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NATURAL ENGLAND

Habitats Regulation Assessment of England Coast Path proposals between **Calshot and Gosport** on **sites of European importance for nature conservation**

Assessment of England Coast Path proposals between Calshot to Gosport

Southampton Water Special Protection Area (SPA) and Ramsar site, Solent Maritime Special Area of Conservation (SAC), Solent and Dorset coast potential SPA (pSPA) and the New Forest SAC, SPA and Ramsar site.

July 2019

Contents:

Summary

I) Introduction

This is a record of the Habitats Regulations Assessment ('HRA') undertaken by Natural England (in its role of competent authority) in accordance with the assessment and review provisions of the Conservation of Habitats and Species Regulations 2017 (as amended) ('the Habitats Regulations').

Natural England has a statutory duty under the Marine and Coastal Access Act 2009 to improve access to the English coast. This assessment considers the potential impacts of our detailed proposals for coastal access from Calshot to Gosport on the following sites of international importance for wildlife: Solent and Southampton water Special Protection Area (SPA) and Ramsar site, Solent Maritime Special Area of Conservation (SAC), Solent and Dorset Coast potential SPA (pSPA) and the New Forest SPA and SAC.

This assessment should be read alongside Natural England's related Coastal Access Reports which between them fully describe and explain its access proposals for the stretch as a whole. The Overview explains common principles and background and the reports explain how we propose to implement coastal access along each of the constituent lengths within the stretch.

https://www.gov.uk/government/publications/england-coast-path-from-calshot-to-gosport-comment-on-proposals

II) Background

The main wildlife interests for this stretch of coast are summarised in Table 1 (see Table 3 for a full list of qualifying features)

Table 1. Main wildlife interests

Interest	Description
Non-breeding water birds	During the winter months Southampton Water supports an internationally recognised population of non-breeding water birds. The extensive areas of soft mud exposed at low tide are the main feeding areas and these birds need suitable undisturbed places to roost at high tide.
Breeding terns and gulls	During the summer months Southampton Water supports an internationally recognised population of breeding seabirds. These include four species of tern (little, common, roseate and Sandwich) and the Mediterranean gull. Shingle banks within and outside of nature reserves are the main potential nesting areas and these birds need undisturbed access between nesting and foraging areas.
Foraging terns	Foraging terns use subtidal areas and inland water bodies to forage during nesting season. These birds require undisturbed foraging sites

	to ensure that breeding is successful and chick survival rates aren't impacted.
Supralittoral sediment	This is coastal land where the substrate is mud, sand or shingle situated immediately inland from the high water mark. Of this type, strandlines and vegetated coastal shingle are found along this stretch. These sites offer important high tide roost sites and nesting opportunities for birds as well as hosting internationally important species of flora.
Intertidal habitat	This consists of a range of habitats and associated plants and invertebrates. They include but are not limited to estuaries, coastal lagoons, salt marsh and mudflats.
Terrestrial plants and invertebrates	Lowland heath, ancient woodland, fen, bog woodland and range of acid to neutral grasslands at the New Forest creates a mosaic of habitat for rare plants and invertebrates.
New Forest birds	The New Forest regularly supports large numbers of breeding and non-breeding birds that use lowland heathland to nest and the wider woodland and heath to feed.

III) Our approach

Natural England's approach to ensuring the protection of sensitive nature conservation features under the Coastal Access Programme is set out in section 4.9 Coastal Access: Natural England's Approved Scheme 2013 [Ref 1].

Our final published proposal for a stretch of England Coast Path is preceded by detailed local consideration of options for route alignment, the extent of the coastal margin and any requirement for restrictions, exclusions or seasonal alternative routes. The proposal is thoroughly considered before being finalised and initial ideas may be modified or rejected during the iterative design process, drawing on the range of relevant expertise available within Natural England.

Evidence is also gathered as appropriate from a range of other sources which can include information and data held locally by external partners or from the experience of local land owners, environmental consultants and occupiers. The approach includes looking at any current visitor management practices, either informal or formal. It also involves discussing our emerging conclusions as appropriate with key local interests such as land owners or occupiers, conservation organisations or the local access authority. In these ways, any nature conservation concerns are discussed early and constructive solutions identified as necessary.

The conclusions of our assessment are certified by both the member of staff responsible for developing the access proposal and the person responsible for considering any environmental impacts. This ensures appropriate separation of duties within Natural England.

IV) Aim and objectives for the design of our proposals

The new national arrangements for coastal access will establish a continuous well-maintained walking route around the coast and clarify where people can access the foreshore and other parts of the coastal margin. These changes will influence how people use the coast for recreation and our aim in designing our detailed proposals has been to secure and enhance opportunities for people to enjoy their visit whilst ensuring appropriate protection for affected European sites.

A key consideration in developing coastal access proposals for this stretch has been the possible impact of disturbance on non-breeding water birds as a result of recreational activities, particularly visitors with dogs.

Objectives for design of our detailed local proposals have been to:

- Avoid exacerbating issues at sensitive locations by making use of established coastal paths
- Work with local partners to design detailed proposals that take account of and complement efforts to manage access in sensitive locations
- Where practical, incorporate opportunities to raise awareness of the importance of this stretch of coast for wildlife and how people can help efforts to protect it.

V) Conclusion

We have considered whether our detailed proposals for coastal access between Calshot and Gosport might have an impact on Solent and Southampton Water Special Protection Area (SPA) and Ramsar site, Solent Maritime Special Area of Conservation (SAC), Dorset & Solent Coast potential SPA (pSPA) and the New Forest SPA and SAC. In Part C of this assessment we identify some possible risks to the relevant qualifying features and conclude that proposals for coastal access, without incorporated mitigation, may have a significant effect on some of these sites. In Part D we consider these risks in more detail, taking account of avoidance and mitigation measures incorporated into our access proposal, and conclude that there will not be an adverse effect on the integrity any of these sites. These measures are summarised in Table 2 below.

Table 2. Summary of risks and consequent mitigation built in to our proposals

Risk to conservation objectives	Relevant design features of the access proposals
Disturbance to non-breeding water birds	• Utilise existing coastal paths and help ensure they are of a high standard • Provide some new on site information about the importance of the area for birds and visitors can help reduce disturbance

	• Discourage access to saltmarsh and mudflats that are unsuitable for access
Disturbance to breeding terns and gulls	• Utilise existing coastal paths and help ensure they are of a high standard • Provide some new on site information about the importance of the area for birds and visitors can help reduce disturbance • Ensure access to known breeding sites will not be affected.
Disturbance to foraging terns	• Utilise existing coastal paths and help ensure they are of a high standard •
Trampling and permanent loss of habitat	• Utilise existing coastal paths and help ensure they are of a high standard • Establishment works that results in the loss of designated land will be small-scale and regarded as 'trivial' in the context of the conservation objectives.

VI) Implementation

Once a route for the trail has been confirmed by the Secretary of State, we will work with Hampshire County Council to ensure any works on the ground are carried out with due regard to the conclusions of this appraisal and relevant statutory requirements.

VII) Thanks

The development of our proposals has been informed by input from people with relevant expertise within Natural England and other key organisations. The proposals have been thoroughly considered before being finalised and our initial ideas were modified during an iterative design process. We are grateful to the organisations and local experts whose contributions and advice have helped inform the development of our proposals.

PART A: Introduction and information about the England Coast Path

A1. Introduction

Natural England has a statutory duty under the Marine and Coastal Access Act 2009 to improve access to the English coast. The duty is in two parts: one relating to securing a long-distance walking route around the whole coast: we call this the England Coast Path; the other relating to a margin of coastal land associated with the route where in appropriate places people will be able to spread out and explore, rest or picnic.

To secure these objectives, we must submit reports to the Secretary of State for Environment, Food and Rural Affairs recommending where the route should be and identifying the associated coastal margin. The reports must follow the approach set out in our methodology (the Coastal Access Scheme), which – as the legislation requires – has been approved by the Secretary of State for this purpose.

Where implementation of a Coastal Access Report would be likely to have a significant effect on a site designated for its international importance for wildlife, called a 'European site[1]', the report must be subject to special procedures designed to assess its likely significant effects.

The conclusions of this screening are certified by both the member of staff responsible for developing the access proposal and the person responsible for considering any environmental impacts. This ensures appropriate separation of duties within Natural England.

Natural England's approach to ensuring the protection of sensitive nature conservation features under the Coastal Access Programme is set out in section 4.9 of the Coastal Access Scheme [Ref 1].

A2. Details of the plan or project

This assessment considers Natural England's proposals for coastal access along the stretch of coast between Calshot and Gosport. Our proposals to the Secretary of State for this stretch of coast are presented in a series of reports that explain how we propose to implement coastal access along each of the constituent lengths within the stretch. Within this assessment we consider each of the relevant reports, both separately and as an overall access proposal for the stretch in question

Our proposals for coastal access have two main components:

- alignment of the England Coast Path; and,

[1] Ramsar sites are treated in the same way by UK government policy

- Designation of coastal margin.

England Coast Path

A continuous walking route around the coast – the England Coast Path National Trail - will be established by joining up existing coastal paths and creating new sections of path where necessary. The route will be established and maintained to National Trail quality standards. The coastal path will be able to 'roll back' as the coast erodes or where there is significant encroachment by the sea such as occurs in the case of a deliberate breach of sea defences.

Coastal Margin

An area of land associated with the proposed trail will become coastal margin, including all land seawards of the trail down to mean low water.

Coastal margin is typically subject to new coastal access rights, though there are some obvious exceptions to this. The nature and limitations of the new rights, and the key types of land excepted from them, are explained in more detail in Chapter 2 of our Coastal Access Scheme [Ref 6]. Where there are already public or local rights to do other things, these are normally unaffected and will continue to exist in parallel to the new coastal access rights. The exception to this principle is any pre-existing open access rights under Part 1 of the Countryside and Rights of Way Act 2000 (CROW) over land falling within the coastal margin: the new coastal access rights will apply in place of these.

Where public access on foot already takes place on land within the margin without any legal right for people to use the land in this way, the new coastal access rights will secure this existing use legally. Access secured in this way is subject to various national restrictions. It remains open to the owner of the land, should they wish, to continue tolerating other types of established public use not provided for by coastal access rights.

