) and Jersey tiger (*Euplagia quadripunctaria*).
- 4.26 There is no suitable habitat for these species within the proposed works area. The cliff face has the potential to be used by an assemblage of invertebrates however it is not considered likely to be of note. The proposed works will also not impact the cliff face directly and any invertebrates located within this area are considered to be outside the zone of influence of the development. The stabilisation of the cliff will maintain these habitats for the future.
- 4.27 Invertebrates have been screened out of the assessment.

Great Crested Newts

- 4.28 The HBIC data search returned no records of great crested newts within one kilometre of the site.
- 4.29 There are no suitable areas for great crested newts within the works area with the cliff face providing a dry and exposed area not suitable for amphibians.
- 4.30 Great crested newts have been screened out of the assessment.

Reptiles

- 4.31 The HBIC data search returned three records of slow worm (*Anguis fragilis*) and one record of grass snake (*Natrix helvetica*) within one kilometre of the site between 2005 and 2022.

- 4.32 The banks of the cliff face and areas of vegetated garden provide potential habitat for common species of reptiles such as slow worms and common lizards (*Zootoca vivipara*). These species will largely be restricted to the areas of cliff face and garden and are unlikely to be present within the maritime areas. The cliff face includes some holes which could be used by hibernating reptiles, only the holes higher on the cliff face and away from the high tide mark are considered suitable.
- 4.33 Due to the size of the works area, it is considered unlikely a population of reptiles of more than site importance would be present in the works area. Reptiles have been brought forward in the assessment for legal compliance.

Summary of Important Ecological Features

- 4.34 **Table 3** summarises the important ecological features within the zone of influence which will be brought forward in the impact assessment, these are features which have been valued at local value or above or due to legal compliance.

Table 3: Summary of important ecological features carried forward into impact assessment.

Ecological Feature	Valuation	Impacts
Solent and Southampton Water SPA	International level	Potential for disturbance to the citation features during construction. Potential for pollution events during construction.
Solent and Southampton Water Ramsar	International level	Potential for disturbance to the citation features during construction. Potential for pollution events during construction.
Lee-on-the Solent Estuary SSSI	National Level	Potential for pollution events during construction.
Netley to Hamble Shore SINC	County Level	Potential for pollution events during construction. Potential loss of habitat
Overwintering birds	International level	Disturbance during construction impacting ability to feed.
Common reptile species	Site level (brought forward for legal compliance)	Risk of death/injury during construction works.

5.0 Impacts and Mitigation

Designated sites

Solent and Southampton Water SPA and Ramsar

Impacts

- 5.1 The site is located adjacent to Solent and Southampton Water SPA and Ramsar and within site E03 which is linked with the Solent and Southampton Water SPA. These areas are designated due to the large populations of breeding and wintering birds present across the mudflats and shingle beaches.
- 5.2 The construction of the sheet piling has the potential to disturb overwintering birds within the designated sites. The area adjacent to the site has been identified as an area that supports overwintering brent geese, oystercatcher and curlew in the winter months., site E03 The area is not considered suitable for any of the citation species which breed within the area as there are no suitable shingle areas suitable for tern breeding as the whole shoreline is underwater at high tide.
- 5.3 During the winter months any loud percussive works have the potential to disturb overwintering species. This would impact their ability to feed and increase their consumption of energy which may impact their survival rates.
- 5.4 During construction the sensitive sites located within the SPA and Ramsar may be impacted by pollution events. Machinery will need to be driven across the beach to reach the site from the local public jettway which may damage areas within the SPA and Ramsar.

