



Netley Cliff Sheet Pile Wall

Shadow Habitat Regulations Assessment Report

For Netley Cliff Management
Company

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Document Control

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Introduction

Constructex Limited has been commissioned by Netley Cliff Management Company (the 'applicant') to undertake a Shadow Habitat Regulations Assessment (HRA) Report for submission to the Eastleigh Borough Council (EBC) in support of a planning application for proposed replacement of a failing steel sheet pile wall which currently retains a slope, at the top of which Netley Cliff apartments are located. The sheet pile wall is located along the beach front of 5 Netley Cliff Apartment, Southampton, Hampshire SO31 5DR (the 'Site').

The proposal of the sheet pile wall replacement will significantly enhance coastal safety along the publicly accessible beachfront where in recent years, the existing sheet pile wall has been actively failing, highlighted by such as a mature tree falling in November 2023 due to its loosened soil caused by constant erosion by tidal cycles. Furthermore, a section of wall had slipped in March 2024 during a period of spring tides where retained soil is being washed out every tidal cycle. These events further underscore the urgency of the replacement scheme.

The Environmental Agency (EA) has confirmed that the existing structure is not included in their flood defence assets, but it plays a crucial role in protecting the area from coastal erosion. This proposal aims to mitigate risks to public health by addressing the failing retaining structure, which progressively worsens with each tidal cycle.

1 Requirement for Habitat Regulations Assessment

The need for Habitats Regulations Assessment is set out within Article 6 of the EC Habitats Directive 1992 and interpreted into British law by the Conservation of Habitats & Species (Amendment) Regulations 2017. If it is established that the site will not face any realistic risks, an appropriate assessment would not be needed.

The assessment is carried out to determine whether a planning proposal could infringe on the conservation management of a European site or significantly impact its current quality.

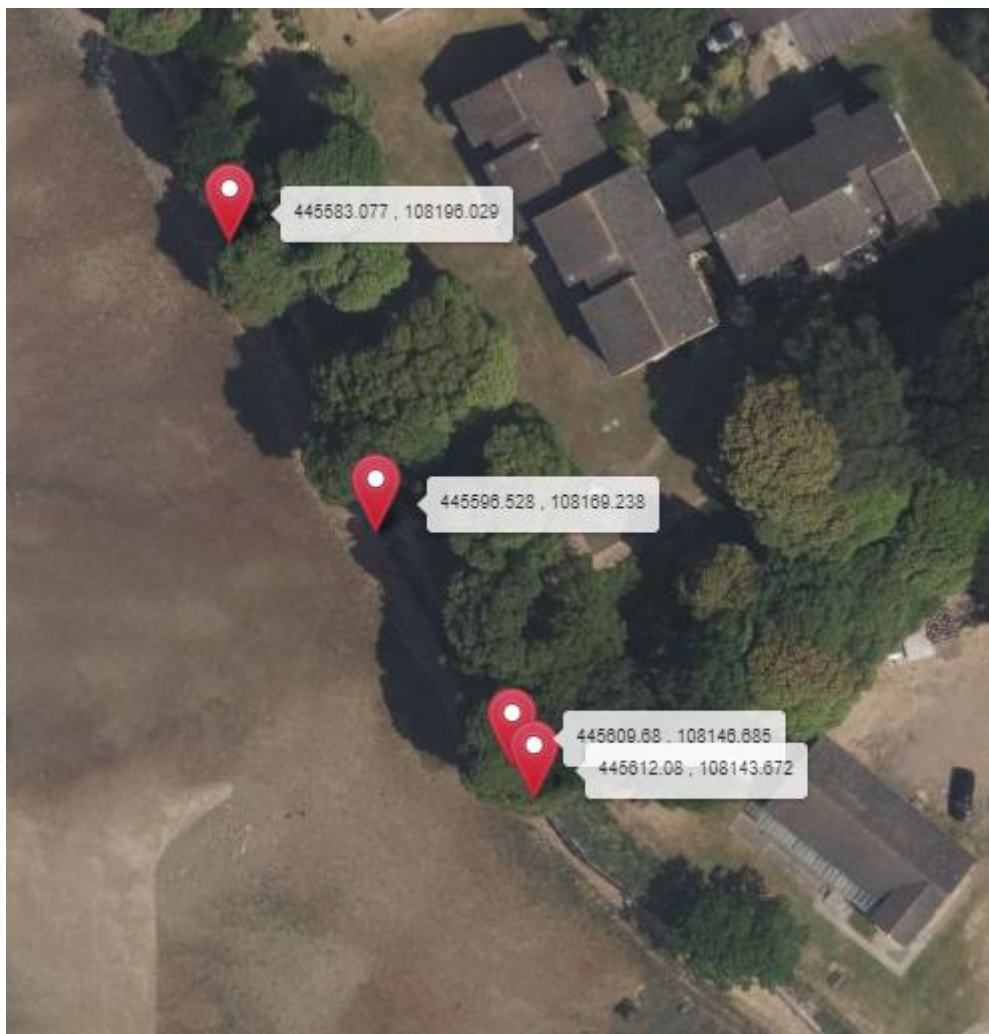
There are three stages to an HRA listed below. Not all stages need to be completed based on the outcome of the previous stage.

