



Habitats Regulations Assessment

Prepared by (LSE only)	Phil Collier-Baker	Job Title	Case Officer	Date	23/08/2023
Quality Checked by	Julia Stobie	Job Title	Case Manager	Date	25/08/2023
Amended by (LSE only)	Philip Collier-Baker	Job Title	Case Officer	Date	25/8/2023
Prepared by (AA only)	Julia Stobie	Job Title	Case Manager	Date	29/08/2023
Quality Checked by	Katherine White	Job Title	Senior Case Manager	Date	31/08/2023
Amended by	Julia Stobie	Job Title	Case Manager	Date	01/09/2023
Quality Checked by	Katherine White	Job Title	Senior Case Manager	Date	05/09/2023
Amended by	Luke Harto	Job Title	Case Officer	Date	11/12/2023
Quality Checked by	Stacey Phillips	Job Title	Case Manager	Date	18/12/2023
Quality Checked by	Katherine White	Job Title	Senior Case Manager	Date	22/12/2023
Quality Checked by	Laura Calvert	Job Title	Case Manager	Date	13/03/2024

Table 1: Proposed plan or project details

Title of project	Development Of Harbour Office Jetty And Shore-Based Facilities
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Case reference	MLA/2023/00025
Applicant name	Captain Joanna Cox, Chichester Harbour Conservancy
Type of licensable activity/ies	<p>66(1) To deposit any substance or object within the UK marine licensing area, either in the sea or on or under the sea bed, from—</p> <p>(a) any vehicle, vessel, aircraft or marine structure,</p> <p>66(7) To construct, alter or improve any works within the UK marine licensing area either—</p> <p>(a) in or over the sea, or</p> <p>(b) (b) on or under the sea bed.</p> <p>http://www.legislation.gov.uk/ukpga/2009/23/section/66</p>
Location of works	Chichester Harbour. See Annex 1, figures 1 and 2.
Description of proposed project	<p>The access pontoons at Itchenor are to be improved to provide increased walk ashore berthing capacity by extending the pontoon footprint in association with shoreside amenity improvements. The existing inner pontoon will be shortened for use as berthing for Harbour Authority vessels and the Itchenor Ferry. The inner pontoon will provide a safe place for ferry passengers to congregate, away from the vessel movements on the outer pontoon.</p> <p>The existing pontoon will be removed. The bolts securing the pile guides to the pontoons will be removed using spanners. It may be necessary to burn these off. The pile guides will be removed and stored on board for disposal at WML yard. The deck boards and pontoon joints will be removed to expose the connect bolts which will be underdone with spanners. Once bolts are removed the pontoon will be towed in lifted and washed before being landed onto the deck and secured. The pontoons will be disposed of at Walcon Marine Yard. This activity does not involve removal from the seabed.</p> <p>The pontoon sections are to be delivered to site fully assembled with attached tubular steel pilings which will be ready to drive into the seabed at 2.5 metres (m) above mean high water springs (MHWS). The marine works will be carried out by specialist marine contractors, construction works will be installed using a 'spud leg' barge supported by small workboats to manoeuvre the sections into place.</p> <p>The proposed new 100m section of jetty, less the removal of one section of the old jetty, will add approximately 231 square metres (m²) to the existing jetty footprint of 342m².</p> <p>The new pilings (5 x 406mm piles) will be the only part of the new structure that will contact the seabed. Most of the works will take place in the deep-water part of the channel, with a small change to the angle of the shore end freeing-up a small inter-tidal area. It is expected that the piling operation will proceed at a rate of 2 piles installed per day (3-4 hours per pile). A raised landing section will be built with a hinged ramp connecting to the jetty, which will be canted to the east. This will facilitate dry foot access, even over high spring tides. It will also free up an area of developed intertidal which can be returned to nature.</p>

	<p>Works are expected to take place over a 6 week period outside the nesting season for over-wintering birds. Order of works is as follows:</p> <ul style="list-style-type: none"> • Arrival of Walcon barges with equipment assembled on deck • Removal of existing pontoon • Installation of new pontoons • Installation of piles (6 piles) • Installation of access pontoon and ramp <p>Works will be carried out during daylight hours from 07:00 hours to 17:00 hours.</p>
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Table 2: Need for a Habitats Regulations Assessment (HRA)

Is the proposal directly connected with, or necessary to the management of a National Site Network (NSN) site for the purpose of conserving the habitats or species for which the site is designated?	No.
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Table 3a: Details of NSN site identified

<p>Name of NSN site: Chichester and Langstone Harbours Special Protection Area (SPA) (UK9011011). (See Annex 1, figure 3)</p> <p>Distance and Direction: The proposed works take place within the above site.</p>
<p>Licensable activity/ies from the project that have the potential to interact with the NSN site: Installing five piles attached to new pontoon sections.</p>
<p>Conservation Advice package used: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9011011&SiteName=chiches&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&HasCA=1&NumMarineSeasonality=18&SiteNameDisplay=Chichester%20and%20Langstone%20Harbours%20SPA</p> <p>Conservation objectives:</p> <p>The objectives are to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> • the extent and distribution of the habitats of the qualifying features • the structure and function of the habitats of the qualifying features • the supporting processes on which the habitats of the qualifying features rely • the populations of each of the qualifying features • the distribution of qualifying features within the site <p>Qualifying features:</p> <ul style="list-style-type: none"> • Bar-tailed godwit (<i>Limosa lapponica</i>), Non-breeding • Common tern (<i>Sterna hirundo</i>), Breeding

- Curlew (*Numenius arquata*), Non-breeding
- Dark-bellied brent goose (*Branta bernicla bernicla*), Non-breeding
- Dunlin (*Calidris alpina alpina*), Non-breeding
- Grey plover (*Pluvialis squatarola*), Non-breeding
- Little tern (*Sternula albifrons*), Breeding
- Pintail (*Anas acuta*), Non-breeding
- Red-breasted merganser (*Mergus serrator*), Non-breeding
- Redshank (*Tringa totanus*), Non-breeding
- Ringed plover (*Charadrius hiaticula*), Non-breeding
- Sanderling (*Calidris alba*), Non-breeding
- Sandwich tern (*Thalasseus sandvicensis*), Breeding
- Shelduck (*Tadorna tadorna*), Non-breeding
- Shoveler (*Spatula clypeata*), Non-breeding
- Teal (*Anas crecca*), Non-breeding
- Turnstone (*Arenaria interpres*), Non-breeding
- Waterbird assemblage, Non-breeding
- Wigeon (*Mareca penelope*), Non-breeding

Date conservation advice was last accessed: 25/08/2023

Table 3b: Details of NSN site identified

Name of NSN site: Solent Maritime Special Area of Conservation (SAC) (UK0030059). (See Annex 1, figure 4)

Distance and Direction: The proposed works take place within the above site.

Licensable activity/ies from the project that have the potential to interact with the NSN site: Installing five piles attached to new pontoon sections.

Conservation Advice package used:

<https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK0030059&SiteName=solent&countyCode=&responsiblePerson=&HasCA=1&NumMarineSeasonality=0&SiteNameDisplay=Solent%20Maritime%20SAC>

Conservation objectives:

The objectives are to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- the extent and distribution of the habitats of the qualifying features
- the structure and function of the habitats of the qualifying features
- the supporting processes on which the habitats of the qualifying features rely

- the populations of each of the qualifying features
- the distribution of qualifying features within the site

Qualifying features:

- Annual vegetation of drift lines
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- Coastal lagoons
- Desmoulin's whorl snail (*Vertigo moulinsiana*)
- Estuaries
- Mudflats and sandflats not covered by seawater at low tide
- Perennial vegetation of stony banks
- Salicornia and other annuals colonising mud and sand
- Sandbanks which are slightly covered by sea water all the time
- Shifting dunes along the shoreline with *Ammophila arenaria* ("White dunes")
- Spartina swards (*Spartinion maritimae*)

Date conservation advice was last accessed: 25/08/23

Table 3c: Details of NSN site identified

Name of NSN site: Chichester and Langstone Harbours Ramsar (UK11013). (See Annex 1, figure 5)

Distance and Direction: The proposed works take place within the above site.

Licensable activity/ies from the project that have the potential to interact with the NSN site: Installing five piles attached to new pontoon sections.

Conservation Advice package used:

<https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9011011&SiteName=chiches&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&HasCA=1&NumMarineSeasonality=18&SiteNameDisplay=Chichester%20and%20Langstone%20Harbours%20SPA>

Ramsar Sites

This Ramsar site overlaps with the Chichester and Langstone Harbours SPA (UK9011011) NSN site. Conservation Advice packages for overlapping NSN Site designations are, in most cases, sufficient to support the management of the Ramsar interests. As such, the Conservation Advice package for Chichester and Langstone Harbours SPA (UK9011011) NSN site has been used. Any Ramsar qualifying features deemed by the MMO to not be covered by the overlapping Conservation Advice package is listed below and considered using best available knowledge.

Sites without Conservation Advice packages on the Designated Sites System

There is currently no Conservation Advice package available for this NSN site. As such, to help inform the HRA the MMO has, where appropriate, used the Conservation Advice packages from Chichester and Langstone Harbours SPA (UK9011011) NSN site as a proxy to help provide information on relevant feature-pressure sensitivities. This is not a definitive list and all relevant considerations of specific interactions at Chichester and Langstone Harbours

Ramsar (UK11013) NSN site have been considered as part of the HRA process.

Ramsar Criteria:

1 - Two large estuarine basins linked by the channel which divides Hayling Island from the main Hampshire coastline. The site includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes.

5 - Assemblages of international importance

6 - Species/populations occurring at levels of international importance.

- Ringed plover, *Charadrius hiaticula*
- Black-tailed godwit, *Limosa limosa islandica*
- Common redshank, *Tringa totanus totanus*
- Dark-bellied brent goose, *Branta bernicla bernicla*
- Common shelduck, *Tadorna tadorna*
- Grey plover, *Pluvialis squatarola*
- Dunlin, *Calidris alpina alpina*

Date conservation advice was last accessed: 25/08/23

Likely Significant Effect (LSE)

Test: Is it possible that this plan or project might undermine the conservation objectives?

In formulating the LSE alone and, or in-combination assessments, Natural England's Conservation Advice Packages, as outlined in Table 3, have been consulted and the following principles applied:

- Where available, the 'Advice on Operations' (AoO) matrix to determine pressures associated with the proposed activities that may potentially harm the qualifying habitat features and/ or species of the sites has been used.
- Features are assessed against the proximity to the works and relevant seasonality considerations. If no pathway is identified between the project (source) and feature (receptor) then no further consideration is given to those features in the HRA.
- Low risk pressures, unless there is evidence or site specific factors that increase the risk, or uncertainty on the level of pressure on a receptor, this pressure generally does not occur at a level of concern and should not require consideration as part of the assessment.
- Features deemed sensitive to pressures (medium and high risk) for both direct and indirect pathways are taken forward into the LSE assessment unless screened for proximity or seasonality.
- The individual pressure/ feature interactions categorised as 'Not Sensitive' at the benchmark are not taken forward into the LSE assessment unless a specific case related pressure is identified such that the impacts on these features will reach above the benchmarks specified for these pressure/ feature interactions.
- For pressure/ feature interactions categorised as 'Not Relevant' these are not taken forward into the LSE assessment. The MMO considers that there is no interaction of concern between the pressure and a feature or the activity has no way of interacting with the feature.
- Pressure/ feature interactions categorised as either 'Insufficient Evidence' or 'Not Assessed' are taken forward into the LSE assessment in accordance with the precautionary principle.

The Advice on Operations (AoO) category of marine activities used is **Ports and Harbours (construction) - Piling and construction of Port and Harbour Structures.**

Q1 - I can confirm that I have reviewed all of the relevant conservation advice packages and I understand the features/supporting habitats that I am assessing.

Yes

Q2 - I can confirm that I have reviewed all of the relevant pressures as per the advice on operations section of the conservation advice packages.

Yes

Q3 - I can confirm that this LSE has not considered mitigation (either included within the application or through additional measures) when assessing the LSE.

Yes

Q4 - I can confirm that the project will not result in habitat loss within the identified designated sites.

No. There will be some loss of intertidal/sub tidal mud habitat.

Pathway assessment

Supporting habitats were screened out of requiring consideration at LSE stage as there is no realistic pathway between the receptor and the proposed activities due to distance. See tables 4a and 4b for further details.