Mitigation

- 5.5 To avoid any impacts to overwintering species works will take place over the spring and summer months (May to September). Works will also be undertaken during daylight hours so no external lighting will be required to avoid any potential lighting impacts to nocturnal species and migration routes.
- 5.6 Appropriate precautions will be taken by contractors to protect sensitive areas during construction. A Construction Environmental Management Plan (CEMP) will be produced which will include the following but not limited to. It will detail appropriate storage of chemicals and ensure there is no runoff during construction. Routes across the beach will be established to prevent any impacts to sensitive areas which will be high along the front and away from the areas of mudflats which are exposed at low tide, informed by an ecologist. Suitable dust suppression may be required during the works.
- 5.7 All refuelling of vehicles will take place on the public jettway and outside the site and materials will be stored away from the site and aquatic habitats when not in use.
- 5.8 With adequate controls in place, it is considered unlikely that the current proposals will have any foreseeable significant negative impacts.

Significance of Residual Effects

- 5.9 With this mitigation in place there will be no significant negative impact on the international designated sites.

Lee-on-the Solent to Itchen Estuary Site of Special Scientific Interest (SSSI):

Impacts

- 5.10 The site is located adjacent to Lee-on-the Solent to Itchen Estuary Site of Special Scientific Interest (SSSI). These areas are designated due to the coastal habitats present.
- 5.11 During construction the sensitive sites located within the SSSI may be impacted by pollution events. Machinery will need to be driven across the beach to reach the site from the local public jettway which may damage areas within the SSSI.

Mitigation

- 5.12 The measures set out within the CEMP provided above for the international sites will also mitigate impacts to the SSSI.

Significance of Residual Effects

- 5.13 With this mitigation in place there will be no significant negative impact on the international designated sites.

Netley to Hamble Shore (SINC):

Impacts

- 5.14 The site is located within the Netley to Hamble Shore SINC. This area has been designated for the intertidal habitats present. The proposed works will not result in any loss of habitat within this SINC with the new sheet piling being placed in front of the existing sheet piling.
- 5.15 During construction the sensitive sites located within the SINC may be impacted by pollution events. Machinery will need to be driven across the SINC to reach the site from the local public jettway which may damage areas within the SINC.

Mitigation

- 5.16 The measures set out within the CEMP provided above for the international sites will also mitigate impacts to the SINC.

Significance of Residual Effects

- 5.17 With this mitigation in place there will be no significant negative impact on the non-statutory designated site.

Protected and/or notable species

Overwintering birds

Impacts

- 5.18 The potential impacts for overwintering birds have been discussed in relation to the Solent and Southampton Water SPA with the potential impacts arising through disturbance during the works.

Mitigation

- 5.19 The measures set out for the international sites which includes the timing of works and use of a CEMP will also mitigate impacts to the population of overwintering birds.

Significance of Residual Effects

- 5.20 With this mitigation in place there will be no significant negative impact on the international designated sites.

Reptiles

Impacts

- 5.21 The cliffside habitat is considered suitable for low populations of slow worms and common reptile species which are present within the area. The cliff face also includes numerous holes and burrows which could be used by hibernating reptile species.
- 5.22 The construction phase may result in a temporary increase in disturbance to reptiles that may be using retained habitat within the site. Disturbance may occur through an increase in noise, accidental damage and human presence.
- 5.23 It is anticipated there will be no loss of habitat with the existing sheet piling retained and the new sheet piling constructed in front of the existing. The works will likely have a positive impact by stabilising the cliff face and preventing the loss of habitat through erosion.

Mitigation

- 5.24 Works will be completed during the reptile active period of May to September, in line with the mitigation for designated sites above. During this time reptiles will be active and can move away from the proposed works area.
- 5.25 It is considered unlikely any reptiles will be located within the proposed works area on the beach. In the unlikely event one is encountered it will be safely moved to an area of cliff away from the works area.

Significance of Residual Effects

- 5.26 With this mitigation in place there will be no significant impact on reptiles.