1. Screening – to check if the proposal is likely to have a significant impact on the sites conservation objectives.
2. Appropriate assessment – an assessment of the significant effects of the proposal and identification and mitigation of any effects.
3. Derogation – To determine if the proposals which have a significant effect can qualify for an exemption.

2 Site context and location

The Site is located along the beachfront of Netley Cliff, Hampshire, publicly accessible beachfront. It comprises a gravelly beach on the foreshore side, and a slope with vegetation on the retained side. The Site is bound by Netley Cliff apartments to the north, Victoria Road to the east and Southampton Water to the west and south. The Site has a central grid reference of SU 45595 08166.

Figure 3-1 **Site Location**



This proposal aligns with the long-term vision for coastal defence outlined in the North Solent Shoreline Management Plan (SMP) 2011, which projects coastal management strategies over a century. Published in collaboration with the Solent operating authorities, Natural England, and other relevant organisations, the SMP Final Policy established in 2011 designates areas 5C09 and 5C10 as "Hold The Line," where the Site is located inbetween. The report recommends either maintain or enhance the level of protection provided by existing coastal defences within these designated areas.

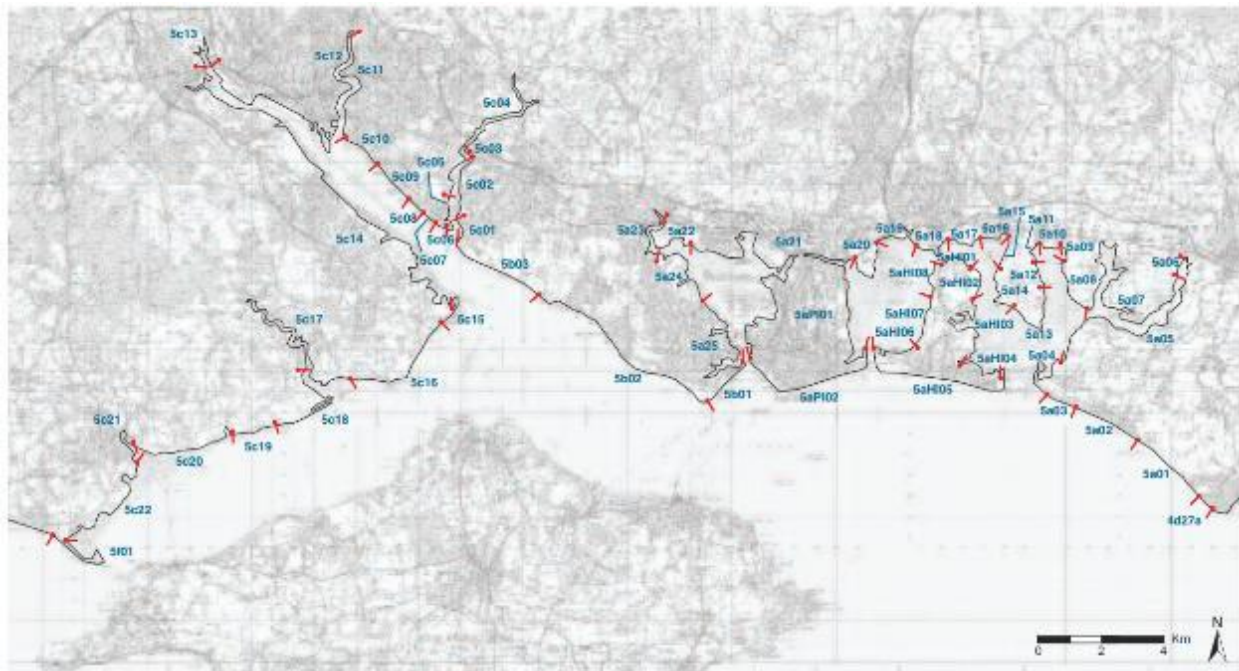
The SMP concludes the following:

Due to the environmental designations within Southampton Water holding the defence line would

contribute towards the loss of European and national nature conservation designated habitats such as inter-tidal foreshore habitats, through coastal squeeze.

The coastline holds significant importance for recreation and leisure uses, especially those dependent on well-maintained beaches and convenient sea access. Beyond the tourism sector, various commercial enterprises thrive along the coast. Preserving these industries is important for maintaining the current economic vitality of the region as a whole.

Figure 3-2 North Solent Shoreline Management Plan - Final Policy Unit Boundaries



The internationally designated sites within 2km of the Site as follow:

- Ramsar

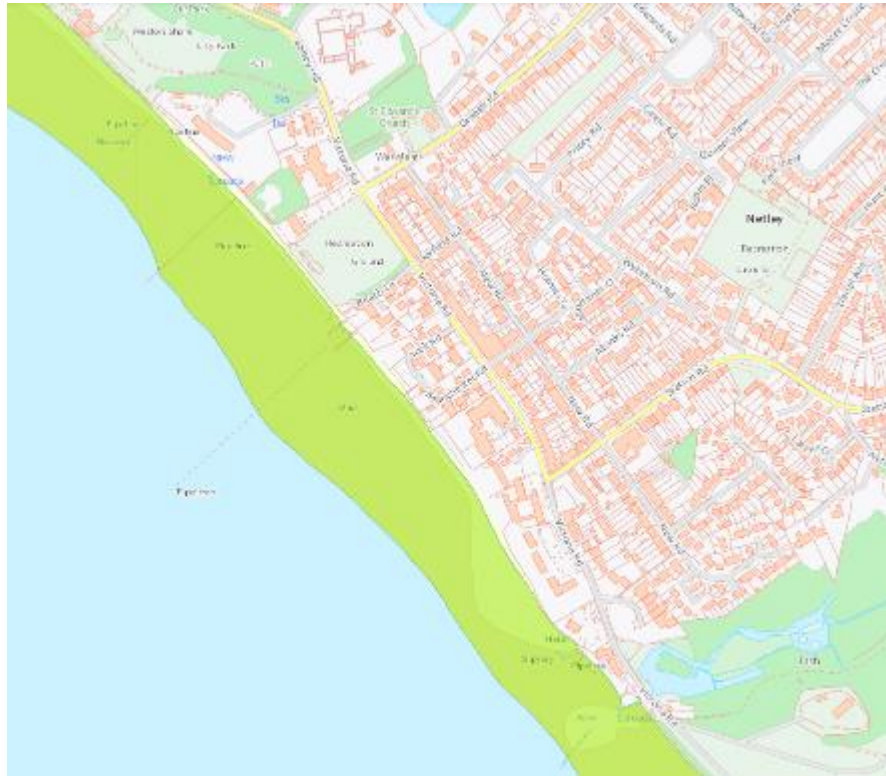


- Solent and Southampton Water SPA



The nationally designated sites within 2km of the Site as follow:

- Lee-on-Solent to Itchen Estuary SSSI



3 Screening

This section identifies the relevant receptors and are summarised in Table 4-1. The potential significant effects on receptors are summarised in Table 4-2.