Of particular relevance to this assessment is that most areas of saltmarsh and mudflat within Solent and Southampton SPA and Ramsar site and Solent Maritime SAC is considered unsuitable for public access and will be excluded from the new coastal access rights at all times regardless of any other considerations. As above, this will not affect other forms of established use, such as wildfowling.

Maintenance of the England Coast Path

The access proposals provide for the permanent establishment of a path and associated infrastructure, including additional mitigation measures referred to in this assessment and described in the access proposals The England Coast Path will be part of the National Trails family of routes, for which there are national quality standards. Delivery is by local partnerships and there is regular reporting and scrutiny of key performance indicators, including the condition of the trail.
Responding to future change

The legal framework that underpins coastal access allows for adaptation in light of future change. In such circumstances Natural England has powers to change the route of the trail

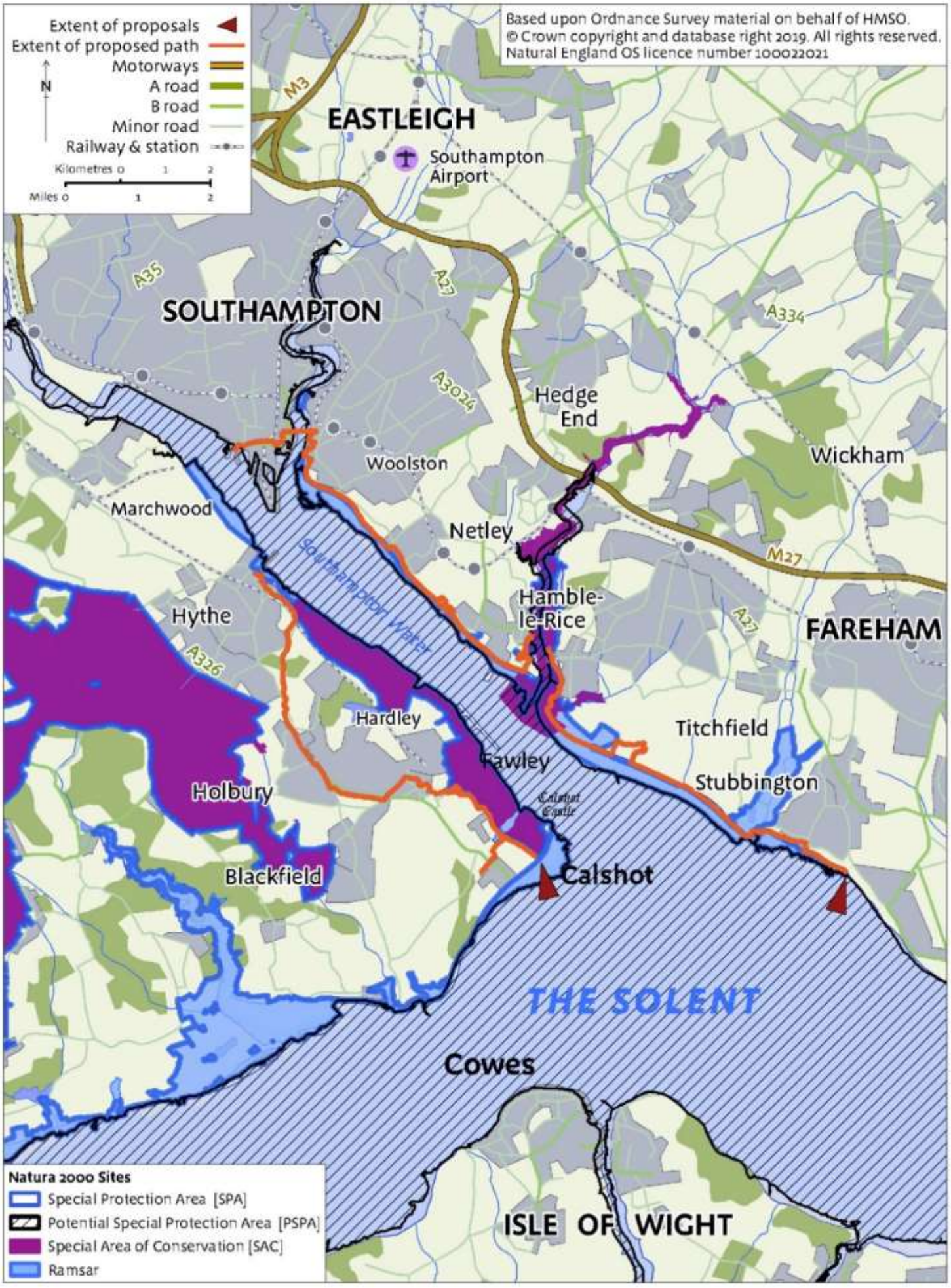
and limit access rights over the coastal margin in ways that were not originally envisaged. These new powers can be used, as necessary, alongside informal management techniques and other measures to ensure that the integrity of the site is maintained in light of unforeseen future change.

Establishment of the trail

Establishment works to make the trail fit for use and prepare for opening, including any special measures that have been identified as necessary to protect the environment, will be carried out before the new public rights come into force on this stretch. Details of the works to be carried out and the estimated cost are provided in the access proposals. The cost of establishment works will be met by Natural England and New Forest National Park Authority. Works on the ground to implement the proposals will be carried out by Hampshire County Council and New Forest National Park Authority, subject to any further necessary consents being obtained, including to undertake operations on a SSSI. Natural England will provide further advice to the local authority carrying out the work as necessary.

Coastal Access - Gosport to Portsmouth - Habitats Regulations Assessment
MAP A

Natura 2000 Designations



PART B: Information about the European Site(s) which could be affected

B1. Brief description of the European Sites(s) and their Qualifying Features

The Solent is protected by a complex of European designations. Map A shows the designated Natura 2000 sites within Calshot to Gosport proposed route alignment. In determining the scope of the assessment of our proposals for Calshot to Gosport we applied a buffer of 2km around the area affected by the access proposals. Solent and Southampton Water SPA and Ramsar site, Solent Maritime SAC, Solent and Dorset Coast pSPA and the New Forest SAC, SPA and Ramsar site are therefore included in the scope.

Solent and Southampton Water SPA & Ramsar site

This area is a complex major estuarine system consisting of coastal plain estuaries including the Yar, Medina, King's Quay Shore, and the Hamble. Bar-built estuaries including Newtown Harbour and Beaulieu also occupy the SPA. The Solent and Southampton Water is composed of extensive intertidal mudflats and sandbanks, intertidal and subtidal rock, areas of saltmarsh, coastal lagoons, coastal reed beds, shingle banks, and grazing marsh. Estuarine sediments within the site support rich populations of invertebrates that provide an important food source for wintering birds. The Solent as a whole exceeds 90,000 waders annually and the mudflats, coastal lagoons, shingle and saltmarsh provide vital feeding and roosting grounds for these. The shingle banks also provide important breeding grounds for terns. The Solent also supports 10-13% of world's population of dark-bellied Brent geese, and 30% of the UK population [Ref 2]. Besides using the mudflats and grazing marshes to feed, they also rely on habitats outside the SPA boundary including amenity grassland and farmland with cereals and pasture [Ref 3].

Solent Maritime SAC

This site has the largest number of small estuaries in the tightest cluster anywhere in Great Britain. Sediment habitats within the site include extensive areas of intertidal mudflats and sandflats, often supporting eelgrass (*Zostera* species), subtidal sandbanks, saltmarsh and natural shoreline transitions such as drift line vegetation. The SAC is of particular interest as it is the only site to support all four species of cordgrass (*Spartina*) found in the UK, including the rare native small cordgrass (*Spartina maritima*). The SAC also includes a number of coastal lagoons, sand dunes at East Head and at the time of designation supported a population of the rare Desmoulin's whorl snail (*Vertigo moulinsiana*).

Solent and Dorset Coast pSPA

The recommendations developed so far propose a new marine designation which will include the subtidal areas not currently encompassed in the existing SPAs designated for breeding terns (Chichester & Langstone Harbours SPA, the Solent and Southampton Water SPA, Pagham Harbour SPA and Poole Harbour SPA). The new SPA will cover the area that

the breeding terns use for foraging during April-September. A number of Sites of Special Scientific Interest (SSSI) underpin the pSPA; Hythe to Calshot Marshes SSSI, Lee-on-Solent to Itchen Estuary SSSI and Titchfield Haven SSSI.

New Forest SAC, SPA and Ramsar site

The New Forest sits in the centre of a dip in the surrounding chalk known as the Hampshire Basin and comprises a series of eroded terraces of soft sedimentary clays and sands capped with flint gravel, brick earth and other superficial deposits. The habitats include lowland heath, valley and seepage step mire, or fen, and ancient pasture woodland, including riparian and bog woodland and a range of acid to neutral grasslands. Nowhere else in England do these habitats occur in combination and on so large a scale. These habitats support a rich wetland invertebrate and plant assemblage. The New Forest regularly supports large numbers of breeding birds including Dartford warbler, honey buzzard, hobby, wood warbler, nightjar and woodlark. During the non-breeding season it regularly supports hen harriers.