Table 4a Feature or supporting habitat not taken forward to LSE assessment as there is no realistic pathway at the reported distance

NSN site: Chichester and Langstone Harbours SPA/Ramsar	
Activity 1 Piling	
Feature or supporting habitat	Approximate Distance
Freshwater and Coastal grazing marsh	Nearest is 4km at Thorney Deepes
Intertidal seagrass beds	Nearest c.2km away
Intertidal rock	Not present
Coastal lagoons	Not present
Coastal Reedbeds	Not present at the site. Nearest is 2.5km away at Birdham Pool Marina.
Intertidal mixed sediment	Not present
Subtidal coarse sediment	Not present
Subtidal sand	Not present
Intertidal sand and muddy sand	Not present

Table 4b Feature or supporting habitat not taken forward to LSE assessment as there is no realistic pathway at the reported distance

NSN site: Solent maritime SAC	
Activity 1 Piling	Approximate Distance
Intertidal seagrass beds	Nearest C 2km away
Coastal Lagoons	Not present
Desmoulin's whorl snail	Not present , unsuitable habitat
Perennial vegetation of stony banks	Not present
Shifting dunes along the shoreline with Ammophila arenaria ("White dunes")	C. 4km from site at East Head.
Sub tidal seagrass bed	c. 2km away
Intertidal mixed sediment	Not present
Subtidal coarse sediment	Not present
Subtidal sand	Not present
Intertidal sand and muddy sand	Not present
Desmoulin's whorl snail	Not present unsuitable habitat

Table 5a – LSE table for Alone Assessment

Chichester and Langstone Harbours SPA (UK9011011) & Chichester and Langstone Harbours Ramsar (UK11013)			
Feature or supporting habitat	Pressures to discuss	LSE?	Justification
Birds (breeding) Common tern Little tern Sandwich tern Birds (non-breeding)	Above water noise Barrier to species movement	Yes	The project involves the installation of five piles and attaching pre-assembled pontoon sections. The proposed works are small scale; however, they do include sources of above water noise such as personnel, workboats, a spud leg barge and piling. Works are to take place in an existing busy harbour facility; whilst the additional noise created by the increase in personnel and vessels is not expected to be

<p>Bar-tailed godwit Curlew Dark-bellied brent goose Dunlin Grey plover Pintail Red-breasted merganser Redshank Ringed plover Sanderling Shelduck Shoveler Teal Turnstone Wigeon Waterbird assemblage</p>			<p>significantly greater than that already experienced, piling will be. This could also cause a barrier to species movement.</p> <p>The MMO considers these pressures have the capacity of causing a likely significant effect on this site from the project alone. These pressures will be taken through to an appropriate assessment alone and will not be considered at the LSE in-combination stage.</p>
<p>Birds (breeding) Common tern Little tern Sandwich tern Birds (non-breeding) Red-breasted merganser Waterbird assemblage</p>	<p>Changes in suspended solids (water clarity)</p>	<p>No</p>	<p>The project involves the installation of five piles and attaching pre-assembled pontoon sections.</p> <p>From AoO, pile driving will cause a highly localised and temporary increase in suspended sediment levels in the direct vicinity of the works.</p> <p>The works are to take place in an existing and busy harbour facility. The works during construction will be temporary.</p> <p>Any increase in suspended sediment levels will be temporary and readily dispersed within the body of water.</p> <p>Operation of the facility is not expected to have a significant impact on sediment levels.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.</p>
<p>Birds (breeding) Common tern</p>	<p>Emergence Regime changes, including tidal level considerations</p>	<p>No</p>	<p>There is insufficient evidence to understand whether these birds are sensitive to this pressure. However, the project is for the installation of 5 piles to support the</p>

Little tern Sandwich tern			<p>100 metre extension of the jetty. Work is expected to take up to 6 weeks. Due to the small scale of the project emergence regime changes are not anticipated.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.</p>
Birds (non-breeding) Bar-tailed godwit Curlew Dark-bellied brent goose Dunlin Grey plover Pintail Red-breasted merganser Redshank Ringed plover Sanderling Shelduck Shoveler Turnstone Wigeon Waterbird assemblage	Emergence Regime changes, including tidal level considerations	No	<p>Bar-tailed godwit, Non-breeding, Curlew, Non-breeding, Dunlin, Non-breeding, Grey plover, Non-breeding, Pintail, Non-breeding, Redshank, Non-breeding, Ringed plover, Non-breeding, Sanderling, Non-breeding, Shelduck, Non-breeding, Turnstone, Non-breeding are considered sensitive to this pressure. There is insufficient evidence to say whether the other bird features are sensitive. However, the project is for the installation of up to 6 piles to support the 100-metre extension of the jetty. Work is expected to take up to six weeks. Due to the small scale of the project emergence regime changes are not anticipated.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.</p>
Birds (breeding) Common tern Little tern Sandwich tern Birds (non-breeding) Bar-tailed godwit Curlew Dark-bellied brent goose Dunlin	Introduction of light	Yes	<p>There is insufficient evidence to ascertain whether these birds are sensitive to this pressure. This pressure feature interaction will be taken through as a precaution as lighting may be used.</p> <p>The MMO considers these pressures have the capacity of causing a likely significant effect on this site from the project alone. These pressures will be taken through to an appropriate assessment alone and will not be considered at the LSE in-combination stage.</p>

<p>Grey plover Pintail Red-breasted merganser Redshank Ringed plover Sanderling Shelduck Shoveler Turnstone Wigeon Waterbird assemblage</p>			
<p>Birds (breeding) Common tern Little tern Sandwich tern Birds (non-breeding) Bar-tailed godwit Curlew Dark-bellied brent goose Dunlin Grey plover Pintail Red-breasted merganser Redshank Ringed plover Sanderling Shelduck Shoveler Turnstone Wigeon Waterbird assemblage</p>	<p>Removal of non-target species</p>	<p>No</p>	<p>There will be no removal of non -target species due to the proposed works.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will not be considered at the LSE in-combination stage as there is no pathway at all for impact.</p>

<p>Birds (breeding) Common tern Little tern Sandwich tern</p> <p>Birds (non-breeding) Dark-bellied brent goose Pintail Red-breasted merganser Shelduck Shoveler Teal Wigeon Waterbird assemblage</p>	Underwater noise changes.	Yes	<p>The project involves the installation of five piles and attaching pre-assembled pontoon sections.</p> <p>The proposed works are small scale; however, they do include sources of underwater noise such as workboats, a spud leg barge and piling.</p> <p>Works are to take place in an existing busy harbour facility; whilst the additional noise created by the increase in vessels is not expected to be significantly greater than that already experienced, piling will be.</p> <p>The MMO considers these pressures have the capacity of causing a likely significant effect on this site from the project alone. These pressures will be taken through to an appropriate assessment alone and will not be considered at the LSE in-combination stage.</p>
<p>Birds (breeding) Common tern Little tern Sandwich tern</p> <p>Birds – (non-breeding) Bar-tailed godwit Curlew Dark-bellied brent goose Dunlin Grey plover Pintail Red-breasted merganser Redshank Ringed plover Sanderling Shelduck Teal Turnstone</p>	Visual disturbance	No	<p>The project involves the installation of five piles and attaching pre-assembled pontoon sections.</p> <p>The main source of visual disturbance could come from movement of personnel, vessels, and equipment.</p> <p>The works are to take place in an existing and busy harbour facility. The works during construction will be temporary and limited to daylight hours for a period of approximately 6 weeks.</p> <p>The added activity from construction and operation of the project is not expected to be significantly greater than that experienced during the day-to-day operation of the facility.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.</p>

Wigeon Waterbird assemblage			
Birds (breeding) Common tern Little tern Sandwich tern Birds (non-breeding) Grey plover Red-breasted merganser Sanderling Shelduck Waterbird assemblage	Waterflow (tidal current) changes, including sediment transport considerations	No	There is insufficient evidence to ascertain whether these birds are sensitive to tidal current changes. However, this project is relatively small scale (5 piles, 406mm in diameter, for a 100m jetty extension). The scale of the activities mean significant waterflow changes are unlikely. The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.
Habitat Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Subtidal mixed sediments Subtidal mud	Abrasion/disturbance of the substrate on the surface of the seabed Penetration and/or disturbance of the substratum below the surface of the seabed, including abrasion	Yes	Piles will be driven into intertidal mud and subtidal mud. Salicornia and other annuals are present throughout the harbour and on nearby intertidal mud. Spartina swards can be found approximately 95m from footprint of works. A spud leg barge will be in use during piling. This will be sited on mud and may cause a small amount of abrasion. The MMO considers these pressures have the capacity of causing a likely significant effect on this site from the project alone. These pressures will be taken through to an appropriate assessment alone and will not be considered at the LSE in-combination stage.
Habitat Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Water column	Barrier to species movement	No	The nearest Spartina swards are situated approx 95m from the works. The works are relatively small and are not considered a physical barrier. Salicornia is present throughout the Harbour and on nearby intertidal mud. Access to the site will be over the existing hardstanding. Construction is scheduled for 6 weeks which is not expected to present a barrier to species movement to/from the feature. The jetty is situated within an established and busy harbour area and operation is not expected to be significantly higher than already experienced and therefore not expected to present a barrier to species movement to/from the feature.

			The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.
Habitat Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments Subtidal mud Water column	Changes in suspended solids (water clarity)	No	Intertidal mud and subtidal mud are within the footprint of the work and subtidal mix sediment approximately 10m from the footprint of the works. Spartina swards can be found approx. 95m from footprint of works. The project is relatively small and involves the installation of five piles and attaching pre-assembled pontoon sections. From Advice on Operations (AoO), pile driving will cause a highly localised and temporary increase in suspended sediment levels in the direct vicinity of the works. The works are to take place in an existing and busy harbour facility. The works during construction will be temporary. Any increase in suspended sediment levels will be temporary and readily dispersed within the body of water. Operation of the facility is within an established and busy harbour area and is not expected to have a significant impact on sediment levels above that already experienced. The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.
Habitat Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina Swards Intertidal coarse sediment Intertidal mud Subtidal mixed sediment Subtidal mud Water column	Emergence Regime Changes, including tidal considerations	No	The project is for the installation of up to 5 piles to support the 100-metre extension of the jetty. Work is expected to take up to 6 weeks. Due to the small scale of the project emergence regime changes are not anticipated. The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.

<p>Habitat Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina Swards Intertidal coarse sediment Intertidal mud Subtidal mixed sediment Subtidal mud Water column</p>	<p>Habitat structure changes (removal of substratum (extraction))</p>	<p>No</p>	<p>There will be no extraction whereby there will be a temporary/reversible change to habitat structure .</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will not be considered at the LSE in-combination stage as there is no pathway at all for impact.</p>
<p>Habitat Subtidal mixed sediment Water column</p>	<p>Introduction of light</p>	<p>Yes</p>	<p>There is insufficient evidence to ascertain whether intertidal mixed sediment is sensitive to introduction of light. Water column is sensitive to introduction of light as evidence had shown the introduction of light in the water column may lead to an increase in fish and an unnatural tip-down regulation of fish populations. This pressure feature interaction will be taken through as a precaution as lighting may be used.</p> <p>The MMO considers these pressures have the capacity of causing a likely significant effect on this site from the project alone. These pressures will be taken through to an appropriate assessment alone and will not be considered at the LSE in-combination stage.</p>
<p>Habitat Salicornia and other annuals colonising mud and sand Atlantic Salt meadows Spartina Swards Intertidal mixed sediment Intertidal mud Subtidal mixed sediment Subtidal mud</p>	<p>Physical change to another sediment type</p>	<p>No</p>	<p>This project is for the installation of five piles to support a 100m pontoon extension. There will be no permanent change from marine habitat type to another through change in substratum.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will not be considered at the LSE in-combination stage as there is no pathway for impact.</p>
<p>Habitat</p>	<p>Physical loss (to land or freshwater habitat)</p>	<p>Yes</p>	<p>New piles (x5) will be driven into intertidal mud and subtidal mud and will be used to secure the new jetty. The installation of five new piles which have a diameter of 406 millimetres (mm) will result in 0.65m² habitat loss (subtidal mud).</p>

<p>Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Subtidal mixed sediments Subtidal mud Water column</p>			<p>The new project will create shading and is considered as habitat loss due to lack of light penetration. As per the applicant's designs it will result in a habitat loss of 231m². It is worth noting that a spud leg barge will be in use during piling. This will be sited on mud and may cause a small amount of temporary habitat loss.</p> <p>Therefore, there will be a loss of subtidal mud habitat/Salicornia colonising mud and sand. Spartina swards can be found approx. 95m from footprint of works so there will be no direct loss of Spartina swards.</p> <p>The MMO considers these pressures have the capacity of causing a likely significant effect on this site from the project alone. These pressures will be taken through to an appropriate assessment alone and will not be considered at the LSE in-combination stage.</p>
<p>Habitat Atlantic salt meadows Spartina swards (ie) Intertidal Coarse sediment Intertidal mixed sediment Intertidal mud Subtidal mud Water column</p>	<p>Removal of non-target species</p>	<p>No</p>	<p>There will be no removal of non-target species.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will not be considered at the LSE in-combination stage as there is no pathway at all for impact.</p>
<p>Habitat Intertidal mud Subtidal mixed sediments Subtidal mud</p>	<p>Smothering and siltation rate changes (Light)</p>	<p>No</p>	<p>Intertidal mud and subtidal mud are within the footprint of the work and subtidal mixed sediment is approximately 10m from the footprint of the works.</p> <p>The project is relatively small and involves the installation of five piles and attaching pre-assembled pontoon sections. From Advice on Operations (AoO), pile driving will cause a highly localised and temporary increase in suspended sediment levels in the direct vicinity of the works.</p> <p>The works are to take place in an existing and busy harbour facility. The works during construction will be temporary.</p> <p>Any increase in suspended sediment levels will be temporary and readily dispersed within the body of water and therefore not expected to have a significant impact on smothering and siltation rate changes.</p>