The Site is categorised to be mudflats on the foreshore on MAGIC maps however, as noted in another pre-planning advice (ref. no. V/21/90403) commented by the EA, as shown in photographs below, the beachfront consist of gravel shingles and not mudflats. A separate Ecological Impact Assessment (EclA) which accompanies this planning application, further clarify this.

If the Site is indeed not mudflat habitat, then the utility for wading birds is very much reduced, whatever time of year the works are carried out. Natural England appeared to be agreeing that as a bird resource, the footprint of the works is of limited value to birds.

Figure 4-1 Photograph of Existing Sheet Pile Wall



Although the Site is located within 2km to Solent and Southampton SPA, the proposal does not result in additional housing or an increase in population therefore, the Solent Recreation Mitigation Strategy is not applicable. Similarly, it does not contribute to the nitrogen and phosphorous level in the Solent for the same reason.

The location of the proposed replacement sheet pile wall is exposed completely during low tide, providing the only working window where piling works will be carried out. The proposal will not impact water quality or hydrology as piling works will be carried out above water level.

It is possible that the backfill material used to infill the gap between the existing and replacement sheet pile wall will introduce foreign species. It is proposed that the imported material is to be sourced from reputable suppliers with established biosecurity protocols. This is to be secured via an outline Construction Environmental Management Plan (CEMP).

The Site is located within Important Bird Areas (GB). It is possible for disturbance to breeding and wintering bird species by temporary construction works in proximity to the land used by breeding or wintering birds in the SPA and Ramsar site. It is proposed that the noise generating activities be

limited outside of wintering bird visit times, secured by the outline CEMP.

Although mature trees with Tree Protection Order (TPO) are in close proximity to the Site, the proposed work will not interfere with existing root system as there is no removal of soil and no loading anticipated above the tree roots. The existing sheet pile wall is actively failing between tidal cycles. The installation of a replacement sheet pile wall will protect the cliff from coastal erosion in addition to protecting the mature trees nearby from secondary effects of coastal erosion.

The length of retaining structure in urgent need of replacement is approximately 60m, and the anticipated extension into the beachfront for constructability is approximately 300mm. resulting in the net encroachment of the beachfront area of 18m². This would be considered small in view of the Southampton and Solent SPA of 54km².

The Site is identified in the updated Solent Waders and Brent Goose Strategy as a Low Use site. Brent goose is a terrestrial wader and feeds on mudflats. The marginal loss of habitat for the proposal cannot be mitigated but the extent of habitat loss is considered low impact. In addition, the nature of this replacement scheme to protect further habitat loss by coastal erosion / coastal squeeze, should offset the marginal habitat loss. The proposal of protecting the shoreline will, in the long term, provide safe feeding ground for wading birds within the Solent and Southampton SPA, including brent goose and other wintering birds.

Priority species for Countryside Stewardship (CS) within the Site has been identified as Lapwing Redshank and Curlew. Additionally, Yellow Wagtail (farmland bird) is known to be present in the area.