Table 3. Qualifying features table

Qualifying feature	Solent & Southampton Water SPA	Solent & Southampton Water Ramsar site	Solent Maritime SAC	Solent & Dorset Coast pSPA	New Forest SAC	New Forest SPA	New Forest Ramsar site
A156 Black-tailed godwit *Limosa limosa islandica* (Non-breeding)	✓	✓					
A046a Dark-bellied brent goose *Branta bernicla bernicla* (Non-breeding)	✓	✓					
A193 Common tern *Sterna hirundo* (Breeding)	✓			✓			
A195 Little tern *Sterna albifrons* (Breeding)	✓			✓			
A176 Mediterranean gull *Ichthyaetus melanocephalus* (Breeding)	✓						
A137 Ringed plover *Charadrius hiaticula* (Non-breeding)	✓	✓					
A192 Roseate tern *Sterna dougallii* (Breeding)	✓						
A191 Sandwich tern *Sterna sandvicensis* (Breeding)	✓			✓			
A052 Eurasian teal *Anas crecca* (Non-breeding)	✓	✓					

Water bird assemblage (Non-breeding)[1]	✓	✓					
H1210 Annual vegetation of drift lines			✓				
1330 Atlantic salt meadows *Glauco-Puccinellietalia maritimae*			✓				
H1150 Coastal lagoons		✓	✓				
Saltmarsh		✓					
Shallow coastal waters		✓					
Grazing marshes		✓					
Reed beds		✓					
Coastal woodland		✓					
Rocky boulder reefs		✓					
S1016 Desmoulin's whorl snail *Vertigo moulinsiana*			✓				
H1130 Estuaries		✓	✓				
H1140 Mudflats and sandflats not covered by sea water at low tide; Intertidal mudflats and sandflats		✓	✓				
H1220 Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves			✓				
H1310 *Salicornia* and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand			✓				
H1110 Sandbanks which are slightly covered by sea water all the time			✓				
H2120 Shifting dunes along the shoreline with *Ammophila arenaria* ("White dunes")			✓				
1320 Spartina Swards *Spartinion maritimae;* cord-grass swards			✓				
Wetland invertebrate assemblage (coastal)		✓					
Wetland plant assemblage (coastal)		✓					
Wetland invertebrate assemblage (terrestrial)							✓
Wetland plant assemblage (terrestrial)							✓
Valley mires and wet heaths							✓

A072 European honey-buzzard *pernis apivorus* (breeding)						✓	
A082 Hen harrier *Circus cyaneus* (non-breeding)						✓	
A099 Eurasian hobby *Falco subbuteo* (breeding)						✓	
A224 European nightjar *Caprimulgus europaeus* (breeding)						✓	
A246 Woodlark *Lullula arborea* (breeding)						✓	
A302 Dartford warbler *Sylvia undata* (breeding)						✓	
A314 Wood warbler *Phylloscopus sibilatrix* (breeding)						✓	
H3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae); Nutrient-poor shallow waters with aquatic vegetation on sandy plains					✓		
H3130 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea; Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels					✓		
H4010 Northern Atlantic wet heaths with Erica tetralix; Wet heathland with cross-leaved heath					✓		
H4030 European dry heaths					✓		
H6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae); Purple moor-grass meadows					✓		

Notes:

[1] A water bird assemblage is a qualifying feature of both the SPA and Ramsar sites. When classifying a water bird assemblage as an SPA qualifying feature, the Ramsar Conventions Strategic Framework definition of 'water bird' is used and as such we consider the two qualifying features synonymous. Current abundance and composition of the assemblage feature is taken into account in our assessment. The main component species for this assemblage include black-tailed godwit, ringed plover, teal and dark-bellied brent goose.

Bird Aware Solent

The Solent Recreation Mitigation Strategy, or more commonly known by its public facing name *Bird Aware Solent*, is a tool being used to lessen potential impacts from increases in local housing development on over wintering birds. Research shows that additional disturbance will affect the birds' survival unless mitigation measures are put in place. The initiative is funded by contributions from all new residential dwellings within 5.6km of the SPAs. A key feature of the mitigation strategy is the employment of wardens to ensure responsible use of the site and to inform and educate the public.

Solent Waders and Brent Goose Strategy

The strategy is a non-statutory document presenting evidence, analysis and recommendations to inform decisions relating to strategic planning as well as individual development proposals. The strategy relates to international important brent goose and wading bird populations within and around the Special Protection Areas and Ramsar wetlands of the Solent Coast. The underlying principle of the Strategy is to wherever possible conserve extant sites, and to create new sites, enhancing the quality and extent of the feeding and roosting resource.

B2. European Site Conservation Objectives (including supplementary advice)

Natural England provides advice about the Conservation Objectives for European Sites in England in its role as the statutory nature conservation body. These Objectives (including any Supplementary Advice which may be available) are the necessary context for all HRAs.

The overarching Conservation Objectives for every European Site in England are to ensure that the integrity of each site is maintained or restored as appropriate, and that each site contributes to achieving the aims of the Habitats Regulations, by either maintaining or restoring (as appropriate):

- The extent and distribution of their qualifying natural habitats,
- The structure and function (including typical species) of their qualifying natural habitats,
- The supporting processes on which their qualifying natural habitats rely,
- The supporting processes on which the habitats of their qualifying features rely,
- The population of each of their qualifying features, and
- The distribution of their qualifying features within the site.

Where Conservation Objectives Supplementary Advice is available, which provides further detail about the features' structure, function and supporting processes mentioned above, the implications of the plan or project on the specific attributes and targets listed in the advice will be taken into account in this assessment.

In light of the European Sites which could be affected by the plan or project, this assessment will be informed by the following site-specific Conservation Objectives, including any available supplementary advice.

The pages of Designated Sites View are publicly available. For Solent and Southampton Water SPA follow the link here . For Solent Maritime SAC follow the link here. Supplementary advice on the conservation objectives for the SPA and SAC can be found following the links above.

For Ramsar sites, a decision has been made by Defra and Natural England not to produce Conservation Advice packages, instead focussing on the production of High Level Conservation Objectives. As the provisions on the Habitats Regulations relating to Habitat Regulations Assessments extend to Ramsar sites, Natural England considers the Conservation Advice packages for the overlapping European Marine Site designations to be, in most cases, sufficient to support the management of the Ramsar interests.

PART C: Screening of the plan or project for appropriate assessment

C1. Is the plan or project either directly connected with or necessary to the (conservation) management (of the European Site's qualifying features)?

The Coastal Access Plan is not directly connected with or necessary to the management of the European or Ramsar sites for nature conservation listed in B1 above.

Conclusion:

As the plan or project is not either directly connected or necessary to the management of all of the European site(s)'s qualifying features, and/or contains non-conservation elements, further Habitats Regulations assessment is required.

C2. Is there a likelihood [or risk] of significant [adverse] effects ('LSE')?

This section details whether those constituent elements of the plan or project which are (a) not directly connected with or necessary to the management of the European Site(s) features and (b) could conceivably adversely affect a European site, would have a **likely significant effect,** either alone or in combination with other plans and projects, upon the European sites and which could undermine the achievement of the site's conservation objectives referred to in section B2.

In accordance with case law, this HRA has considered an effect to be 'likely' if it '*cannot be excluded on the basis of objective information'* and is 'significant' if it *'undermines the conservation objectives'*. In accordance with Defra guidance on the approach to be taken to this decision, in plain English, the test asks whether the plan or project '*may'* have a significant effect (i.e. there is a risk or a possibility of such an effect).

This assessment of risk therefore takes into account the precautionary principle (where there is scientific doubt) and **excludes**, at this stage, any measures proposed in the submitted details of the plan/project that are specifically intended to avoid or reduce harmful effects on the European site(s).

Each of the project elements has been tested in view of the European Site Conservation Objectives and against each of the relevant European site qualifying features. An assessment of potential effects using best available evidence and information has been made.

C2.1 Risk of Significant Effects Alone

The first step is to consider whether any elements of the project are likely to have a significant effect upon a European site 'alone' (that is when considered in the context of the prevailing environmental conditions at the site but in isolation of the combined effects of any other 'plans and projects'). Such effects do not include those deemed to be so insignificant as to be trivial or inconsequential.

In this section, we assess risks to qualifying features, taking account of their sensitivity to coastal walking and other recreational activities associated with coastal access proposals, and in view of each site's Conservation Objectives.

For the purposes of this assessment, the qualifying features of the European Sites listed in B1 have been grouped as follows:

Table 4. Feature groups

Feature group	Qualifying feature(s)
Breeding terns and gulls	Common tern; little tern; roseate tern; Sandwich tern; Mediterranean gull
Non-breeding water birds	Black-tailed godwit; ringed plover; teal; dark-bellied brent goose
Non-breeding water bird assemblage	non-breeding water bird assemblage
Supralittoral sediment	Annual vegetation of drift lines; perennial vegetation of stony banks; shifting dunes along the shoreline with *Ammonphila arenaria* ("White dunes")
Desmoulin's whorl snail	Desmoulin's whorl snail
Intertidal habitat (sub-features shown in brackets)	Estuaries (intertidal seagrass beds; intertidal sand and muddy sand; intertidal mud; intertidal mixed sediments; intertidal coarse sediment) *Salicornia,* Glasswort and other annuals colonising mud and sand*;* Atlantic salt meadows; *Spartina* swards and Cord-grass swards Mudflats and sandflats not covered by seawater at low tide (intertidal coarse sediment; intertidal mixed sediments; intertidal mud; intertidal sand and muddy sand; intertidal seagrass beds);
Marine habitat (sub-features shown in brackets)	Shallow coastal waters; sandbanks which are slightly covered by sea water all the time (subtidal coarse sediment; subtidal mixed sediments; subtidal sand; subtidal seagrass beds); Estuaries (subtidal seagrass beds; subtidal sand; subtidal mixed sediments; subtidal coarse sediment) Sheltered channel between island/mainland (rocky boulder reefs)
Reed beds, lagoons and coastal grazing marsh	Reed beds; saline lagoons; coastal grazing marsh; wetland invertebrate assemblage (coastal); wetland plant assemblage (coastal)
Coastal woodland	Coastal woodland
New Forest birds	European honey-buzzard (breeding); hen harrier (non-breeding); Eurasian hobby (breeding); woodlark (breeding); Dartford warbler (breeding)
New Forest habitats and associated plants and invertebrates	Wetland plant assemblage (terrestrial); wetland invertebrate assemblage; valley mires and wet heaths; oligotrophic waters containing very few minerals of sandy plains; oligotrophic to mesotrophic standing waters; northern Atlantic wet heaths; European dry heaths; Molinia meadows.