			<p>Operation of the facility which is within an established and busy harbour area is not expected to have a significant impact on sediment and siltation rates above that already experienced.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.</p>
<p>Habitat Water column</p>	Underwater noise changes.	No	<p>AoO states: Any loud noise made onshore or offshore by construction, vehicles, vessels, tourism, mining etc. that may disturb birds and reduce time spent in feeding or breeding area. Only relevant to birds and sea mammals that spend time on land for breeding purposes (haul-outs). It is unlikely to be relevant to habitat sensitivity assessments.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.</p>
<p>Habitat Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Water column</p>	Vibration	No	<p>Spartina swards can be found approx. 95m from footprint of works.</p> <p>AoO states: We feel it is possible that this pressure could affect this habitat depending on the magnitude of the vibration, however there are no studies to back this up. Due to the distance to the feature and the relatively small scale of the works it is not expected that the works, in particular the piling will have a significant impact.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.</p>
<p>Habitat Water column</p>	Visual disturbance.	No	<p>AoO states: The shadows would penetrate the surface of the water column and potentially affect the distribution of fish species as avoidance of shadows is commonplace as an anti-predator mechanism, which would in turn affect the feeding areas of seabirds. The jetty may cast shadow over the water however the works are to extend an existing jetty within an established and busy harbour. Shadows caused on the water are not expected to have an impact on the water column significantly greater than already experienced.</p>

			The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.
Habitat Intertidal mixed sediment Intertidal mud Subtidal mud Water column	Waterflow (tidal current changes)	No	This project is small scale (5 piles, 406mm in diameter for a 100m jetty extension). The scale of the activities mean significant waterflow changes are unlikely. The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.
Habitat Water column	Wave exposure changes	No	This project is small scale (5 piles, 406mm in diameter for a 100m jetty extension). The scale of the activities mean significant wave exposure changes are unlikely. The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.

Table 5b – LSE table for LSE Alone Assessment

Solent Maritime SAC (UK0030059)			
Feature or supporting habitat	Pressures to discuss	LSE?	Justification
Annex I habitat Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments	Abrasion/disturbance of the substrate on the surface of the seabed. Penetration and/or disturbance of the substratum below the surface of the seabed, including abrasion	Yes	Piles will be driven into intertidal mud and subtidal mud. Salicornia and other annuals are present throughout the harbour and on nearby intertidal mud. Spartina swards approx. 95m from footprint of works. A spud leg barge will be in use during piling. This will be sited on mud and may cause a small amount of abrasion. Piling will penetrate and/or disturb the substratum below the surface of the seabed, The MMO considers these pressures have the capacity of causing a likely significant effect on this site from the project alone. These pressures will be taken through to an appropriate assessment alone and will not be considered at the LSE in-combination stage.

<p>Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments</p>	<p>Changes in suspended solids (water clarity)</p>	<p>No</p>	<p>From Advice on Operations (AoO), pile driving will cause a highly localised and temporary increase in suspended sediment levels in the direct vicinity of the works. Any increase in suspended sediment levels will be temporary and readily dispersed within the body of water.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.</p>
<p>Annex I habitat Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards</p>	<p>Barrier to species movement</p>	<p>No</p>	<p>Intertidal mud and subtidal mud are within the footprint of the works. Intertidal mud and subtidal mixed sediment can be found approximately 10m from the footprint of the works. Spartina swards can be found approximately 95m from footprint of works.</p> <p>The works are relatively small and are not considered a physical barrier in relation to this Annex 1 habitat.</p> <p>Construction is scheduled for 6 weeks which is not expected to present a barrier to species movement to/from the feature.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.</p>
<p>Annex 1 habitat Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mixed sediment Intertidal mud Subtidal mixed sediment</p>	<p>Emergence regime changes including tidal level considerations</p>	<p>No</p>	<p>The project is for the installation of 5 piles to support the 100 metre extension of the jetty. Work is expected to take up to 6 weeks. Due to the small scale of the project emergence regime changes are not anticipated.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.</p>
<p>Annex 1 habitat Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mixed sediment Intertidal mud</p>	<p>Habitat Structure Changes</p>	<p>No</p>	<p>There will be no extraction whereby there will be a temporary/reversible change to habitat structure.</p> <p>The MMO considers these pressures have the capacity of causing a likely significant effect on this site from the project alone. These pressures will be taken through to an appropriate assessment alone and will not be considered at the LSE in-combination stage.</p>

Subtidal mixed sediment			
Annex 1 habitat Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mixed sediment Intertidal mud Subtidal mixed sediment	Introduction of Light	Yes	<p>There is insufficient evidence to ascertain whether intertidal mixed sediment, and subtidal mixed sediment is sensitive to introduction to light (all other habitats listed here there is no interaction of concern, or the habitat is not sensitive.</p> <p>The MMO considers these pressures have the capacity of causing a likely significant effect on this site from the project alone. The remaining features in relation to this pressure (sub tidal coarse sediment, subtidal mixed sediment) will be taken through to an appropriate assessment alone (as a precaution if light is introduced) and will not be considered at the LSE in-combination stage.</p>
Annex 1 habitat Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mixed sediment Intertidal mud Subtidal mixed sediment	Physical change to another sediment type	No	<p>This project is for the installation of five piles to support a 100m pontoon extension. There will be no permanent change from marine habitat type to another through change in substratum.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will not be considered at the LSE in-combination stage as there is no pathway for impact.</p>
Annex I habitat Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments	Physical loss (to land or freshwater habitat)	Yes	<p>New piles will be driven into intertidal mud and subtidal mud and will be replacements for existing piles in the same or immediately adjacent locations. Therefore, there will be a loss of mud habitat/Salicornia colonising mud and sand.</p> <p>Spartina swards can be found approx. 95m from footprint of works so there will be no loss of Spartina swards.</p> <p>A spud leg barge will be in use during piling. This will be sited on mud and may cause a small amount of temporary habitat loss.</p>

			The MMO considers these pressures have the capacity of causing a likely significant effect on this site from the project alone. These pressures will be taken through to an appropriate assessment alone and will not be considered at the LSE in-combination stage.
Annex 1 habitat Annual vegetation of drift lines Atlantic salt meadows Spartina swards Intertidal mixed sediment Intertidal mud Subtidal mixed sediment	Removal of non-target species	No	There will be no removal of non -target species. The MMO considers these pressures have the capacity of causing a likely significant effect on this site from the project alone. These pressures will be taken through to an appropriate assessment alone and will not be considered at the LSE in-combination stage.
Annex I habitat Intertidal mud Subtidal mixed sediments	Smothering and siltation rate changes (Light)	No	Intertidal mud, subtidal mix sediment approximately 10m from the footprint of the works. There is mud within the footprint of the work. The project is relatively small and involves the installation of five piles and attaching pre-assembled pontoon sections. From Advice on Operations (AoO), pile driving will cause a highly localised and temporary increase in suspended sediment levels in the direct vicinity of the works. The works are to take place in an existing and busy harbour facility. The works during construction will be temporary. Any increase in suspended sediment levels will be temporary and readily dispersed within the body of water and therefore not expected to have a significant impact on smothering and siltation rate changes. Operation of the facility which is within an established and busy harbour area is not expected to have a significant impact on sediment and siltation rates above that already experienced. The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.
Annex I habitat Annual vegetation of drift lines arenaria (“White dunes”) Salicornia and other annuals colonising mud and sand	Vibration	No	Spartina swards can be found approx. 95m from the footprint of works. Only intertidal/subtidal mud is within the footprint of work. AoO states: We feel it is possible that this pressure could affect this habitat depending on the magnitude of the vibration, however there are no studies to back this up.

Atlantic salt meadows Spartina swards			<p>Due to the distance to the feature and the relatively small scale of the works it is not expected that the works, in particular the piling will have a significant impact.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.</p>
Annex 1 habitat Intertidal mixed sediment Intertidal mud	Waterflow (tidal current changes), including sediment transport	No	<p>This project is small scale (6 piles, 406mm in diameter for a 100m jetty extension- construction to last 6 weeks. The scale of the activities mean significant waterflow changes are unlikely.</p> <p>The MMO considers the pressure exerted from this activity will not cause a likely significant effect on the features detailed for this site from the project alone. This pressure will now be considered at the LSE in-combination stage.</p>

Part 1 - LSE Alone

Q 5 - Upon reviewing the feature/pressure interactions I consider that the project as proposed will:

- a) Have an LSE alone because a pathway between the source and receptors have been identified such that an effect on the listed NSN sites may occur. The conclusions for feature/pressure interactions from LSE alone that are taken to AA are listed in Table 6 below.

Table 6: Feature/pressure interactions from LSE alone to be taken to AA

NSN Site	Feature(s)	Pressure(s)
Chichester and Langstone Harbours SPA (UK9011011) & Chichester and Langstone Harbours Ramsar (UK11013)	<p>Birds (breeding)</p> <p>Common tern Little tern Sandwich tern</p> <p>Birds (non-breeding)</p> <p>Bar-tailed godwit Curlew</p>	<p>Above water noise Barrier to species movement</p>

	<p>Dark-bellied brent goose Dunlin Grey plover Pintail Red-breasted merganser Redshank Ringed plover Sanderling Shelduck Shoveler Teal Turnstone Wigeon Waterbird assemblage</p>	
<p>Chichester and Langstone Harbours SPA (UK9011011) & Chichester and Langstone Harbours Ramsar (UK11013)</p>	<p>Birds (breeding) Common tern Little tern Sandwich tern Birds (non-breeding) Bar-tailed godwit Curlew Dark-bellied brent goose Dunlin Grey plover Pintail Red-breasted merganser Redshank Ringed plover Sanderling Shelduck Shoveler</p>	<p>Introduction of light</p>

	<p>Teal Turnstone Wigeon Waterbird assemblage</p>	
<p>Chichester and Langstone Harbours SPA (UK9011011) & Chichester and Langstone Harbours Ramsar (UK11013)</p>	<p>Habitat Subtidal mixed sediment Water column</p>	<p>Introduction of light</p>
<p>Chichester and Langstone Harbours SPA (UK9011011) & Chichester and Langstone Harbours Ramsar (UK11013)</p>	<p>Habitat Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments Subtidal mud</p>	<p>Abrasion/penetration</p>
<p>Chichester and Langstone Harbours SPA (UK9011011) & Chichester and Langstone Harbours Ramsar (UK11013)</p>	<p>Habitat Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Subtidal mixed sediments Subtidal mud Water column</p>	<p>Physical loss to land and freshwater habitat</p>
<p>Chichester and Langstone Harbours SPA (UK9011011) & Chichester and Langstone Harbours Ramsar (UK11013)</p>	<p>Birds (breeding) Common tern Little tern Sandwich tern Birds (non-breeding) Dark-bellied brent goose Pintail Red-breasted merganser</p>	<p>Underwater noise changes.</p>

	Shelduck Shoveler Teal Wigeon	
Solent Maritime SAC (UK0030059)	Annex 1 habitat Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments	Abrasion/penetration
Solent Maritime SAC (UK0030059)	Annex 1 habitat Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments	Physical loss to land or freshwater habitat
Solent Maritime SAC (UK0030059)	Annex 1 habitat Subtidal coarse sediment Subtidal mixed sediment	Introduction of light

Part 2 – LSE in-combination

Other Projects considered for in-combination assessment

MMO has conducted a GIS check of activities in the immediate area around the proposed project. A pathway zone of influence of 2 kms has been used. The MMO has also considered any known projects occurring within or around the boundaries of the NSN sites.

The following projects have been identified and listed in Table 5.

Table 7 – In-combination plan or projects.

Name of plan or project and activity type	NSN site to which there is a pathway in-combination with licence application
MLA/2021/00126 Construction of sailing club jetty Expires 30/06/24	Chichester and Langstone Harbours SPA (UK9011011) & Chichester and Langstone Harbours Ramsar (UK11013). Solent Maritime SAC (UK0030059).
MLA/2022/00428 Alternative use of dredged material Expires 01/09/27	Chichester and Langstone Harbours SPA (UK9011011) & Chichester and Langstone Harbours Ramsar (UK11013). Solent Maritime SAC (UK0030059).