6.0 Summary of Impacts and Mitigation Measures

6.1 A summary of ecological impacts and mitigation measures is provided in **Table 4** below.

Table 4: Summary of impacts and mitigation

Ecological Feature	Valuation of ecological feature	Impact	Proposed mitigation	Significance of post-mitigation Impact	Compensation required
Solent and Southampton Water SPA	International level	Damage during construction Disturbance of citation features	Implementation of a CEMP Timing of works during May to September	Not significant	No
Solent and Southampton Water Ramsar	International level	Damage during construction Disturbance of citation features	Implementation of a CEMP Timing of works during May to September	Not significant	No
Lee-on-the Solent to Itchen Estuary SSSI	National Level	Damage during construction	Implementation of a CEMP	Not significant	No
Netley to Hamble Shore SINC	County level	Damage during construction	Implementation of a CEMP	Not significant	No
Reptiles	Site level (legal compliance)	Death/injury during construction Disturbance	Timing of works in reptile active season	Not significant	No
Overwintering birds	International level	Disturbance during construction	Timing of works during May to September	Not significant	No

7.0 References and Bibliography

CIEEM (2017). *Technical Guidance Series: Guidelines for Preliminary Ecological Appraisal*. Chartered Institute of Ecology and Environmental Management [online].

CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland*, Chartered Institute of Ecology and Environmental Management

CIEEM (2020) *Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition*. Chartered Institute of Ecology and Environmental Management. Winchester, UK.

Collins, J (Ed) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th ed.)*. Bat Conservation Trust, London.

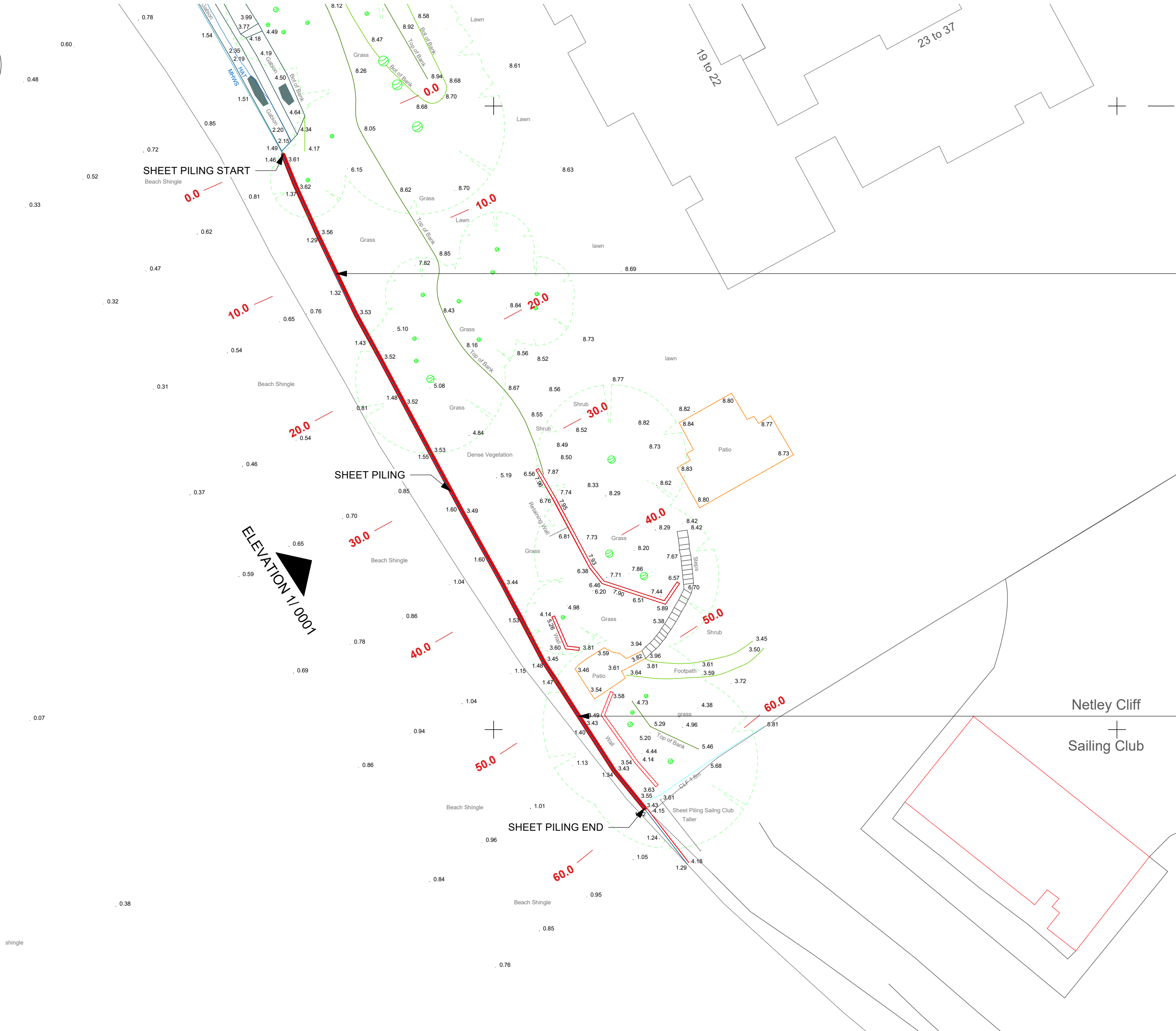
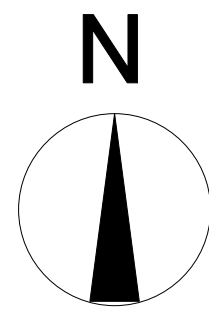
Eastleigh Borough Council (2014) Eastleigh Borough Local Plan 2011 - 2029