Table 5. Assessment of likely significant effects alone

Feature	Relevant pressure	Sensitivity to coastal access proposals	Assessment of risk to site conservation objectives	LSE alone?
Breeding terns and gulls	Disturbance of nesting birds.	The qualifying features in this groups are colonial species and nest on shingle beaches and rocky islands, on rivers with shingle bars, and at inland gravel pits and reservoirs. Nesting birds are particularly vulnerable to disturbance as a result of recreational activities (including walking and walking with a dog) which can lead to direct trampling of eggs and chicks, or disturbance of incubating parents leading to increased mortality through predation or hypothermia/heat.	Along this stretch of coast there are nesting sites at Titchfield Haven and the Hamble Estuary and so a significant effect is considered likely at this stage of the assessment.	Yes
Breeding terns and gulls	Disturbance to foraging birds.	Foraging behaviour may be interrupted if birds are feeding close to places where recreational activities take place, including walking and walking with a dog.	No appreciable risk because • Terns forage mainly off shore giving enough spatial separation between path users and the birds. The presence of people on the shore may discourage birds from feeding close to the shore at times but is unlikely to compromise foraging activity. • Use of coastal lagoons by roseate, common and little tern will not be affected by the access proposals because lagoons at Titchfield Haven and Hook with Warsash are not within coastal margin. Lagoons are also found within Fawley Oil Refinery which is excepted land.	No

Non-breeding water birds	Disturbance of feeding and resting birds.	Non-breeding birds using the intertidal or functionally linked land (e.g. amenity grassland and agricultural fields) may be disturbed by recreational activity. The birds can show a range of responses from being alert to making major flights. Disturbance during wintering season can lead to extra energy expenditure, interrupted feeding and reduced survival rates.	Water birds are present in significant numbers in many locations on this part of the site so a significant effect is considered likely at this stage of the assessment.	Yes
Non-breeding water birds	Disturbance of breeding birds.	Non-breeding water birds (that are wholly or largely resident) that breed within or near to the SPA in the vicinity of a coastal path may be disturbed, or nests may be trampled by recreational activities.	The level of risk is higher at places where a breeding population of a species significantly contributes to the non-breeding population and where the access proposals are likely to place breeding birds at risk from recreational activities. Ringed plover nest at Hook Spit and therefore there is potential for interaction with coastal access users.	Yes
Non-breeding water bird assemblage	Disturbance of feeding and resting birds.	Non-breeding birds using the intertidal or functionally linked land (e.g. amenity grassland and agricultural fields) may be disturbed by recreational activity. The birds can show a range of responses from being alert to making major flights. Disturbance during wintering season can lead to extra energy expenditure, interrupted feeding and reduced survival rates. Changes to component species populations can lead	Water birds are present in significant numbers in many locations on this part of the site so a significant effect is considered likely at this stage of the assessment.	Yes

		to a reduction in the overall population and diversity of the assemblage.		
Supralittoral sediment	Trampling of vegetation.	Vegetated shingle can be damaged or destroyed by people walking repeatedly over the same part of it.	Areas of shingle may form part of the coastal margin and be subject to new coastal access rights. Significant effects on vegetated shingle cannot be ruled out at this stage of the assessment. Shifting dunes along the shoreline with *Ammonphila arenaria* ("White dunes") are not present along this stretch and are therefore not assessed at the Appropriate Assessment stage.	Yes
Supralittoral sediment	Loss of supporting and designated habitat though installation of access management infrastructure.	Might be sensitive if there were a permanent loss of habitat as a result of the access proposals.	There will be a small loss of shingle (<1m^2) on vegetated shingle due to the installation of 3 signposts and 1 interpretation panel and therefore significant effects cannot be ruled out at this stage.	Yes
Desmoulin's whorl snail	Trampling of species and its supporting habitat.	Could be vulnerable where the coast path created or improved access to the banks of calcareous wetlands, streams and lakes which this species is restricted to.	No appreciable risk This feature is only found underwater in freshwater systems.	No
Intertidal habitat	Trampling of sensitive species and habitats.	Of the features in this group saltmarsh vegetation and sea grass beds are at greater risk as they can be more easily damaged or destroyed by people walking repeatedly over the same part of them. Bare areas may be created which make the surrounding habitat	Intertidal habitats may form part of the coastal margin and be subject to new access rights. Significant effects cannot therefore be ruled out at this stage of the assessment.	Yes

		more vulnerable to erosion.		
Intertidal habitat	Permanent loss of supporting and designated habitat though installation of access management infrastructure .	Might be sensitive if there were a permanent loss of habitat as a result of the access proposals.	There will be a small loss of intertidal habitat (<0.5m^2) due to the installation of 2 signposts.	Yes
Reed beds, lagoons and coastal grazing marsh	Trampling of species and habitats.	Could be vulnerable if there were to be significant changes in recreational activities taking place within the site as a result of the access proposals.	No appreciable risk Grazing marsh occurs on the Fawley oil refinery site and at Hook with Warsash LNR. There is no current pressure from recreational activity. At Fawley the grazing marsh is within the site perimeter and is excepted from the right of access. The small area (0.3 ha) of grazing marsh north of the Fawley Swing Bridge is unsuitable for public access and no new access rights will be created over this area. Hook with Warsash LNR is landwards of the proposed trail and separated from it by a fence and drainage ditch. . Reed beds and lagoons occur landwards of the proposed trail, at Hook with Warsash LNR and Titchfield Haven NNR. Access to these areas will not be affected by the proposals. Titchfield Haven NNR is a visitor attraction managed by Hampshire County Council. The wetland invertebrate and plant assemblages are associated with lagoons and grazing marshes. For the reasons explained above, we conclude there is no appreciable risk to this feature as a result of the access proposals.	No

Coastal woodland	Trampling of species and habitat areas.	Might be sensitive if there were to be significant changes in recreational activities taking place within the site as a result of the access proposals.	No appreciable risk There is no current pressure to coastal woodland from recreational activities. The proposed coast path will follow existing marked trails through the woodland.	No
Coastal woodland	Loss of habitat through installation of access management infrastructure.	Might be sensitive if there were a permanent loss of habitat as a result of the access proposals.	There will be a small loss of habitat due to the installation of 2 signposts at Hamble Common.	Yes
Marine habitat	None identified.	Not considered sensitive due to the lack of interaction between path users and the features.	There are no appreciable risks because there is no interaction between users of the Coast Path and these features.	No
New Forest birds	Disturbance to breeding, feeding or resting birds.	Bird species are mobile and may be disturbed by recreational activities taking place in functionally linked land beyond the boundary of the designated site.	No appreciable risk. The breeding and non-breeding birds that nest and feed in the New Forest SPA and Ramsar will not be disturbed by users of the coast path. The SPA and Ramsar site is within the 2km buffer of scope where the coast path aligns along the A326, around the Fawley Oil Refinery. The closest point between the proposed coast path and the New Forest SPA and Ramsar site is where the route leaves the A326 at Hardley to join a public right of way around the oil storage depot immediately north of Cadland Road (275m to the edge of the SPA and Ramsar site). New signposting will direct users along this route towards the coast (either Hythe or Ashlett). Between Hythe and Ashlett (within the 2km buffer) there are some small, isolated woodland copses but they are not considered large enough or contain the extent of heathland needed to connect to the SPA functionally. It is considered that	No

			there is no appreciable risk that the promotion of this path will affect current access levels and patterns in the New Forest.	
New Forest habitat and associated plants and invertebrates	None identified.	The access proposals will not affect New Forest habitat. Features or associated plant and invertebrate species.	No risk. The features that are found within the New Forest SAC will not be impacted by users of the coast path. The SAC is within the 2km buffer of scope where the coast path aligns along the A326, around the Fawley Oil Refinery. The closest point between the proposed coast path and the New Forest SPA is where the route leaves the A326 at Hardley to join a public right of way around the oil storage depot immediately north of Cadland Road (275m to the edge of the SPA). New signposting will direct users along this route towards the coast (either Hythe or Ashlett) and it is considered that there is no risk to New Forest habitat or associated plant and invertebrate species.	No

Conclusion:

The plan or project alone is likely to have a significant effect on the following qualifying features groups:

- Breeding terns and gulls – through disturbance during nesting
- Non-breeding water birds – through disturbance
- Non-breeding water birds – through disturbance of ringed plover that remain on site to breed
- Non-breeding water bird assemblage – through disturbance
- Intertidal habitat – through trampling and permanent loss
- Supralittoral sediment – through trampling and permanent loss
- Coastal woodland – through permanent loss

The plan or project alone is unlikely to have a significant effect on the following qualifying features groups:

- Breeding terns and gulls – through disturbance during foraging
- Desmoulin's whorl snail – through trampling

- Reed beds, lagoons and coastal grazing marsh – through trampling
- Coastal woodland – through trampling
- Marine habitat – through trampling
- New Forest birds – through disturbance during nesting and feeding
- New Forest habitat with associated plants and invertebrates – through trampling

C2.2 Risk of Significant Effects in-combination with the effects from other plans and projects

The need for further assessment of the risk of in-combination effects is considered here.

Natural England considers that it is the appreciable risks of effects (from a proposed plan or project) that are not themselves considered to be significant alone which must be further assessed to determine whether they could have a combined effect significant enough to require an appropriate assessment.

Further to the risks identified as being significant alone (in C2.1), it is considered that there are no other residual and appreciable risks likely to arise from this project which have the potential to act in-combination with similar risks from other proposed plans or projects to also become significant. It has therefore been excluded, on the basis of objective information, that the project is likely to have a significant effect in-combination with other proposed plans or projects.

C3. Overall Screening Decision for the Plan/Project

On the basis of the details submitted, Natural England has considered the plan or project under Regulation 63(1)(a) of the Habitats Regulations and made an assessment of whether it will have a likely significant effect on a European site, either alone or in combination with other plans and projects.

In light of sections C1 and C2 of this assessment above, Natural England has concluded:

As the plan or project is likely to have significant effects (or may have significant effects) on some or all of the Qualifying Features of the European Site(s) 'alone', further appropriate assessment of the project 'alone' is required.

PART D: Appropriate Assessment and Conclusions on Site Integrity

D1. Scope of Appropriate Assessment

In light of the screening decision above in section C3, this section contains the Appropriate Assessment of the implications of the plan or project in view of the Conservation Objectives for the European Site(s) at risk.