Impacts from projects considered for in-combination assessment

Q6 - Upon reviewing the feature/pressure interactions acting in-combination between the application project and projects listed in Table 7, I consider that the project as proposed will:

- a) not have a likely significant effect on any NSN site mentioned above. My rationale is that:

Although there is a pathway, in-combination impacts are such that there would not be a likely significant effect. This is because construction of the sailing club has now ended. The minor impacts identified, (changes in suspended solids, emergence regime changes, visual disturbance, water flow changes, vibration) are so minor due to the scale of the project (5 piles to support a 100m jetty extension) that in combination with similar pressures from MLA/2022/00428 they will not act in combination to result in likely significant effect on the features.

Likely Significant Effect Conclusion

The MMO:

Has decided to carry out an appropriate assessment because significant effects alone could not be screened out.

Details of the sites and feature/pressure interactions to be assessed in the Appropriate Assessment are detailed in Table 5 for alone.

Appropriate Assessment

Below is the MMO's assessment of those aspects of the project that it was not possible to rule out the likelihood of significant effects on the designated sites listed in table 3.

Part 1 (table 8) – Alone

Name of designated site: Chichester and Langstone Harbours SPA (UK9011011) & Chichester and Langstone Harbours Ramsar (UK11013).				
Qualifying feature or species (include sub-features and supporting habitats)	Pressure	Adverse Effect on Integrity on qualifying feature of species?	Justification	After mitigation, can you conclude no adverse effect on site integrity?
Birds (breeding) Common tern Little tern Sandwich tern	Above water noise	Yes	Above water noise will be generated because of piling activities (5 x 406mm piles). The applicant notes that these breeding birds do not breed near the site. They breed at Thorney Deeps (5km) and Stakes Island (1.5km). It is expected that piling operations will proceed at a rate of 2 piles installed per day (3-4 hours per pile).	Yes. It is proposed that the activities will take place outside the nesting season for over-wintering birds, during the months of March and April. The Applicant has stated that records of previous piling show they have not had to impact drive piles in this area and vibro piling will be used. However, should impact pile driving be required "Soft start" procedures will be used. Condition to be added to the licence: Vibro piling must be used as standard, percussive piling must only be used if needed to drive a pile to its design depth. Soft-start procedures must be used to ensure incremental increase in pile power over a set time

				<p>period until full operational power is achieved. The soft-start duration must be a period of not less than 20 minutes. Should piling cease for a period greater than 10 minutes, then the soft start procedure must be repeated.</p> <p>The Applicant notes these breeding birds are present April to September and do not breed near the site. They breed at Thorney Deeps (5km) and Stakes Island (1.5km)</p> <p>In addition, to protect the over wintering birds a cold weather condition will be added to any licence granted: “If temperatures of zero degrees Celsius (or lower) occur on the site, at any point within a 24-hour period, for seven consecutive days leading up to or during any instance of the licenced activities as recorded by the nearest meteorological station to the site, then works must be suspended. Once temperatures have been above zero degrees Celsius for three consecutive days then works can recommence.”</p>
Birds (non-breeding) Bar-tailed godwit Curlew Dark-bellied brent goose Dunlin Grey plover Pintail Red-breasted merganser Redshank Ringed plover Sanderling Shelduck Shoveler Teal Turnstone	Above water noise	Yes	<p>Above water noise will be generated because of piling activities (5 x 406mm piles). The Applicant has noted these birds Migrate to north-west/north-east Europe during the spring/summer period and therefore are not likely to be present when the works take place mid-September to October. It is expected that piling operations will proceed at a rate of 2 piles installed per day (3-4 hours per pile).</p>	<p>Yes</p> <p>It is proposed that the activities will take place during March and April inclusive and will avoid sensitive overwintering times. The Applicant has stated that records of previous piling show they have not had to impact drive piles in this area and vibro piling will be used. However, should impact pile driving be required “Soft start” procedures will be used: Condition to be added to the licence: Vibro piling must be used as standard, percussive piling must only be used if needed to drive a pile to its design depth. Soft-start procedures must be used to ensure incremental increase in pile power over a set time period until full operational power is achieved. The soft-start duration must be a period of not less than 20 minutes. Should piling cease for a period greater than 10 minutes, then the soft start procedure must be repeated.</p> <p>In addition, to protect the over wintering birds a cold weather condition will be added to any licence granted: “If temperatures of zero degrees Celsius (or lower) occur on the site, at any point within a 24-hour period, for seven</p>

<p>Wigeon Waterbird assemblage</p>				<p>consecutive days leading up to or during any instance of the licenced activities as recorded by the nearest meteorological station to the site, then works must be suspended. Once temperatures have been above zero degrees Celsius for three consecutive days then works can recommence.”</p>
<p>Birds (breeding) Little tern</p>	<p>Barrier to Species movement</p>	<p>Yes</p>	<p>In terms of barrier to species movement as a result of construction activities the applicant notes that this bird does not breed near the site but breeds at Thorney Deepes (5km) and Stakes Island (1.5km). It is expected that piling operations will proceed at a rate of 2 piles installed per day (3-4 hours per pile). The project is relatively small and involves the installation of five piles and attaching pre-assembled pontoon sections.</p> <p>The works are to take place in an existing and busy harbour facility. The works during construction will be temporary and limited to daylight hours for a period of approximately 6 weeks.</p> <p>The added activity from construction and operation of the project is not expected to be significantly greater than that experienced during the day-to-day operation of the facility.</p> <p>In terms of barrier to species movement in relation to the increase in area of the pontoons - the piles and pontoons will add</p>	<p>Yes</p> <p>It is proposed that the activities will take place during March and April inclusive and will avoid sensitive overwintering times. The Applicant has stated that records of previous piling show they have not had to impact drive piles in this area and vibro piling will be used. However, should impact pile driving be required “Soft start” procedures will be used: Condition to be added to the licence: Vibro piling must be used as standard, percussive piling must only be used if needed to drive a pile to its design depth. Soft-start procedures must be used to ensure incremental increase in pile power over a set time period until full operational power is achieved. The soft-start duration must be a period of not less than 20 minutes. Should piling cease for a period greater than 10 minutes, then the soft start procedure must be repeated.</p>

			an additional 231m ² to the existing footprint of 342m ² but this is not anticipated that this in itself will cause a barrier to species movement/interfere with feeding as this addition area represents only 0.0000018% of the extent of the SPA.	
Birds (non-breeding) Bar-tailed godwit Curlew Dark-bellied brent goose Dunlin Grey plover Pintail Red-breasted merganser Redshank Ringed plover Sanderling Shelduck Teal Turnstone Wigeon Waterbird assemblage	Barrier to Species movement	No	<p>In terms of barrier to species movement as a result of construction activities the applicant notes that this bird does not breed near the site but breeds at Thorney Deepes (5km) and Stakes Island (1.5km). It is expected that piling operations will proceed at a rate of 2 piles installed per day. (3-4 hours per pile). The project is relatively small and involves the installation of five piles and attaching pre-assembled pontoon sections.</p> <p>The works are to take place in an existing and busy harbour facility. The works during construction will be temporary and limited to daylight hours for a period of approximately 6 weeks.</p> <p>The added activity from construction and operation of the project is not expected to be significantly greater than that experienced during the day-to-day operation of the facility.</p> <p>In terms of barrier to species movement in relation to the</p>	<p>Yes</p> <p>It is proposed that the activities will take place during March and April inclusive and will avoid sensitive overwintering times. The Applicant has stated that records of previous piling show they have not had to impact drive piles in this area and vibro piling will be used. However, should impact pile driving be required "Soft start" procedures will be used: Condition to be added to the licence: Vibro piling must be used as standard, percussive piling must only be used if needed to drive a pile to its design depth. Soft-start procedures must be used to ensure incremental increase in pile power over a set time period until full operational power is achieved. The soft-start duration must be a period of not less than 20 minutes. Should piling cease for a period greater than 10 minutes, then the soft start procedure must be repeated.</p>

			increase in area of the pontoons The piles and pontoons will add an additional 231m ² to the existing footprint of 342m ² but this is not anticipated that this in itself will cause a barrier to species movement/interfere with feeding as this addition area represents only 0.0000018% of the extent of the SPA.	
Birds (breeding) Common tern Little tern Sandwich tern Birds (non-breeding) Bar-tailed godwit Curlew Dark-bellied brent goose Dunlin Grey plover Pintail Red-breasted merganser Redshank Ringed plover Sanderling Shelduck Shoveler Turnstone Wigeon Waterbird assemblage	Introduction of light	Yes	Introduction of light may displace/disturb birds	Yes It is proposed that the activities will take place during March and April inclusive and will avoid sensitive overwintering times. In addition, work will only take place during daylight hours, therefore there will be no additional introduction of light. The following condition will be added: Licensed activities must only take place during daylight hours.

<p>Birds (breeding) Common tern Little tern Sandwich tern</p>	Underwater noise	Yes	<p>There is insufficient evidence to determine whether Common tern (Breeding) Little tern (Breeding) and Sandwich tern (Breeding) are sensitive to underwater noise therefore they are being considered as a precaution. Under water noise will be generated as a result of piling activities (6 x 406mm piles). The Applicant notes these breeding birds are present April to September and do not breed near the site. They breed at Thorney Deeps (5km) and Stakes Island (1.5km). It is expected that the piling operations will proceed at a rate of 2 piles installed per day. (3-4 hours per pile)</p>	<p>Yes</p> <p>It is proposed that the activities will take place during March and April inclusive and will avoid sensitive overwintering times. The Applicant has stated that records of previous piling show they have not had to impact drive piles in this area and vibro piling will be used. However, should impact pile driving be required “Soft start” procedures will be used. Condition to be added to the licence. Vibro piling must be used as standard, percussive piling must only be used if needed to drive a pile to its design depth. Soft-start procedures must be used to ensure incremental increase in pile power over a set time period until full operational power is achieved. The soft-start duration must be a period of not less than 20 minutes. Should piling cease for a period greater than 10 minutes, then the soft start procedure must be repeated.</p> <p>The Applicant notes these breeding birds are present April to September and do not breed near the site. They breed at Thorney Deeps (5 km) and Stakes Island (1.5km)</p> <p>In addition, to protect the over wintering birds a cold weather condition will be added to any licence granted:</p> <p>“If temperatures of zero degrees Celsius (or lower) occur on the site, at any point within a 24-hour period, for seven consecutive days leading up to or during any instance of the licenced activities as recorded by the nearest meteorological station to the site, then works must be suspended. Once temperatures have been above zero degrees Celsius for three consecutive days then works can recommence.”</p>
<p>Birds (non-breeding) Bar-tailed godwit Curlew Dark-bellied brent goose</p>	Underwater noise	Yes	<p>Red breasted merganser is the only bird identified as being sensitive to underwater noise. However Dark bellied brent goose, Pintail, Shelduck, Shoveler, Teal), Widgeon are</p>	<p>Yes</p> <p>It is proposed that the activities will take place during March and April inclusive and will avoid sensitive overwintering times. The Applicant has stated that records of previous piling show they have not had to impact drive piles in this area and vibro piling will be used. However,</p>

<p>Dunlin Grey plover Pintail Red-breasted merganser Redshank Ringed plover Sanderling Shelduck Shoveler Teal Turnstone Wigeon Waterbird assemblage</p>			<p>being considered as a precaution due to insufficient evidence. Waterbird assemblage is also being considered. Above water noise will be generated as a result of piling activities (5 x 406mm piles). The Applicant has noted these birds Migrate to north-west/north-east Europe during the spring/summer period and therefore are not likely to be present when the works take place mid-September to October. It is expected that piling operation will proceed at a rate of 2 piles installed per day (3-4 hours per pile).</p>	<p>should impact pile driving be required “Soft start” procedures will be used. Condition to be added to the licence. Vibro piling must be used as standard, percussive piling must only be used if needed to drive a pile to its design depth. Soft-start procedures must be used to ensure incremental increase in pile power over a set time period until full operational power is achieved. The soft-start duration must be a period of not less than 20 minutes. Should piling cease for a period greater than 10 minutes, then the soft start procedure must be repeated. In addition, to protect the over wintering birds a cold weather condition will be added to any licence granted: “If temperatures of zero degrees Celsius (or lower) occur on the site, at any point within a 24-hour period, for seven consecutive days leading up to or during any instance of the licenced activities as recorded by the nearest meteorological station to the site, then works must be suspended. Once temperatures have been above zero degrees Celsius for three consecutive days then works can recommence.”</p>
<p>Habitat Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments Subtidal mud</p>	<p>Abrasion/penetration of seabed</p>	<p>No</p>	<p>The area impacted is small - 5 x 406mm Piles will be driven into intertidal and subtidal mud. These will replace existing piles or will be adjacent to existing piling. Penetration of the seabed will occur, This is considered a small amount in relation to the extent of the area of the SPA (5810.05 ha). Less than 0.0000018% of the SPA will be impacted as a result of abrasion/penetration.</p> <p>A spud leg barge will be in use during piling. This will be sited on mud and may cause a small</p>	<p>N/a</p>