Table 4-1 Potential Receptors

Receptor	Habitat and Behaviour Description
Lapwings	Lapwings, also known as northern lapwings or peewits, are birds that inhabit a variety of wetland and agricultural habitats. It is currently in The Birds of Conservation Concern 5 Red list. Lapwings prefer open grassland or wetland habitats for nesting. They often nest on the ground in shallow depressions lined with grass or other vegetation to conceal their eggs from predators. They may also nest in areas with sparse vegetation to allow for easy detection of predators. Lapwings seek nesting sites that provide some protection from predators. They may choose areas with good visibility to detect approaching threats or select nesting sites in close proximity to other breeding pairs for safety in numbers. They are vulnerable to predation from ground-dwelling predators such as foxes, stoats, and corvids.
Redshank	The Redshank <i>Tringa totanus</i> is a wading bird commonly found in wetland habitats across Europe and Asia. It is currently in The Birds of Conservation Concern 5 Amber list. Redshanks are frequently seen foraging in intertidal mudflats, salt marshes, and estuaries along coastlines. These habitats provide abundant food resources. Redshanks typically nest on the ground in wet grasslands, marshes, or meadows, often near water bodies such as ponds, rivers, or marshes. They construct shallow scrapes lined with grass or vegetation to incubate their eggs. Redshanks may also nest in coastal dunes, saltmarshes, or reedbeds, where suitable nesting habitat is available.
Curlew	Curlew <i>Numenius arquata</i> is the largest European wading bird. It is currently in The Birds of Conservation Concern 5 Amber list. They are typically found on estuaries in winter and moors in summer. The ideal habitat for curlews comprises extensive coastal marshes, mudflats, and wet grasslands, typically found in low-lying areas such as estuaries and tidal flats. These environments provide the essential resources that curlews need for breeding, foraging, and nesting. They prefer areas with ample vegetation cover for nesting sites and protection from predators, while also requiring

access to shallow water bodies for feeding on invertebrates like worms and crustaceans.

Yellow Wagtail The Yellow Wagtail *Motacilla flava* is currently in The Birds of Conservation Concern 5 Amber list. It is a summer visitor that breeds in a variety of habitats in the UK. Yellow Wagtails produce two broods per year where suitable habitat exists. They nest on the ground, usually in large fields, well away from tall boundaries. They also nest in wet grassland and hay meadows. arable farmland, wet pastures and upland hay meadows.

Table 4-2 Environmental Considerations

Activity	Potential significant effect on receptors
Noise	Piling activities can potentially impact the receptors identified if they occur in or near habitats where these birds nest or forage. The loud noise and vibrations generated during piling can disrupt nesting behavior, leading to abandonment of nests or reduced breeding success.
Vibration	The vibrations generated during piling activities could negatively impact the receptors identified if these birds inhabit or forage in the area. The receptors are sensitive to disturbances in their environment, and the vibrations produced can cause them stress and disrupt their natural behaviors. Potentially abandon nesting sites or feeding grounds, disrupting their ability to communicate, navigate and detect predators, which may lead to changes to their population dynamics.
Plant siting	The mobilisation of the piling machine to install the replacement sheet piles may result in temporary impacts on the gravel shingle beach. The tracking of heavy plant equipment is anticipated to cause some disturbance to the beachfront, primarily due to the weight and movement of the machinery.

While noise and vibration disturbances from piling activities could cause temporary disruptions to habitats and wildlife such as curlews, it is important to recognise that these effects are typically short-lived and don not usually have significant long-term impacts on the overall habitat or populations of the receptors.

Furthermore, the potential damage to the gravel shingle beachfront is deemed minimal, primarily because of its location within the tidal zone. The natural ebb and flow of the tides will facilitate the

recovery of the beachfront, with water rising to cover and smooth out any tracked distances left by the heavy plant.

To further mitigate disruption to the gravel shingle beachfront, appropriate measures will be implemented. This includes the deployment of tracking mats, which serve to distribute the pressure exerted by the piling plant over a wider area. By spreading the load more evenly, these mats help minimise the risk of localised damage and prevent concentrated pressure points on the beachfront. Additionally, the use of tracking mats provides a stable platform for the heavy plant, reducing the likelihood of incidental damage during construction activities.

The temporary effects can be mitigated by limiting the window for piling activities which may introduce noise and vibration to the Site.

4 Assessment Outcome

Based on the above, this Shadow HRA Screening report concludes that the temporary adverse effects of the proposal can be mitigated in a CEMP secured by planning condition. It will therefore be unlikely to pose a significant risk to international and national designation sites, further HRA assessment steps are not necessary.

We would welcome the following conditions to be secured via a formal CEMP once planning permission has been granted.

"Wherever possible, percussive piling or works with heavy machinery (i.e. plant resulting in a noise level in excess of 69dbA max – measured at the sensitive receptor) should be avoided during the bird overwintering period (i.e. October to March inclusive).

"The imported material shall be sourced exclusively from reputable suppliers with established biosecurity protocols."