The Sites and the Qualifying Feature for which significant effects (whether 'alone' or 'in combination') are likely or cannot be ruled out and which are initially relevant to this appropriate assessment are:

Table 6. Scope of Appropriate Assessment

Environmental pressure	Qualifying Feature(s) affected	Risk to Conservation Objectives
Disturbance of non-breeding water birds	• Dark-bellied brent goose • Ringed plover • Black-tailed godwit • Teal • Water bird assemblage	Disturbance to foraging or resting non-breeding water birds, following changes in recreational activities as a result of the access proposal, leads to reduced fitness and reduction in population and/or contraction in the distribution of Qualifying Features within the site.
Disturbance of non-breeding water birds	• Ringed plover	Disturbance to breeding birds, following changes in recreational activities as a result of the access proposal, leads to reduction in the abundance and distribution of the Qualifying Features within the site and a resultant reduction non-breeding population
Disturbance of breeding terns and gulls	• Little tern • Common tern • Sandwich tern • Roseate tern • Mediterranean gull •	Disturbance to breeding terns and gulls at their nesting site, following changes in recreational activities as a result of the access proposal, leads to reduction in the abundance and distribution of the Qualifying Features within the site.
Loss of qualifying and supporting habitat through installation of access management infrastructure	• Supralittoral sediment; • Intertidal habitat • Coastal woodland	The installation of access management infrastructure may lead to the reduction in the extent and distribution of qualifying natural habitats and habitats of the qualifying species.
Trampling of sensitive species and habitat areas	• Intertidal habitat • Supralittoral sediment	The trampling of designated features following changes in recreational activities as a result of the access proposal leads to the reduction in the extent and distribution of qualifying natural habitats and habitats of the qualifying species.

D2. Contextual statement on the current status, influences, management and condition of the European Site and those qualifying features affected by the plan or project

Disturbance of non-breeding water birds

The Solent as a whole attracts 90,000 waders annually and the Solent and Southampton Water SPA provides important foraging and resting sites for over wintering birds. Along the Calshot to Gosport stretch disturbance could potentially be problematic for over wintering birds if it occurs repeatedly. Disturbance as a result of recreational activities during the wintering period can affect the bird's energy expenditure, impacting on feeding and roosting. As part of the Supplementary Advice on Conservation Objectives for the SPA, Natural England has recently set targets for all of the qualifying features, in order to meet the conservation objectives for the site. All the features also have a target to 'reduce disturbance caused by human activities'. These attributes within the Supplementary Advice are considered to be those which best describe the sites ecological integrity which if preserved will achieve the Conservation Objectives.

SPA supports 6,346 individuals (2009/10-2013/14) of the wintering Western European population of dark-bellied brent goose and have remained relatively stable [Ref 7]. These birds are generally found in significant numbers near Calshot LNR at Tom Tiddler's field, the arable land immediately east of Solent Breezes Holiday Village, within the intertidal and open waters to the south of the Hamble estuary and Warsash where green alga and seagrass are present. Supplementary Advice for this feature states that this feature is in good condition and has a target to maintain population abundance.

The SPA supports 1,075 individuals (2009/10-2013/14) of Black-tailed godwit but the key sites for feeding and roosting are Beaulieu Estuary, Newton Harbour and North-West Solent of which none are within this stretch. WeBS data has shown a handful of counts within the intertidal areas near Hythe, but Southampton Water is not considered to have large populations using it. The feature is in good condition, has a stable population and has a target to maintain population abundance [Ref 7].

Ringed plover at the SPA has declined since classification to 417 individuals (2009/10-2013/14) but remains in good condition with a target to maintain population abundance [Ref 7]. The reasons for decline are not clear but are in line with UK and regional trends. The most counts at the SPA include Hythe, Itchen estuary, Hamble estuary and intertidal areas south-east of Warsash.

Teal have seen relatively stable populations at the SPA with 5,554 individuals using a range of sites along this stretch (2009/10-2013/14). Feeding along mudflats and roosting on open water, these birds are found in significant numbers at Calshot LNR, areas north of the Ashlett Creek oil refinery and the far reaches of Southampton water and Hamble estuary. The feature is in good condition and has a target to maintain population abundance [Ref 7]

The non-breeding water bird assemblage feature at of the SPA has seen a decline in numbers of water birds now averaging 43,897 individuals (2009/10-2013/14) but the feature is in good condition and has a target to maintain the abundance and diversity of the assemblage [Ref 7]. It consists of all native species to the area. It is recognised that some constituent species contribute more towards the integrity of the overall assemblage than others and as such our assessment focuses on the abundance and diversity of the main component species listed above but considers the assemblage as a whole when assessing the impacts of the proposals on water bird abundance and diversity.

Bird Aware Solent

Extensive research has been undertaken to assess the impact of recreational activity on wintering birds in The Solent in light of planned new housing. Further residential growth and the implications this has for management of recreational activities alongside the Solent SPAs has been addressed by local authorities as part of the planning process. The resulting mitigation strategy aims to reduce bird disturbance through a series of management measures which actively encourage all coastal visitors to enjoy their visits in a responsible manner rather than restricting access to the coast or preventing activities that take place there [Ref 6].

The measures delivered through Bird Aware Solent provide for an enhanced range of quality recreational opportunities alongside safeguarding birds populations of non-breeding water birds. Proposals for coastal access have been made following a series of workshops and discussions with Bird Aware Solent representatives during which we have checked that detailed design of the access proposals is compatible with the Solent Recreation Mitigation Strategy and latest thinking on how it will be delivered, including site-specific visitor management measures.

Solent Waders and Brent Goose Strategy

The Solent Waders and Brent Goose Strategy (SWBGS) is a non-statutory document presenting evidence, analysis and recommendations to inform decisions relating to strategic planning as well as individual development proposals. The strategy relates to internationally important brent goose and wading bird populations within and around the SPAs and Ramsar wetlands of the Solent Coast. The underlying principle of the Strategy is to wherever possible conserve extant sites, and to create new sites, enhancing the quality and extent of the feeding and roosting resource.
A framework for guidance on mitigation and off-setting requirements has been prepared by the Strategy Steering Group to achieve the long-term protection of the wider dark-bellied brent goose and wader network of sites. This network is under pressure from the growth planned for the Solent and formal guidance was considered necessary to define an approach for the non-designated sites.
Within the Gosport to Portsmouth stretch of the England Coast Path, key sites have been identified. Maps of these key sites can be viewed from the Strategy's website here. Data on the individual species found at the key sites and counts can be requested via the Hampshire Biodiversity Information Centre (HBIC). When referring to key sites these include Primary Core, Primary Support and SPA sites, definitions of these can be found in Appendix 1. We

have used the evidence base underpinning the Strategy to assess whether the England Coast Path proposals will lead to a likely significant effect, through increased recreational disturbance, on the qualifying features outside of the boundaries of the European and Ramsar sites.

Disturbance of non-breeding water birds (breeding ringed plover)

Where a breeding population of a species significantly contributes to the non-breeding population on the same site by being wholly or largely resident (or this cannot be ruled out), there is the potential for impacts of that breeding population to have consequences for the non-breeding population. Ringed plover is a non-breeding qualifying feature of the Southampton Water SPA.

Ringed plover have a preference for wide sandy or shingle beaches for breeding [Ref 11]. These types of beaches are also attractive for recreation and hence interaction with the coastal path proposals is more likely through trampling of eggs and nests and disturbance. Along this stretch of coast ringed plover are known to breed in low numbers at Hook with Warsash LNR and Titchfield Haven NNR.

Disturbance of breeding terns and gulls

Changes in coastal access arrangements may increase the interaction between Coast Path users and important nesting sites for terns and Mediterranean gull. Along this stretch there are few key sites where terns and gulls are known to nest. Compared to other key sites in the Solent such as between Hurst Point – Pitts Deep and Newtown Harbour, these birds nest to a lesser extent at Titchfield Haven NNR. The Hamble Estuary as a whole is considered important for terns and gulls, however, where the Coast Path is aligned on the western and eastern bank of the estuary, there are no nesting sites.

Little, common, Sandwich and roseate tern populations have all declined across the SPA. Their recent 5 year peak mean (2013-2017) are 11, 147, 95 and 2 pairs respectively. The reasons for decline are attributed to increased recreational disturbance to nesting sites, predation and coastal squeeze reducing the vegetated shingle habitat they require to nest. All terns species have a target to 'restore' the size of the breeding population across the SPA, however, there are no known conservation efforts being made on this stretch to restore breeding sites. All tern species have a target to reduce disturbance caused by human activity.

Breeding pairs of Mediterranean gull have increased across the SPA to 13 pairs (2013-2017). The feature are considered to be in good condition and have a target to 'maintain' the size of the breeding population. This species also has a target to reduce disturbance caused by human activity.

EU LIFE+ Nature Little Tern Recovery Project & Roseate Tern LIFE Project

These two projects, funding through the EU LIFE programme, aims to improve the conservation status of the little tern and roseate tern in the UK through targeted action at the most important colonies. The main colonies identified in the Solent are Chichester and Langstone Harbours and Western Solent. The Little Tern Project finished in 2018 however the Roseate Tern Project has funding until 2020. Titchfield Haven NNR has been mentioned as a key site in the Roseate Tern Project but it is predominantly focusing on the colonies near Lymington Harbour in the Western Solent.

Permanent loss of habitat

All the features below have been identified as being at risk to permanent loss due to the installation of establishment works and are either designated features or supporting habitat for SPA birds. Inappropriate management and direct or indirect impacts may affect the extent and distribution of habitats may adversely affect the population and alter the distribution of birds.

The installation of infrastructure as part of the ECP may result in the permanent loss of supralittoral sediment, intertidal habitat (saltmarsh) and coastal woodland.

The Supplementary Advice on Conservation Objectives has set a target to 'maintain' the extent and distribution of annual vegetation of drift lines and perennial vegetation of stony banks that make up the 'Supralittoral sediment' feature group being assessed.

The Advice sets a target to 'restore' the extent and distribution of Salicornia and other annuals colonising mud and sand, *spartina* swards, Atlantic salt meadows and Estuaries. These features make up part of the 'Intertidal habitat' feature group being assessed.

Coastal woodland, a Ramsar feature, does not have supplementary advice on its conservation objectives. There is currently no evidence to suggest this feature is at risk.

Trampling of sensitive habitat

Intertidal habitat

The Solent Maritime SAC Is designated, in part, for its intertidal habitat. The risk associated with the proposal is the possible increase in repeated trampling where the Coast Path changes current access levels and patterns at sensitive sites.

Supralittoral sediment

The Solent Maritime SAC is designated, in part, for its supralittoral sediments. The qualifying feature most at risk to changes in coastal access arrangements as a result of the ECP are annual vegetation of drift lines and perennial vegetation of stony banks. This is due to the possible increase in repeated trampling where the Coast Path changes current access levels and patterns at sensitive sites.