			<p>amount of abrasion (20m²) but this will be temporary throughout the works.</p> <p>Therefore, it is not considered that an adverse effect on the integrity of the SPA will be caused as a result of abrasion/penetration of the seabed.</p>	
<p>Habitat Subtidal mixed sediment Water column</p>	Introduction of light	Yes	It is possible that introduction of light would lead to an increase in fish species and an unnatural top-down regulation of fish populations.	<p>Yes</p> <p>Will only take place during daylight hours, therefore there will be no additional introduction of light. The following condition will be added: Licensed activities must only take place during daylight hours.</p>
<p>Habitat Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments Subtidal mud Water column</p>	Physical loss of land or freshwater habitat	Yes	<p>New piles (x5) will be driven into intertidal mud and subtidal mud and will be used to secure the new jetty. The installation of five new piles which have a diameter of 406 millimetres (mm) will result in 0.65m² habitat loss of subtidal mud. The new project will create shading and this is considered habitat loss (subtidal mud) due to lack of light penetration. As per the applicant's designs this shading will result in a habitat loss of 231m².</p> <p>This is considered a small amount in relation to the extent of the area of the SPA (5810.05 ha). Less than 0.0000398% of the SPA will be impacted as a result of this habitat loss.</p>	N/a

			<p>As part of the project, the applicant will be removing six moorings within the project vicinity (illustrated in figure 9 in annex 1). This proactive measure will result in the expansion of available space, thereby minimising shading and reducing habitat loss.</p> <p>Additionally, the applicant plans to remove dinghy chains in the intertidal area east of the jetty, as depicted in Annex 3.</p> <p>According to the applicant's statements, the removal of dinghy chains and the six moorings will contribute to a project area increase of 9928m² (excluding any habitat loss resulting from the jetty).</p> <p>Therefore, it is not considered that an adverse effect on the integrity of the SPA will be caused as a result of habitat loss.</p>	
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Table 9 – Alone

Name of designated site: Solent Maritime SAC (UK0030059)				
Qualifying feature or species (include sub-features and supporting habitats)	Pressure	Adverse Effect on Integrity on qualifying feature of species?	Justification	After mitigation, can you conclude no adverse effect on site integrity?
Annex 1 habitat Annual vegetation of drift lines	Abrasion/Penetration of seabed	No	The area impacted is small - 5 x 406mm Piles will be driven into intertidal and subtidal mud. These will replace existing piles or will be adjacent to existing piling. Therefore, there is a	N/a

<p>Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments</p>			<p>possibility of a maximum of 5 x 406mm diameter of mud habitat being disturbed/penetrated. This is a small amount in relation to the extent of the area of the SAC (11325.09 ha). This represents a loss of less than 0.0000008% of the extent of the SAC and 0.000003% of intertidal mud habitat.</p> <p>A spud leg barge will be in use during piling. This will be sited on mud and may cause a small amount of abrasion (20m²), but this will be temporary throughout the works.</p> <p>Therefore, it is not considered that an adverse effect on the integrity of the SAC will be caused as a result of abrasion/penetration of the seabed.</p>	
<p>Annex 1 habitat Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments</p>	<p>Physical loss of land or freshwater habitat</p>	<p>No</p>	<p>New piles (x5) will be driven into intertidal mud and subtidal mud and will be used to secure the new jetty. The installation of five new piles which have a diameter of 406 millimetres (mm) will result in 0.65m² habitat loss. The new project will create shading and is considered as habitat loss due to lack of light penetration. As per the applicants designs it will result in a habitat loss of 231m².</p> <p>This is a small amount in relation to the extent of the area of the SAC (11325.09 ha). This represents a loss of less than 0.0000008% of the extent of the SAC and 0.000003% of mud habitat.</p> <p>As part of the project, the applicant will be removing six moorings within the project vicinity (illustrated in figure 9 in annex 1). This proactive measure will result in the expansion of available space, thereby minimising shading and reducing habitat loss. Additionally, the applicant plans to remove dinghy chains in the intertidal area east of the jetty, as depicted in Annex 3. According to the applicant's statements, the removal of dinghy chains and the six moorings will contribute to a project area increase of 9928m² (excluding any habitat loss resulting from the jetty).</p>	<p>N/a</p>

			Therefore, it is not considered that an adverse effect on the integrity of the SAC will be caused as a result of habitat loss.	
Annex 1 habitat Subtidal mixed sediment Subtidal coarse sediment	Introduction of light	Yes	Although there is insufficient evidence to ascertain whether these habitats are sensitive to the introduction of light, there is a possibility that there will be an adverse effect if light is introduced.	Yes Activities will only take place during daylight hours, therefore there will be no additional introduction of light. The following condition will be added: Licensed activities must only take place during daylight hours.

Part 2 (table 10) – In-combination

Chichester and Langstone Harbours SPA (UK9011011) & Chichester and Langstone Harbours Ramsar (UK11013).		
Project number	Name of identified plan or project to which there is a pathway to NSN site.	Compatible pressures with assessed project
1	MLA/2021/00126 Construction of sailing club jetty Expires 30/06/24	Above water noise Underwater noise Abrasion/penetration to seabed Physical loss to land or freshwater habitat Introduction of light
2	MLA/2022/00428 Alternative use of dredged material Expires 01/09/27	Above water noise Underwater noise Abrasion/penetration to seabed Physical loss to land or freshwater habitat Introduction of light

Table 11– In-combination

Solent Maritime SAC (UK0030059).		
Project number	Name of identified plan or project to which there is a pathway to NSN site.	Compatible pressures with assessed project
1	MLA/2021/00126 Construction of sailing club jetty Expires 30/06/24	Above water noise Underwater noise Abrasion/penetration to seabed Physical loss to land or freshwater habitat Introduction of light
2	MLA/2022/00428 Alternative use of dredged material Expires 01/09/27	Above water noise Underwater noise Abrasion/penetration to seabed Physical loss to land or freshwater habitat Introduction of light

Table 12 – In-combination

Name of designated site: Chichester and Langstone Harbours SPA (UK9011011) & Chichester and Langstone Harbours Ramsar (UK11013).				
Qualifying feature or species (include sub-features and supporting habitats)	Pressure	Adverse Effect on Integrity on qualifying feature of species?	Justification	After mitigation, can you conclude no adverse effect on site integrity?
Birds (breeding) Common tern Little tern Sandwich tern	Above water noise	Yes	MLA/2021/00126 – Construction of sailing club: There is no possibility of in combination impacts leading to adverse effects as work on the sailing club is now complete. There are possible in combination impacts with MLA/2022/00428 Alternative use of dredged material.	Yes MLA/2022/00428- Alternative use of dredged material. Above water noise as a result of this project, was considered to have no adverse effect as although the noise may exceed background noise disturbance in the area the features have enough alternative areas to limit disturbance. It is proposed that the activities will take place during March and April inclusive and will avoid sensitive overwintering times. In addition the applicant has identified that these birds do not breed near the site. They breed at Thorney Deeps (5km) and Stakes Island (1.5km). It is expected that piling operations will proceed at a rate

				<p>of 2 piles installed per day. (3-4 hours per pile). The Applicant has stated that records of previous piling show they have not had to impact drive piles in this area and vibro piling will be used as standard. However, should impact pile driving be required “soft start” procedures will be used.</p> <p>Condition to be added to the licence: Vibro piling must be used as standard, percussive piling must only be used if needed to drive a pile to its design depth. Soft-start procedures must be used to ensure incremental increase in pile power over a set time period until full operational power is achieved. The soft-start duration must be a period of not less than 20 minutes. Should piling cease for a period greater than 10 minutes, then the soft start procedure must be repeated.</p> <p>As vibro piling will be used in the first instance, with percussive piling only if necessary, and because soft start procedures will be used, the above water noise impacts are unlikely to combine with the above water noise impacts from the alternative use of dredged material project and lead to adverse effect).</p> <p>In addition, to protect the over wintering birds a cold weather condition will be added to any licence granted: “If temperatures of zero degrees Celsius (or lower) occur on the site, at any point within a 24-hour period, for seven consecutive days leading up to or during any instance of the licenced activities as recorded by the nearest meteorological station to the site, then works must be suspended. Once temperatures have been above zero degrees Celsius for three consecutive days then works can recommence.”</p>
Birds (non-breeding) Bar-tailed godwit	Above water noise	Yes	MLA/2021/00126 – Construction of sailing club: There is no possibility of in combination impacts leading to	Yes MLA/2022/00428- Alternative use of dredged material. Above water noise, as a result of this project, was considered to have no adverse effect as although the

<p>Curlew Dark-bellied brent goose Dunlin Grey plover Pintail Red-breasted merganser Redshank Ringed plover Sanderling Shelduck Shoveler Teal Turnstone Wigeon Waterbird assemblage</p>			<p>adverse effects as work on the sailing club is now complete.</p> <p>There are possible in combination impacts with MLA/2022/00428 Alternative use of dredged material.</p>	<p>noise may exceed background noise disturbance in the area the features have enough alternative areas to limit disturbance. It is proposed that the activities will take place during March and April inclusive and will avoid sensitive overwintering times. The Applicant has stated that records of previous piling show they have not had to impact drive piles in this area and vibro piling will be used. However, should impact pile driving be required “soft-start” procedures will be used.</p> <p>Condition to be added to the licence: Vibro piling must be used as standard, percussive piling must only be used if needed to drive a pile to its design depth. Soft-start procedures must be used to ensure incremental increase in pile power over a set time period until full operational power is achieved. The soft-start duration must be a period of not less than 20 minutes. Should piling cease for a period greater than 10 minutes, then the soft start procedure must be repeated.</p> <p>As vibro piling will be used in the first instance, with percussive piling only if necessary, and because soft start procedures will be used, the above water noise impacts are unlikely to combine with the above water noise impacts from the alternative use of dredged material project and lead to adverse effect in combination with MLA/2022/00428).</p> <p>In addition, to protect the over wintering birds a cold weather condition will be added to any licence granted: “If temperatures of zero degrees Celsius (or lower) occur on the site, at any point within a 24-hour period, for seven consecutive days leading up to or during any instance of the licenced activities as recorded by the nearest meteorological station to the site, then works must be suspended. Once temperatures have been above zero degrees Celsius for three consecutive days then works can recommence.”</p>
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<p>Birds (breeding) Common tern, Breeding Little tern, Breeding Sandwich tern, Breeding</p>	<p>Under water noise</p>	<p>Yes</p>	<p>MLA/2021/00126 – Construction of sailing club: There is no possibility of in combination impacts leading to adverse effects as work on the sailing club is now complete.</p> <p>There are possible in combination impacts with MLA/2022/00428 Alternative use of dredged material</p>	<p>Yes</p> <p>It is proposed that the activities will take place during March and April inclusive and will avoid sensitive overwintering times. The Applicant has stated that records of previous piling show they have not had to impact drive piles in this area and vibro piling will be used. However, should impact pile driving be required “Soft-start” procedures will be used.</p> <p>Condition to be added to the licence:</p> <p>Vibro piling must be used as standard, percussive piling must only be used if needed to drive a pile to its design depth. Soft-start procedures must be used to ensure incremental increase in pile power over a set time period until full operational power is achieved. The soft-start duration must be a period of not less than 20 minutes. Should piling cease for a period greater than 10 minutes, then the soft start procedure must be repeated.</p> <p>Any underwater water noise generated is unlikely to lead to an adverse effect combined with underwater noise from MLA/2022/00428.</p> <p>Underwater noise from that project was not deemed an adverse effect and no additional mitigation was required in order to reduce underwater noise. Underwater noise impacts from the small scale works for the Chichester Harbour Extension (5 piles, 100m extension of pontoon) is unlikely to lead to adverse effect in combination with MLA/2022/00428.</p> <p>In addition, to protect the over wintering birds a cold weather condition will be added to any licence granted: “If temperatures of zero degrees Celsius (or lower) occur on the site, at any point within a 24-hour period, for seven consecutive days leading up to or during any instance of the licenced activities as recorded by the nearest meteorological station to the site, then works must be suspended. Once temperatures have been above zero</p>
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				degrees Celsius for three consecutive days then works can recommence.”
Birds (non-breeding) Bar-tailed godwit Curlew Dark-bellied brent goose Dunlin Grey plover Pintail Red-breasted merganser Redshank Ringed plover Sanderling Shelduck Shovele Teal Turnstone Wigeon Waterbird assemblage	Under water noise	Yes	MLA/2021/00126 – Construction of sailing club: There is no possibility of in combination impacts leading to adverse effect as work on the sailing club is now complete. There are possible in combination impacts with MLA/2022/00428 Alternative use of dredged material.	Yes It is proposed that the activities will take place during March and April inclusive and will avoid sensitive overwintering times. The Applicant has stated that records of previous piling show they have not had to impact drive piles in this area and vibro piling will be used. However, should impact pile driving be required “soft -start” procedures will be used. Condition to be added to the licence: Vibro piling must be used as standard, percussive piling must only be used if needed to drive a pile to its design depth. Soft-start procedures must be used to ensure incremental increase in pile power over a set time period until full operational power is achieved. The soft-start duration must be a period of not less than 20 minutes. Should piling cease for a period greater than 10 minutes, then the soft start procedure must be repeated. Any underwater noise generated is unlikely to lead to an adverse effect combined with underwater noise from MLA/2022/00428. Underwater noise from that project was not deemed an adverse effect and no additional mitigation was required in order to reduce underwater noise. Underwater noise impacts from the small scale works for the Chichester Harbour Extension (5 piles, 100m extension of pontoon) is unlikely to lead to adverse effect in combination with MLA/2022/00428 In addition, to protect the over wintering birds a cold weather condition will be added to any licence granted: “If temperatures of zero degrees Celsius (or lower) occur on the site, at any point within a 24-hour period, for seven consecutive days leading up to or during any instance of the licenced activities as recorded by the nearest meteorological station to the site, then works must be suspended. Once temperatures have been above zero