Hampshire Biodiversity Information Centre (2024). HBIC ref: 12512

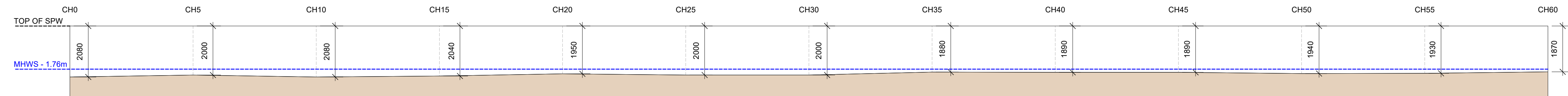
National Planning Policy Framework (2023). *National Planning Policy Framework*. Ministry of Housing, Communities and Local Government, London.

Appendices

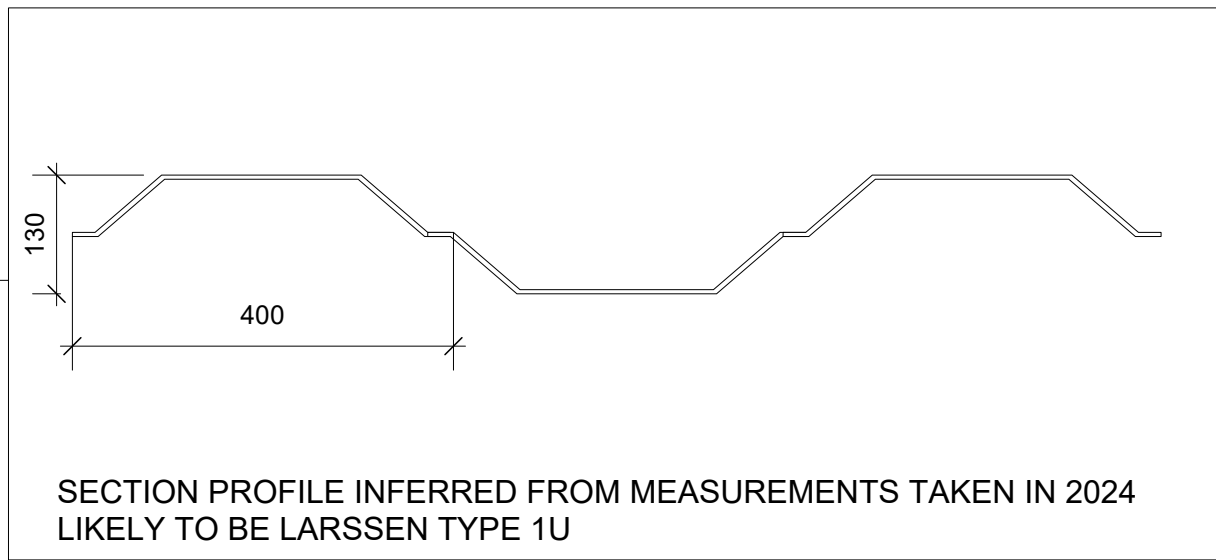
Appendix A: Site Location



1 **PLAN - GENERAL ARRANGEMENT**
Scale: 1:200



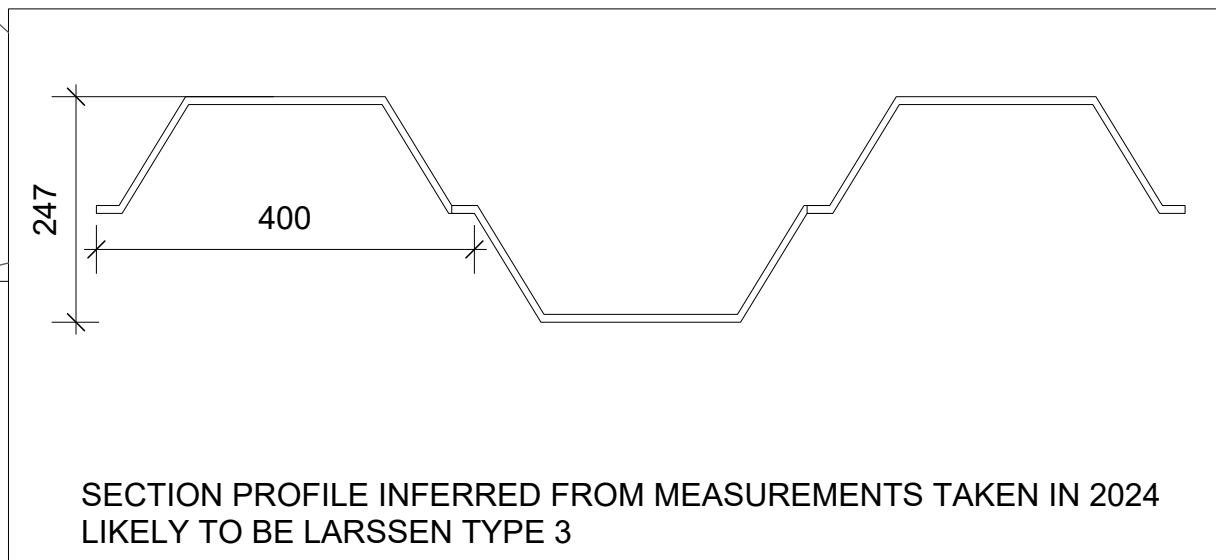
2 **ELEVATION 1**
Scale: 1:100



3 **ORIGINAL SECTION PROFILE OF OLDER SECTION**
Scale: N.T.S.



CONDITION IN 2024



4 **ORIGINAL SECTION PROFILE OF NEWER SECTION**
Scale: N.T.S.



CONDITION IN 2024

- NOTES
- DO NOT SCALE FROM DRAWING
 - ALL DIMENSIONS ARE IN MILLIMETERS U.N.O.
 - FOR PLANNING PURPOSES ONLY

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

This information is based on an experienced and competent contractor carrying out the work and the risks specific to these works additional to those normally associated with this type of work. Where appropriate the residual risks are indicated on the drawing with the symbol and reference to the note number.

Construction

Ci Risk of items falling from height.

Cii Risk of injury / drowning whilst working over and near water.



KEY PLAN

CLIENT

NETLEY CLIFF MANAGEMENT COMPANY

REV	DATE	DESCRIPTION
P01	01.03.24	MO JA VUE
REV	DATE	DESCRIPTION

CONSTRUCTEX

Address: Unit 4 Calcot Mount Business Park
Calcot Lane
Curdridge
Southampton, SO32 2BN

Tel: 0333 355 1892

Fax: 0333 355 1893

Website: www.constructex.co.uk

Email: enquiries@constructex.co.uk

TITLE

P2551 - Netley Cliff - Sheet Pile Wall

DRAWING TITLE

SITE PLAN

SCALE

AS SHOWN

DRAWING NO.