D3. Assessment of potential adverse effects considering the plan or project 'alone'

This section considers the risks identified at the screening stage in section C and assesses whether adverse effects arising from these risks can be ruled out, having regard to the detailed design of proposals for coastal access.

In reviewing the ability of any incorporated measures to avoid harmful effects, Natural England has considered their likely effectiveness, reliability, timeliness, certainty and duration over the full lifetime of the plan or project. A precautionary view has been taken where there is doubt or uncertainty regarding these measures.

D3.1 Design of the access proposal to address possible risks – at a stretch level

In this section of the assessment we describe our overall approach to address the potential impacts and risks from our proposal. The key nature conservation issue for the Solent is the protection of non-breeding water birds, which occur all along the SPA and Ramsar site on this stretch during the wintering season. We will also describe our approach to the issue of small scale habitat loss from the installation of establishment works, potential disturbance to nesting birds and trampling of sensitive features.

South Hampshire is the most populated area in the south-east of England apart from London and is home to approximately 1.5million people. Southampton itself is the most populated city on this stretch with urban density reducing in the surround towns and suburbs before increasing again as you near Gosport. This is reflected by predicted annual visits to the coastal areas closest to the city between of 716,000 to 3,096,000, between 169,000 and 1,265,000 at the surrounding areas including Fawley and the Hamble Estuary and between 1,265,000 and 3,096,000 at Lee-on-the-Solent [Ref 10]. Along the entire stretch, access to the coast is possible via a variety of formal (including the Weston Shore Promenade and the Solent Way) and informal paths.

Residential growth is a key issue within The Solent because of the urbanised nature of the coastline. Local Authorities within the area recognise this pressure and have incorporated strategic solutions to address this in the adopted and emerging local plans. All the adopted plans have a positive HRA concluding no adverse effect from their proposals on European designated sites with no residual risks to conservation objectives. This informs the prevailing conditions and suggests that, in their current state, the European designated sites are not experiencing adverse effects from recreational or other impact pathways from the plans alone or in-combination.

A key finding from the research underpinning the Solent Recreation Mitigation Strategy for wintering water birds is that how people behave, and how access is managed at each location determines the extent of disturbance [Ref 6]. Our objective in designing proposals

for coastal access has been to ensure they do not increase the disturbance pressure affecting the site and that where possible they contribute to efforts to manage existing and future demand for places for coastal recreation in ways that help to reduce disturbance to wintering birds. To achieve this between Calshot and Gosport, our proposals for coastal access:

- Make use of popular established paths where increase in the level of use in unlikely to increase the disturbance pressure affecting the SPA. The proposed alignment for the England Coast Path between Calshot and Gosport entirely follows existing paths including already promoted routes including Weston Shore Promenade and the Solent Way.
- Do not create new coastal access rights over intertidal mudflats and saltmarsh that are used by feeding water birds. In practice, use of such intertidal areas for recreation limited since they are unattractive, dangerous and inherently unsuitable for public access. A year round exclusion will apply over the majority of mudflats and saltmarsh along the stretch such that no new coastal access rights will be created over these areas. Maps showing the extent of excluded areas can be found within the Coastal Access Overview Report (Map E1, E2 and E3)
- Contribute to raising awareness and encouraging appropriate visitor behaviour close to areas used by wintering birds by installing new information panels at key access points along the stretch. These will reinforce Bird Aware messaged and display information about the sensitive features.

Non-breeding ringed plover that stay on site to breed may also be at risk as a consequence of promoting the coast path. The key breeding site for ringed plover is Titchfield Haven NNR, but some irregular sightings have been made at Hook Spit, part of Hook with Warsash LNR. The design of our proposal at both locations uses the existing, regularly walked route and no new access is being created at the nesting sites. Our proposal will complement the existing access management measures at Hook Spit with the installation of an interpretation panel to inform visitors of the sensitivities as well as new signposting, encouraging users to remain on the path. Titchfield Haven NNR is visitor hot-spot and is managed by Hampshire County Council. Our proposal is aligned along the road seaward of the NNR boundary and will not affect future access levels or patterns with the NNR itself.

Breeding terns and Mediterranean gulls are also at risk as a consequence of promotion the coast path. There are no known nesting sites outside of Titchfield Haven NNR and for the same reasons mentioned above for ringed plover, our proposal will complement existing management measures.

Permanent loss of habitat as a consequence of establishment work has also been considered. 7 new signposts and 1 new interpretation panel are proposed within SPA, Ramsar and SAC designations. All new installations will not result in the direct loss of qualifying features. Any loss of designated land is considered trivial because it will be installed on or near the path.

Trampling of sensitive features is another risk identified as a consequence of promoting the coast path. Our proposal is aligned to existing coastal routes and no new coastal access are

being proposed over these areas. A year round exclusion will apply over the majority of mudflats and saltmarsh along the stretch such that no new coastal access will be created over these areas. No new access is being proposed upon supralittoral sediment.

D3.2 Design of the access proposal to address possible risks – at a local level

In this part of the assessment we consider key locations along the coast between Calshot and Gosport where establishing the England Coast Path and associated coastal access rights might impact on qualifying features of a European site. We explain how the detailed design of our proposals at these locations takes account of possible risks.

A number of locations have been identified as being potentially at risk to disturbance caused by the promotion of the England Coast Path. Using WeBS count data, SWBGS and supplementary advice on conservation objections these locations were identified to accommodate significant numbers of non-breeding and breeding birds, their supporting habitat and SAC qualifying habitats.

The features occurring at each of these key locations are shown in the table below. To make it easier to cross-reference between this assessment and the corresponding Coastal Access Reports in which access proposals are made, the relationship between the geographic units in this assessment and the way the stretch is sub divided in the Coastal Access Reports is shown.

Table 7. Summary of key locations

Location	Cross reference to the access proposal	Non-breeding water birds	Breeding terns and gulls	Intertidal habitat	Coastal wood-land	Supra-littoral sediment
Calshot Marshes LNR	CCG-1-S001 to CCG-1-S002	✓		✓		
Hythe Spartina Marsh Nature Reserve	CCG-1-S057	✓		✓		
Woolston to Hamble Common	CCG-2-S001 to CCG-2-S050	✓		✓		✓
Hamble Common	CCG-2-S050 to CCG-2-S056	✓		✓	✓	
Eastern jetty Hamble-Warsash Ferry crossing	CCG-3-S01	✓		✓		

Hook with Warsash LNR	CCG-3-S03 to CCG-3-S014	✓		✓		✓
Solent Breezes Holiday Village	CCG-3-S018 to CCG-3-S041	✓		✓		
Titchfield Haven NNR	CCG-3-S061 to CCG-3-SO65	✓	✓	✓		

To inform our assessment of risk, we have reviewed how relevant sections of coast are currently used for recreation, how this might change as a result of known factors (such as planned housing), and how the established patterns and levels of access might be affected by our proposed improvement to access. The predictions we have made from this work are informed by available information, including reports commissioned to support development of the local plan, on-line mapping and aerial photography, travel and visitor information, site visits and input from local access managers. The findings of this work are incorporated into the assessments below.

Our assessment of the impact of the access proposals at each of these location is set out in Table 8 below.

Table 8. Detailed assessment of key locations

Location	Current situation	Risk analysis
Calshot Marshes LNR	**Access baseline** Calshot Marshes is a very popular area for walking, with and without a dog especially during the summer. The Marshes is adjacent to Calshot Spit which has a popular water sports centre and lots of car parking provision. The spit is a 5 minute walk from the village of Calshot. Most visitors drive to the site and walk adjacent to the Marshes on the compacted soil path towards Ashlett. There is only one main established route along this section. From the start of the stretch, the route is on a permissive path adjacent to the marshes until it joins a public right of way via Tom Tiddler's Land that continues north towards Ashlett.	**Disturbance to non-breeding birds** Access provisions at this location will be unchanged as a result of the Coast Path. No new coastal access will be created on the mudflats and saltmarsh seaward of the trail because of a year round Section 25A restriction. The proposal will align as inland as possible of the current braided route adjacent to the marshes in order reduce the likelihood of the path flooding. This will encourage users to remain on one path. To complement the SRMP, Natural England are installing 3 new interpretation panels at key locations (one at the beginning of the permissive path at the LNR, another where the path meets the public right of way from Tom Tiddler's field and

	There are various, criss-crossing paths where users have attempted to avoid boggy areas due to the high tides. Some visitors walk inland through Tom Tiddler's Land (part of Fawley Power Station) to create a circular route Dogs are not permitted in the reserve and there is on-site signage. The intertidal is difficult to walk over and the majority of visitors use the established paths. **Environmental baseline** The LNR is designated SAC, SPA and Ramsar land. Of the features being considered in this part of the assessment, non-breeding water birds and intertidal habitat are present at this location. Tom Tiddler's field directly landwards of the path is identified as a Primary and Core site for wintering birds by the SWBGs. WeBS low tide counts and site visits confirm the importance of the marshes especially for dark-bellied brent goose (approximately 100 counts for 2000/1) and teal (approximately 60 counts for 2000/1). In the same year a handful of ringed plover were counted at the reserve but no counts of black-tailed godwit were made. Of other species that make up the assemblage, the LNR is very popular with dunlin and to a lesser extent wigeon, grey plover and redshank. Further along the stretch, away from the LNR and towards Ashlett, the use of the intertidal by these birds decreases significantly. The underpinning SSSI unit conditions (Hythe to Calshot Marshes SSSI) states the site is in 'Unfavourable –	the third at Ashlett) along this stretch of coast. This will inform the public of the sensitivities of the wintering birds here. Tom Tiddler's field has been identified as a Primary and Core area for wintering birds. The Optional Alternative Route (Appendix 2 – Map B) proposed will be along the regularly used public rights of way which is separated from the grassland used by birds by existing natural screening. **Trampling of vegetation** The proposals will tend to encourage use of existing paths and so help to reduce trampling pressure over the saltmarsh and mudflat here.