				degrees Celsius for three consecutive days then works can recommence.”
Little tern, Breeding	Barrier to Species movement	No	<p>MLA/2021/00126 – Construction of sailing club: There is no possibility of in combination impacts leading to adverse effects as work on the sailing club is now complete.</p> <p>The footprint for the activity for MLA/2022/00428 is small only affecting 0.06% of the SPA and the barrier caused by plant/ persons and machinery during activities was considered insignificant. The additional footprint as a result of the Chichester Jetty extension represents less than 0.000002% and the as the works are close to a busy harbour facility any barriers caused by plant, persons machinery is not considered in excess of what already exists.</p>	N/a
Birds (Non breeding) Bar-tailed godwit Curlew Dark-bellied brent goose Dunlin Grey plover Pintail Red-breasted merganser	Barrier to Species movement	No.	<p>MLA/2021/00126 – Construction of sailing club: There is no possibility of in combination impacts leading to adverse effects as work on the sailing club is now complete.</p> <p>The footprint for the activity for MLA/2022/00428 is small only affecting 0.06% of the SPA and the barrier caused by plant/ persons and machinery</p>	N/a

Redshank Ringed plover Sanderling Shelduck Teal Turnstone Wigeon Waterbird assemblage			during activities was considered insignificant. The additional footprint as a result of the Chichester Jetty extension represents less than 0.000002% and the as the works are close to a busy harbour facility any barriers caused by plant, persons machinery is not considered in excess of what already exists.	
Birds (breeding) Common tern Little tern Sandwich tern	Introduction of light	Yes	<p>MLA/2021/00126 – Construction of sailing club: There is no possibility of in combination impacts leading to adverse effects as work on the sailing club is now complete.</p> <p>If light is introduced as a result of MLA/2022/00428 there is a possibility of adverse impacts in combination with an introduction of light from the Chichester Harbour jetty extension.</p>	<p>Yes</p> <p>In respect of the Chichester Harbour jetty extension work will be completed in daylight hours. Condition to be added to the licence will be:</p> <p>Licensed activities must only take place between sunrise and sunset daily.</p> <p>Introduction of light was not identified as a pressure for MLA/2022/00428, so there is no possibility impacts can combine to cause adverse effect.</p>
Birds (non-breeding) Bar-tailed godwit Curlew Dark-bellied brent goose Dunlin Grey plover Pintail Red-breasted merganser	Introduction of light	Yes	<p>MLA/2021/00126 – Construction of sailing club: There is no possibility of in combination impacts leading to adverse effects as work on the sailing club is now complete.</p> <p>If light is introduced there is a possibility of adverse impacts in combination with an introduction of light as a result of MLA/2022/00428</p>	<p>Yes</p> <p>In respect of the Chichester Harbour jetty extension work will be completed in daylight hours (between sunrise and sunset). Condition to be added to the licence with be:</p> <p>Licensed activities must only take place between sunrise and sunset.</p> <p>Introduction of light was not identified as a pressure for MLA/2022/00428, so there is no possibility impacts can combine to cause adverse effect.</p>

<p>Redshank Ringed plover Sanderling Shelduck Shoveler Turnstone Wigeon Waterbird assemblage</p>				
<p>Habitat Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments Subtidal mud</p>	<p>Abrasion/penetration of seabed</p>	<p>No</p>	<p>MLA/2021/00126 – Construction of sailing club: Work on the sailing club is already complete and there was considered no adverse effect as the result of abrasion/penetration of the seabed.</p> <p>MLA/2022/00428 – It was considered that abrasion/penetration as a result of this project was not an adverse effect because a large part of the site was made up of intertidal mud, mixed sediments and sand and muddy sand and this habitat has a good recoverability rate from the stated activities- in addition the works were temporary.</p> <p>It is not likely that abrasion/penetration from MLA/2022/00428 would lead to an adverse effect on site</p>	<p>N/A</p>

			<p>integrity in combination with the Chichester Harbour Jetty MLA as the area impacted by activities for the Chichester Harbour Jetty is small - 5 x 406mm piles will be driven into intertidal and subtidal mud. These will replace existing piles or will be adjacent to existing piling. Less than 0.0000018% of the SPA will be impacted as the result of penetration/abrasion A spud leg barge will be in use during piling. This will be sited on mud and may cause a small amount of abrasion (20m²), but this will be temporary throughout the works.</p> <p>Therefore, it is not considered that an adverse effect on the integrity of the SPA will be caused as a result of abrasion/penetration in combination impacts.</p>	
<p>Habitat Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments Subtidal mud Water column</p>	Physical loss of land or freshwater habitat	No	<p>MLA/2021/00126 – Construction of sailing club: Work on the sailing club is already complete and there was considered no adverse effect as the result of habitat loss as the loss of mud and sand habitat was considered de-minimis.</p> <p>MLA/2022/00428 – It was considered that habitat loss as a result of this project</p>	

			<p>(alternative use of dredged material) was minimal and was not an adverse effect. It is not likely that/habitat loss from MLA/2022/00428 would lead to an adverse effect on site integrity in combination with habitat loss from Chichester Harbour Jetty MLA as the area impacted by activities for the Chichester Harbour Jetty is small - 5 x 406mm piles will be driven into subtidal mud. These will replace existing piles or will be adjacent to existing piling. Less than 0.0000398% of the SPA will be impacted as the result of habitat loss. A spud leg barge will be in use during piling. This will be sited on mud and may cause a small amount of habitat loss (20m²), but this will be temporary throughout the works.</p> <p>According to the applicants comments, removal of dinghy chains and removing the 6 moorings will increase the project by 9928m² (not taking in account of resulted habitat loss from the jetty).</p> <p>Therefore, it is not considered that an adverse effect on the integrity of the SPA will be caused as a result of habitat loss in combination impacts.</p>	
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Habitat Subtidal mixed sediment Water column	Introduction of light	Yes	MLA/2021/00126 – Construction of sailing club: There is no possibility of in combination impacts as work on the sailing club is now complete. If light is introduced as the result of MLA/2022/00428 there is a possibility of adverse impacts in combination	Yes In respect of the Chichester Harbour jetty extension work will be completed in daylight hours (between sunrise and sunset). Condition to be added to the licence with be: Licensed activities must only take place between sunrise and sunset. Introduction of light was not identified as a pressure for MLA/2022/00428, so there is no possibility impacts can combine to cause adverse effect.
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Table 13 (In combination)

Name of designated site: Solent Maritime SAC (UK0030059).				
Qualifying feature or species (include sub-features and supporting habitats)	Pressure	Adverse Effect on Integrity on qualifying feature of species?	Justification	After mitigation, can you conclude no adverse effect on site integrity?
Annex I habitat Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments	Abrasion/Penetration of seabed	No	MLA/2021/00126 – Construction of sailing club: Work on the sailing club is already complete and there was considered no adverse effect as the result of abrasion/penetration of the seabed. MLA/2022/00428 – It was considered that abrasion/penetration as a result of this project because a large part of the site was made up of intertidal mud, mixed sediments and sand and muddy sand and this habitat has a good recoverability rate from the stated activities- in addition the works were temporary. It is not likely that abrasion/penetration from MLA/2022/00428 would lead to an	N/a

			<p>adverse effect on site integrity in combination with the Chichester Harbour Jetty MLA as the area impacted by activities for the Chichester Harbour Jetty is small – 5 x 406mm piles will be driven into intertidal and subtidal mud. These will replace existing piles or will be adjacent to existing piling. Less than 0.000008% of the SAC will be impacted as the result of penetration/abrasion (and 0.000003% of the extent of mud habitat).</p> <p>A spud leg barge will be in use during piling. This will be sited on mud and may cause a small amount of abrasion (20m²), but this will be temporary throughout the works.</p> <p>Therefore, it is not considered that an adverse effect on the integrity of the SAC will be caused as a result of abrasion/penetration in combination impacts.</p>	
<p>Annex I habitat Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows Spartina swards Intertidal mud Subtidal mixed sediments</p>	Physical loss of land or freshwater habitat	No	<p>MLA/2021/00126 – Construction of sailing club: Work on the sailing club is already complete and there was considered no adverse effect as the result of habitat loss as the loss of mud and sand habitat was considered de-minimis.</p> <p>MLA/2022/00428 – It was considered that habitat loss as a result of this project was sufficiently insubstantial so as not to create an adverse effect. It is not likely that abrasion/penetration habitat loss from MLA/2022/00428 would lead to an adverse effect on site integrity in combination with that from Chichester Harbour Jetty MLA as the area impacted</p>	N/a

			<p>by activities for the Chichester Harbour Jetty is small - 5 x 406mm. Piles will be driven into subtidal mud. These will replace existing piles or will be adjacent to existing piling. Piles will be driven into intertidal and subtidal mud. These will replace existing piles or will be adjacent to existing piling. Less than 0.000008% of the SAC will be impacted as the result of penetration/abrasion (and 0.000003% of the extent of mud habitat).</p> <p>According to the applicant's comments, removal of dinghy chains and removing the 6 moorings will increase the project by 9928m² (not taking in account of resulted habitat loss from the jetty).</p> <p>A spud leg barge will be in use during piling. This will be sited on mud and may cause a small amount of habitat loss (20m²), but this will be temporary throughout the works.</p> <p>Therefore, it is not considered that an adverse effect on the integrity of the SAC will be caused as a result of in combination impacts due to habitat loss.</p>	
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Appropriate Assessment Conclusion

This is a record of the appropriate assessment required by regulation 63 of The Conservation of Habitats and Species Regulations 2017 and undertaken by the Marine Management Organisation in respect of the proposed project outlined in table 1.

The LSE alone assessment concluded that the proposed project would be likely to have a significant effect on the following European or European marine site:

- **Chichester and Langstone Harbours SPA**
- **Chichester and Langstone Harbours Ramsar**
- **Solent Maritime SAC**

An alone and in-combination appropriate assessment has been undertaken of the implications of the proposal in consideration of the applicable conservation objectives.

The MMO has concluded that the proposed project would not have an adverse effect on the integrity of the following sites either alone or in-combination with other plans of projects:

- **Chichester and Langstone Harbours SPA**
- **Chichester and Langstone Harbours Ramsar**
- **Solent Maritime SAC**

This conclusion is dependent on mitigation measures being secured by the following conditions being secured in a marine licence:

- Vibro piling to be used in the first instant. If impact pile driving is required soft start procedures to be employed.
- No piling to be undertaken between 31 October and 25 March in any given year.
- All activities must take place between sunrise and sunset.
- Not licensed activities during cold weather

Natural England was consulted on the appropriate assessment 13 October 2023 and 30 January 2024 and have provided comments, to which the MMO has had regard. The conclusions of this appropriate assessment are in accordance with the advice and recommendations of Natural England.