P2551-DR-0001

DRAWN

MO

Appendix B: Designated Sites

The plan shown here is for the purpose of supporting a planning application only. Only scale from this drawing for the purposes of determining a planning application. Do not scale from this drawing for construction purposes.

The proposal presented here is subject to review by specialist consultants, and is to be read in conjunction with all relevant specialist's drawings and information where available. Any discrepancies between this and any other consultant's drawings and information should be reported to Pro Vision immediately.

Legend

-  Works Area
-  Special Protection Area and Ramsar
-  Site of Special Scientific Interest
-  Site of Interest for Nature Conservation (approximate location)



ISSUE	DATE	DESCRIPTION	DRAWN	CHECKED
v1	13.05.24	Mapping	LJ	AH

CLIENT:	Netley Cliffs Management Company		
PROJECT:	5 Netley Cliff		
DRAWING:	Designated Sites plan		1:850
NUMBER:	8494-XX-E0-01		A4
ISSUE:	v1		13.05.24



Appendix C: Relevant Legislation

The Conservation of Habitats and Species 2017

The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations) transpose Habitats Directive into UK legislation. The Habitats Regulations provide for the designation and protection of European Sites and European Protected Species. European Sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), which form part of the Natura 2000 network of protected areas across Europe.

European Protected Species (EPS) are those listed under Schedule 2 of the Habitats Regulations and include dormouse, great crested newt, otter and all species of bat. The regulations prohibit the deliberate capture, killing or disturbance of any EPS; it is also an offence to damage or destroy a breeding site or resting place of any of these species. In order to carry out a lawful operation (e.g. development work which has full planning permission) that may result in an offence under the Habitats Regulations, it is necessary to obtain a licence from Natural England. EPS Licences will only be granted after Natural England has been satisfied that there are no satisfactory alternative and that there will not be any adverse impacts on the favourable conservation status of the species.

WILDLIFE AND COUNTRYSIDE ACT 1981

The Wildlife and Countryside Act 1981 is the principle piece of legislative protection of wildlife in Great Britain. Various amendments have occurred since the original enactment. The Wildlife and Countryside Act contains both habitat and species protection. Certain bird, animal and plant species are afforded protection under Schedules 1, 5 and 8 of the Act. Measures for the protection of the countryside, National Parks, Sites of Special Scientific Interest (SSSIs) are also included within the Act.

THE NATURAL ENVIRONMENT AND RURAL COMMUNITIES ACT 2006

The Natural Environment and Rural Communities (NERC) Act 2006 improved wildlife protection by amending the WCA. The main function of the NERC Act was to raise the profile of biodiversity amongst public authorities. Section 40 (S40 of the Act places a 'Biodiversity Duty' on all public bodies to have regard to the conservation of biodiversity when carrying out their normal functions.

THE PROTECTION OF BADGERS ACT 1992

The Protection of Badgers Act 1992 consolidates previous legislation (including the Badgers Acts 1973 and 1991 Badgers (Further Protection) Act 1991). It makes it a serious offence to:

- kill, injure or take a badger;
- attempt to kill, injure or take a badger; or
- to damage or interfere with a sett.

The 1992 Act defines a badger sett as "any structure or place which displays signs indicating current use by a badger".

ENVIRONMENT ACT 2021

The Environment Act 2021 received royal assent in November 2021 and introduces new environmental protection regimes. This includes the creation of the Office for Environmental Protection who will oversee the framework. The Act includes several measures which impact on the planning application process to provide measures to ensure developments result in a net gain in biodiversity. The Act includes the mandatory requirement of 10% net gain for new developments, unless listed within the exemptions, which includes householder applications, self-build and developments below the threshold of impacts. Biodiversity net gain must be evidenced with the use of the statutory metric and associated documents.