	Recovering' and 'Unfavourable – No change' for the LNR and intertidal habitat further towards Ashlett. Bird numbers, as in the whole of the Solent, are decreasing at these sites due to the loss of habitat from sea level rise and coastal squeeze. Compensation for this is being made at the Medmerry Reserve near Pagham Harbour. Calshot Marshes LNR is approximately 57 hectares in size with 11.5 hectares being saltmarsh and the remaining being mudflat. Further along towards Ashlett the intertidal area within coastal margin is significantly larger at approximately 95 hectares of which 26 hectares is saltmarsh and the remaining being mudflat. The underpinning SSSI units are in 'unfavourable' condition due to water quality and the effects of coastal squeeze. Tom Tiddler's Field has been classified as a mostly 'Primary Supporting Areas' as well as a small section of 'Core Area' adjacent to Jack Maynard Road. The 'Core Area' is ploughed whereas the rest of the site is unmanaged grassland/woodland.	
Hythe Spartina Marsh Nature Reserve	**Access baseline** The reserve is seawards of the busy Shore Road that links the north east section of the town of Hythe to Southampton Road leading to the city. The existing path is part of the Solent Way that follows Shore Road on its landward side and is popular for local residents, especially during the summer. To the north-west of the reserve is Hythe Sailing Club, the Sea Scouts centre and the Hythe Ferry terminal. There is one small free car park off the road opposite the reserve.	**Disturbance to non-breeding birds and trampling of vegetation** Access provisions will be unchanged as a result of the promotion of the coast path. The coast path will be aligned on the existing Solent Way, consisting of the pavement landward of Shore Road. No new coastal access rights will be created seaward of Shore Road due to a Section 25A restriction on the mudflat and saltmarsh. The access proposal will

	The reserve is accessible to the public by one informal entrance to the east of the reserve, but evidence suggests a low level of use due to the frequent inundation by the tide and subsequent unsuitable walking terrain. There is one informal track that leads from the eastern entrance of the reserve. Aerial imagery and site visits show the track leads directly north towards the low tide mark. Existing access management includes a temporary barrier (large felled tree) at the entrance of this track in addition to a sign that asks visitors to respect the sensitive features found here. It is not considered likely that visitors enter the site any other way. Visitors within the reserve are unable to walk south-east across the intertidal habitat due to a barbed wire fence that extends across the reserve. Beyond this fence-line is excepted land, part of the Fawley Oil Refinery. **Environmental baseline** The reserve is designated SAC, SPA and Ramsar land. Of the features being considered in this part of the assessment, non-breeding water birds and intertidal habitat are present at this location. Low-tide WeBS count data show very low use of the site by wintering birds, with only a handful of counts between the SPA designated wintering birds in total for 2000/1. SWBGS has not classified this site as an important feeding ground for wintering birds. SSSI unit condition for the site states it is in 'Unfavourable-Recovering' condition and the low bird counts are attributed to the loss of food and	encourage the use of the pavement over use of the reserve.

	roosting site availability as a result of rising sea levels and coastal squeeze. This is being compensated for at Medmerry Reserve near Pagham Harbour. The reserve within proposed coastal margin is approximately 13 hectares in total of which approximately half is saltmarsh and half is mudflat. The underpinning SSSI unit is in 'unfavourable' condition due to water quality and the effects of coastal squeeze.	
Woolston to Hamble Common	**Access baseline** Access along this entire section of the coast is very popular. The proposal follows the Solent Way along this stretch with the majority of it being paved/tarmac. This allows for a variety of recreational activities along the path other than walking with and without a dog (e.g. cycling and horse riding). From the Solent Way it is easy for users to reach the shorefront. This is especially apparent around Weston where wide shingle beaches are a popular attraction for visitors during the summer. Further south along the coast, use of the shorefront is much less as the shingle area becomes very narrow. The coastal routes here are, nonetheless, very popular with local residents in Netley and Hamble. **Environmental baseline** The coastline is designated SPA and Ramsar site. WeBS low tide counts show that the intertidal areas along this section of coast is not used as much by SPA wintering birds compared to other locations, for example, Calshot Marshes LNR and Hook with	**Disturbance to non-breeding birds** A year round Section 25A over the mudflats will reduce the risk of disturbance on the birds feeding there. Due to the current popularity of the areas identified as SWBGS 'high use sites', it is considered unlikely that the promotion of the coast path along this section of the Solent Way will change access levels and patterns. New signposting will encourage users to stay on the path. **Trampling and permanent loss of habitat** No new coastal access is being proposed over areas of vegetated shingle. The proposal is aligned along the Solent Way which, in most part, is paved/tarmac offering a more desirable route compared to walking over shingle. Vegetated shingle communities are found in greater number on the shorefront adjacent to Westfield Common. Here the route follows the existing regularly used track along the back of the shingle. It is considered that users will continue to use this route and new signposting will encourage new and existing users to remain on the path.

	Warsash LNR. The largest concentration of wintering birds are found within the inter and subtidal areas around Woolston, with WeBS low tide data showing approximately 20 counts of brent geese and ringed plover here (2000/1). Low tide counts for species making up the assemblage show that the intertidal areas off Weston Parade are very popular with dunlin (approximately 350 counts in 2000/1) and to a lesser extent grey plover (50 counts in 2000/1). Aerial imagery shows sand/mud banks not covered by seawater at high tide which may provide valuable high tide roosting and feeding sites. A handful of counts of brent goose were also seen along the foreshore and further inland, suggesting that the geese and other waders use areas adjacent to the beach. SWBGS has identified a number of 'Primary and Secondary Supporting Areas' and 'Core Areas' (for the purpose of this assessment these areas will be collectively named 'high use' sites) that cover the majority of the foreshore and amenity grassland landward of the Solent Way here. These areas include Weston Shore Parade, Weston Shore Pitch and Putt, the Cricket Field at Netley and the foreshore at Royal Victoria Country Park. No counts have been for teal, ringed plover and black-tailed godwit along this section, however it is considered likely that individuals use the intertidal and the SWBGS sites. Aerial imagery shows sparse areas of vegetated shingle communities along this section of the coast. Although this feature is an SAC	The installation of one signpost within the SPA and Ramsar site at Westfield Common (Appendix 2 – Map G) will lead to the permanent loss of less than 0.5m^2 of designated land. The signpost will be installed on or near the existing worn path and not directly on top of vegetated shingle. The loss of designated land is considered trivial and will not adversely affect the site integrity of the SPA.

	feature group, this section of the path is designated SPA and Ramsar site. Levels of trampling is low as most users remain on the path rather than walking along unstable shingle.	
Hamble Common	**Access baseline** Hamble Common is a popular area of greenspace for walking, with and without a dog, especially during the summer. The common is within walking distance to the village of Hamble-le-rice. Visitors can arrive by car and enter the site from the car park from Green Lane or via foot from School Lane that cuts across the common. There is a network of informal paths consisting of bare compacted soil over the common. There is no evidence to suggest frequent walking over the intertidal area because it is frequently inundated by the tide and is not an attractive place to walk. The proposed route for England Coast Path is along the existing public right of way to the south of the intertidal area and along well used paths (compacted bare soil) through woodland before going inland towards the Hamble ferry western jetty. Two footbridges (in need of repair) allow users a safe and more attractive route across the intertidal areas here. Open access rights are already established over the common. **Environmental Baseline** The intertidal reaches of Hamble Common is designated SAC, SPA and Ramsar land.	**Disturbance to non-breeding birds and trampling of vegetation** Access permissions over Hamble Common will be unchanged by the proposals. Modest improvements to the quality of the path around the common are proposed that are likely to encourage use of this route by current and future visitors to the common. The route proposed avoids sensitive areas where non-breeding birds feed on the mudflats at low tide and will tend to reduce trampling away from the path. **Permanent loss of habitat as a result of establishment works** Two existing footbridges are becoming worn and will be replaced as well as 2 culverts that are directly beneath the used path. Three new signposts are proposed which will result in a small loss of habitat (less than 0.5 m^2) (Appendix 2 – Map C). The posts will be installed adjacent to the existing path within coastal woodland areas (two most northern posts) as well as next to the most southern footbridge (situated on saltmarsh habitat). Installation method will be checked at establishment stage and further assessment under the Habitats Regulations made, as necessary, prior to works being carried out. Assessment of possible impacts on the European site will need to be checked and confirmed as part of the SSSI assenting process prior to works being carried out

	Of the feature groups being considered in this part of the assessment, non-breeding water birds, intertidal habitat and terrestrial habitat are present at this location. At low tide, the mud flats are sometimes used by small numbers of non-breeding water birds (low tide counts in 2000/1 saw 5 brent geese and 4 teal). Of the other species making up the assemblage, approximately 20 counts of dunlin, 4 counts of redshank, 1 count of wigeon and 1 count of grey plover were made on the intertidal area here. There are no known high tide roost sites along this section of the route. The part of Hamble Common that would be included within the coastal margin is part of the SPA but is not ranked by SWBGS. Intertidal habitat comprises an area of mud flat and salt marsh. The total size of this area within seaward coastal margin is approximately 3.5 hectares, of which 1.5 hectares and 2 hectares is saltmarsh and mudflat respectively. This habitat is considered to be in unfavourable condition due to poor water quality. There is an area of coastal woodland (0.3 hectares) landward of the trail north of the second footbridge that will be included in the coastal margin.	
Eastern jetty Hamble-Warsash Ferry crossing	**Access baseline** This location is where users of the Hamble-Warsash Ferry crossing board and alight. From the ferry, passengers walk along the wooden jetty to meet a formal gravel path (public right of way) that is upon the sea wall. This path is heavily used, especially during the summer.	**Disturbance to non-breeding water birds and trampling of intertidal habitat** The Coast Path will be aligned along existing public rights of way to/from the ferry jetty. Walking away from this surfaced path is difficult at this location due to the terrain and no new coastal access rights will be created over the