Name of MMO officer: Luke Harto

Job Title: Marine Licensing Case Officer

Date: 08/04/2024

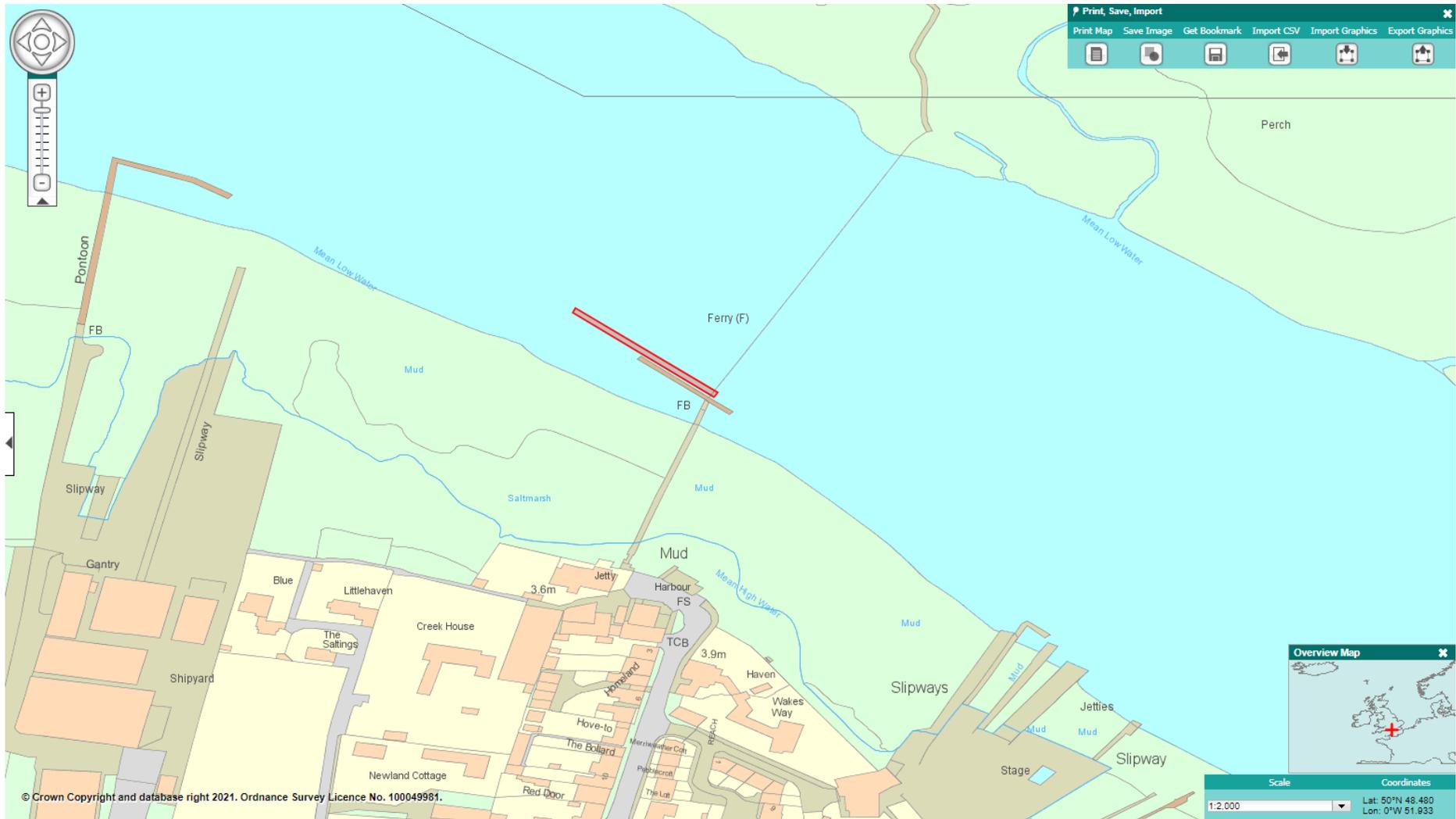


Figure 2 Proposed Chichester harbour jetty (red polygon)

Chichester and Langstone Harbours SPA

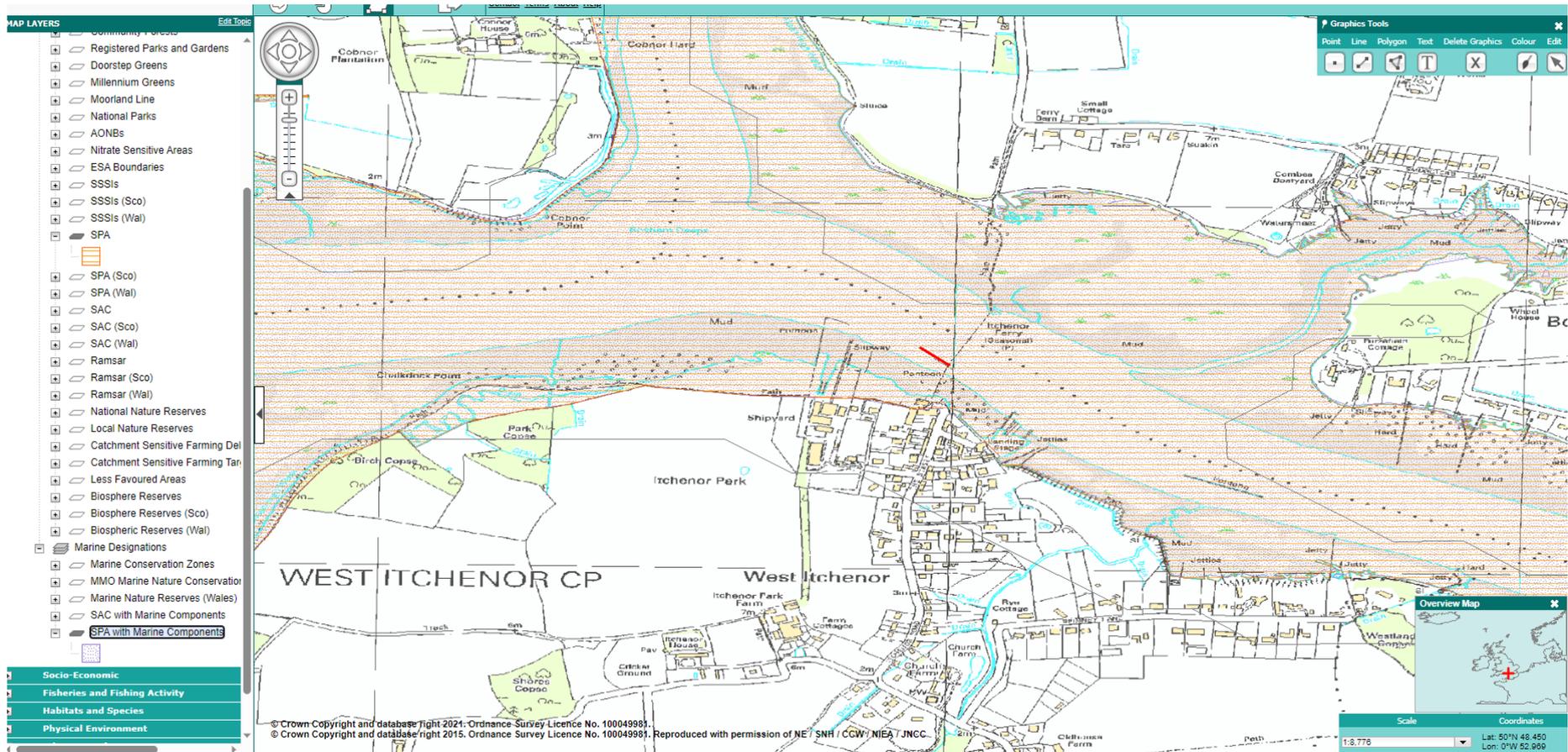


Figure 3 Chichester and Langstone Harbours SPA (shaded area)

Solent Maritime SAC (UK0030059).

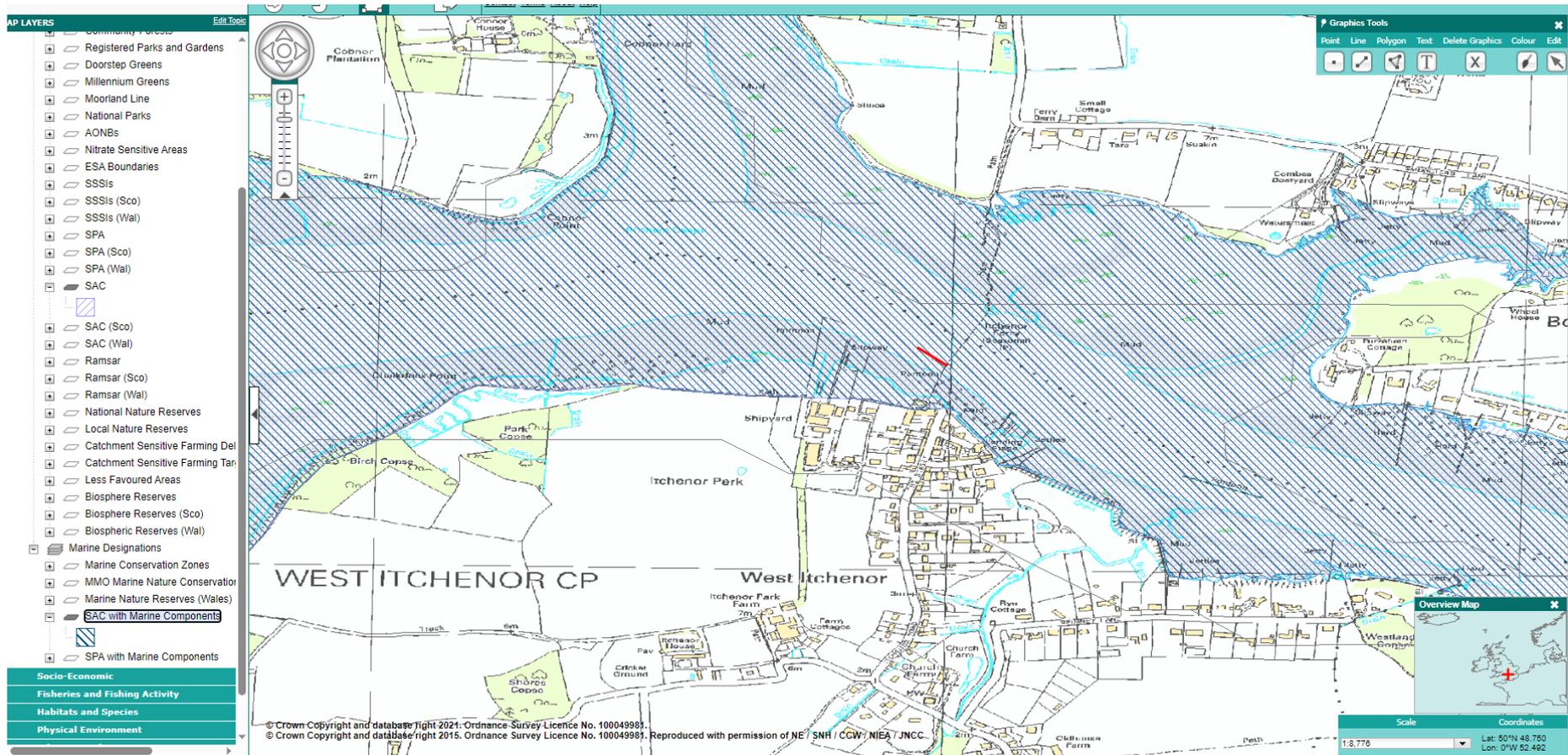


Figure 4 Solent Maritime SAC (shaded area)

Chichester and Langstone Harbours Ramsar (UK11013).

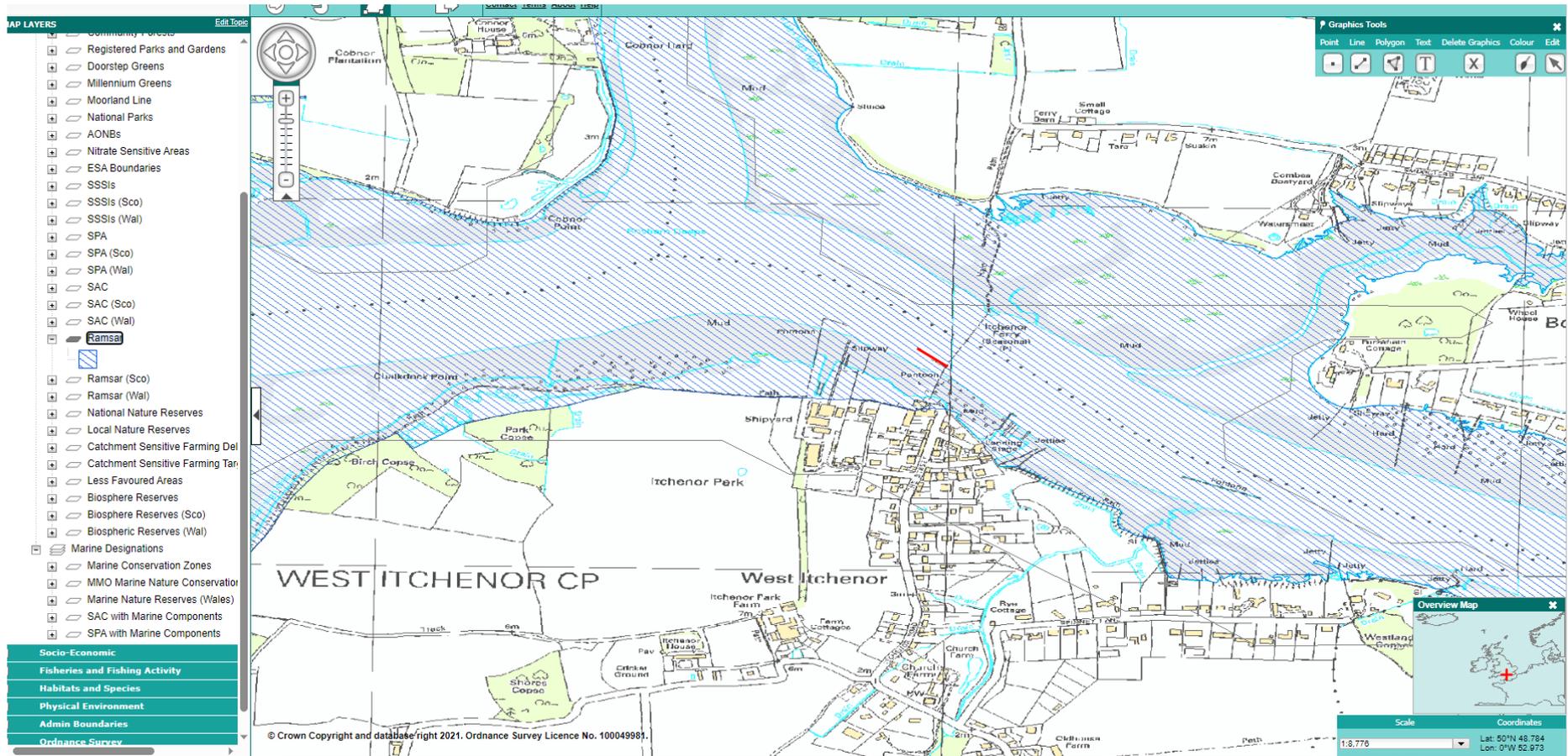


Figure 5 Chichester and Langstone Harbours Ramsar (shaded area)

Annex 2

Chichester and Langstone Harbours SPA

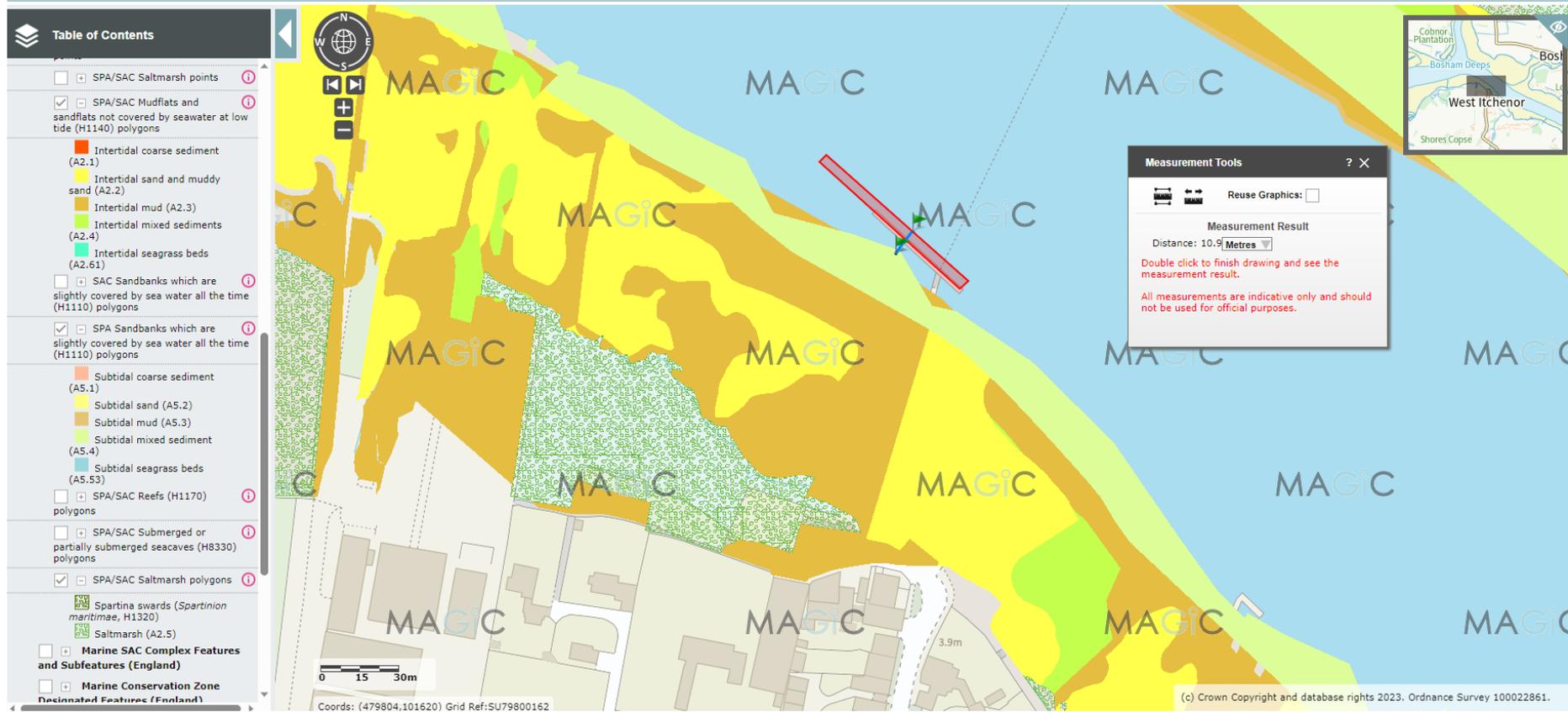


Figure 6 SPA habitats in relation to works (red polygon).

Solent Maritime SAC

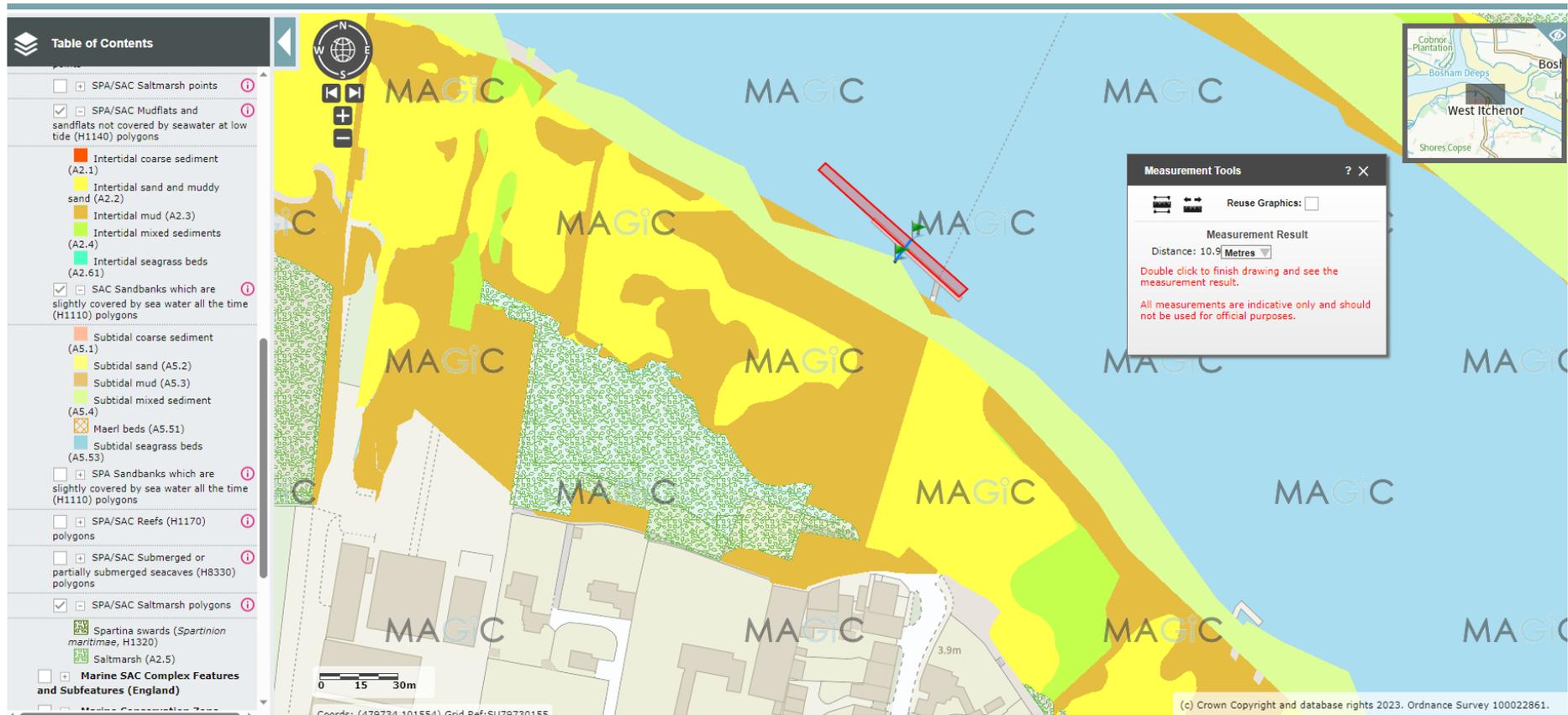


Figure 7 SAC habitats in relation to works (red polygon).

Annex 3



Figure 8: Further mitigation will be provided by removing 1 set of dinghy chains in the intertidal area to the East of the jetty development creating 900m² of additional intertidal habitat. Diagram shows the area highlighted in yellow, in which the ground chains, sinkers and small craft will be removed.

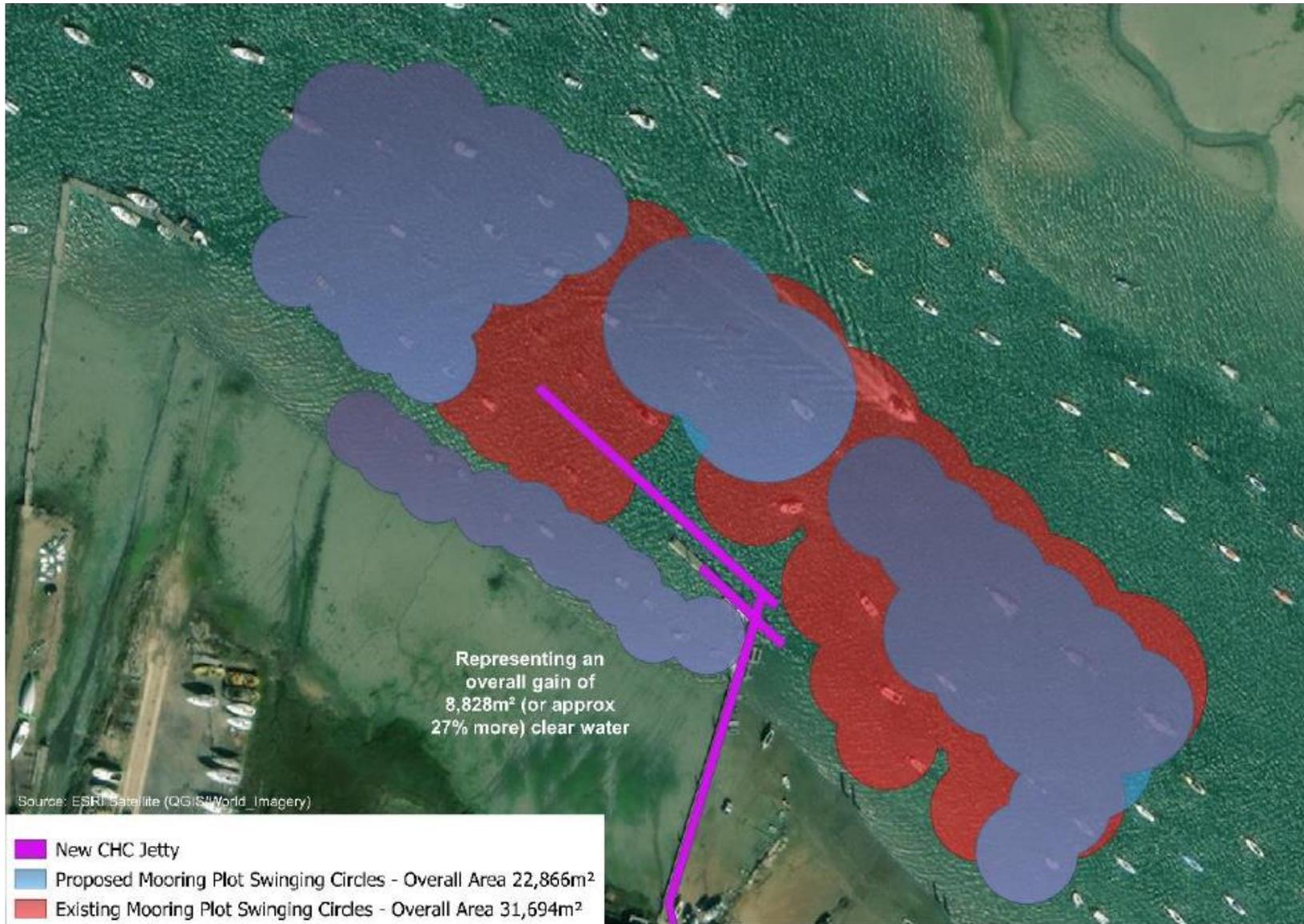


Figure 9: Reduction in swinging moorings