	Users stick to the path here due to the sea wall keeping them above high water mark. Access to the intertidal areas at low tide is possible, but the unsuitable walking terrain compared to the formal path makes it an unpopular area to walk. **Environmental baseline** The jetty and path leading to/from it towards Hook with Warsash LNR is designated SPA, Ramsar and SAC. The Hamble Estuary as a whole is an important site for non-breeding birds using the intertidal mudflat to feed. The surrounding boat jetties are used as roosting sites. Low tide WeBS counts show that use of the area by feeding birds is concentrated in larger expanses of mudflat in the middle reaches of the estuary. SWBGS does not consider the area around the jetty to be of high use for feeding brent goose and waders. Immediately adjacent to the ferry jetty there is approximately 0.9 hectares of intertidal mudflat habitat. The underpinning SSSI unit is in 'unfavourable' condition due to water quality.	saltmarsh and mudflats seawards of the proposed route as these are unsuitable for access. The access proposals will tend to reinforce the current pattern of access by encouraging people to stick to the waymarked route and deter walking on adjacent intertidal habitat. Non breeding birds feed on the mudflats exposed at low tide here, however the path along the top of the sea wall provides suitable separation between user and birds and makes it difficult to access the coastal margin. At high tide, wintering birds may use the large area of saltmarsh and mudflat immediately landward of the trail. This area is not part of the coastal margin and will not be promoted by the proposal. SWBGS also does not consider this area a high use site for brent geese and waders. The jetties may be used as a roost site when boat activity is low. However, there is existing access on the jetty where the ferry docks and suitable separation between path and other jetties reduces the interaction between path user and birds. A year round Section 25A restriction on the seaward intertidal mudflat will exclude access. **Permanent loss of habitat as a result of establishment works** One new signpost will be installed on the existing, formal path opposite the end of the ferry jetty (Appendix 2 – Map D). Although within SPA and Ramsar designations, this exact location is on a formal gravel path and does not support any qualifying feature.
Hook with	**Access baseline**	**Disturbance to non-breeding birds**

Warsash LNR	Access along the Solent Way that passes through the LNR is a popular route, providing a formal path between the eastern Hamble ferry jetty and Hook Spit to the south (gravel path). The closest car park is Passage Lane car park situated approximately 200m from the very north boundary of the LNR, however, the walk from it to the more environmentally sensitive areas (Hook Spit) nears 900m-1km. A handful of cars are able to park along Hook Park Road near the Warsash Maritime Academy. From here visitors can take a 5-10minute walk down to Hook Spit. There is current access on Hook Spit, with a well-worn track on the eastern side leading to a line of fence posts. During the summer, a temporary fence is erected here to guide visitors away from an area used by breeding turnstone and irregular pairs of breeding ringed plover. A formal sign informing visitors that access is forbidden accompanies the fence during the summer. Site visits suggest this measure is effective as the track does not continue beyond the footpath (site visit in late winter). To the south of Hook Spit along the vegetated shingle beach, current access is along the back on an informal path along large earth bund. This is the preferred route over loose shingle and the current level of trampling is low. Access to the LNR landwards of the route is very difficult. Large drainage ditches and fencing prevents access to the coastal lagoons and reed beds found here. Access is on coastal grazing marsh is easier to the southern reaches of the LNR.	The saltmarsh and mudflat along this section of the coast is unsuitable for access and is not currently used for recreation. No new coastal access rights will be created. On site information will be installed as part of the access proposal to highlight the danger of walking in intertidal areas and raise awareness of its importance for wintering birds. Signposts will encourage users to remain on the path. Few pairs of breeding ringed plover have been spotted attempting to nest at Hook Spit. The proposal will complement the existing access management measures through the installation of an interpretation panel at the base of the spit and new signposts will encourage users to remain on the path (Appendix 2 – Map E) **Trampling of habitat and vegetation** The vegetated shingle at Hook Spit and along the beach to the south of Hook Spit are sensitive to trampling: At Hook Spit, a fence is put up by volunteers during the breeding season to discourage people from walking in more sensitive areas. Aerial imagery shows that this measure has benefited the vegetated shingle on Hook Spit. A new interpretation panel will be installed at this location as part of the access proposals with messages to reinforce the current management. Along the shingle beach to the south, signposting will encourage users to remain on the path which is currently the preferred route. The saltmarsh and mudflat along this section of the coast is unsuitable for access and is not currently used for recreation. No new coastal access rights will be created. On site information will be installed as part of

	Environmental baseline The LNR is designated SPA, Ramsar and SAC land. This LNR has a variety of different habitats. Hook Spit and the shingle beach to the south has vegetated shingle and the underpinning SSSI condition is 'favourable'. The spit attracts few irregular pairs of breeding ringed plover. The spit may also be used as a high tide roost site as it is one of few areas of exposed shingle within the intertidal. The intertidal mudflats at the LNR are very important for wintering birds with approximately 200 counts of brent geese and 50 counts of ringed plover made here in 2000/1. No counts of black-tailed godwit or teal were made. Of the other species making up the assemblage, the entire LNR is very popular with dunlin with 500+ low tide counts made. A handful of counts were also made for wigeon, redshank and grey plover. Landwards of the proposed route there are coastal grazing marsh, lagoons and reed beds.	the access proposal to highlight the danger of walking in intertidal areas **Permanent loss of habitat** The installation of one signpost and one interpretation panel within the SPA and Ramsar site will lead to the permanent loss of less than 0.5m^2 of designated land. The posts will be installed adjacent to the existing path and away from more sensitive areas. Installation method will be checked at establishment stage and further assessment under the Habitats Regulations made, as necessary, prior to works being carried out. Assessment of possible impacts on the European site will need to be checked and confirmed as part of the SSSI assenting process prior to works being carried out.
Solent Breezes Holiday Village	**Access baseline** Access to the shorefront is popular for those using the holiday village as well as local residents in the nearby villages around Hook. Comparatively, the level of use is lower than that further up the coast around Hook with Warsash LNR and between Woolston and Hamble. The main points of access onto the shorefront are from Workman's lane, the holiday village itself and via Chilling's Barn. Access is also possible further south along the coast at Meon where visitors to the popular Titchfield Haven NNR may	**Disturbance to non-breeding water birds** No new coastal access will be made over the SWBGS sites nor will they be part of the coastal margin. New signposting along the proposed route will encourage users to remain on the path rather than use the cut through at Chilling's Barn. A year round Section 25A exclusion on the intertidal area will reduce the risk of disturbance of wintering birds feeding here. **<u>Trampling of intertidal habitat</u>** The intertidal mudflats between the holiday village and Titchfield Haven

	also walk further north to access quieter areas of seafront compared to the popular beaches at Hill Head. There are two large SWBGS sites to the west of Solent Breezes Holiday Village, landwards of the trail. Immediately adjacent to the east of the holiday village is a 'Core' site; a large field that is ploughed on rotation. There is an informal cut-through to the shore via Chilling's Barn in the north-west corner of the field. The Solent Way (compacted bare soil) continues along the front of this field before reaching the second 'Primary Support' site. This is intensely managed arable land with no existing access to the public from the Solent Way. This area in particular is very popular for professional dog walkers. **Environmental baseline** All SWBGS high use sites are adjacent to SAC, SPA and Ramsar designated land. The intertidal area at this location is, like that at Hook with Warsash LNR, very important for wintering birds, notably brent geese and ringed plover. Between the shorefront at the holiday village and Titchfield Haven NNR there is approximately 72 hectares of intertidal mud. WeBS low tide counts for 2000/1 brent goose and dunlin are comparatively low, however, considering the large numbers that are counted along Hook with Warsash LNR it is likely that these birds also use the intertidal here. Approximately 40 counts of ringed plover were made in the same year on the intertidal. No counts of teal or black-tailed godwit were made. A handful of counts for each of wigeon, redshank and grey plover were made in the	NNR are considered unsuitable for public access and will be covered by a year round Section 25a exclusion. No new access onto the mudflats is being proposed.

	intertidal here up to Titchfield Haven NNR.	
Titchfield Haven NNR	**Access baseline** The majority of visitors to this section of the path, passing Titchfield Haven NNR, are local from the adjacent towns of Hill Head and Stubbington or from further afield by car, with parking available roadside of the NNR and at Salterns car park and Monks Hill ca park further east. This section of the stretch is very popular, especially in the summer, where a predicted 1,265,000 to 3,096,000 visitors arrive to use Hill Head Beach and visit the NNR. Access to the beach and intertidal mudflats to the west of the reserve is less popular as it is further from carparks and the mudflats are less inviting than the intertidal sand and shingle at Hill Head Beach to walk upon at low tide. **Environmental baseline** Titchfield Haven NNR and the surrounding intertidal area is designated SPA and Ramsar. There is approximately 12 hectares of intertidal mudflat seawards of the path that support feeding breeding and non-breeding birds. Rainbow Bar is a known high tide roost and feeding site within the intertidal area. No low tide counts are held by WeBS for wintering birds, however, considering the large numbers of brent geese and dunlin counted along Hook with Warsash LNR it is likely that they also congregate (in lower numbers) on the intertidal mudflat at this location. Other wintering birds assessed in this section were not counted in	**Disturbance to breeding terns and gulls** No new coastal access will be made over the NNR. The NNR is landwards of the proposed path and not within coastal margin. The promotion of the Coast Path will not affect access to the NNR nor the existing access management measures in place where breeding birds nest. **Disturbance to non-breeding birds** No new coastal access will be made either landwards on the NNR where wintering birds may feed or roost, nor over the intertidal where they are known to feed. The area used by breeding ringed plover is landwards of the trail and will not be affected by the access proposals. A year round Section 25A restriction across the mudflats here will reduce the risk of disturbance to feeding birds. This exclusion will cover Rainbow Bar. **Trampling of intertidal habitat** New signage along the route leading up to the reserve will encourage users to remain on the path. A year round Section 25A restriction across the mudflats will remove the risk of significant trampling.

	significant numbers (teal and black-tailed godwit had no counts) SWBGS does not classify this area as a high use site.	

Non-breeding water bird assemblage

The non-breeding water bird assemblage as a whole contains all native species that use Southampton Water SPA. The integrity of the assemblage is generally recognised as a product of both *abundance* and *diversity.* Within this assessment, the main component species have been the focus of assessment as it is generally recognised that some species contribute more towards the integrity of the overall assemblage than others and any ecological impact assessment should therefore focus on these. The main component species are those non-breeding water birds already assessed; dark-bellied brent goose, teal, ringed plover and black-tailed godwit. In addition to this, however, assessment of other species have been made within the Nature Conservation Assessment (NCA), which accompanies this HRA, as part of the SSSI assessments.

Table 8 above has shown that the main component species within the non-breeding water bird assemblage individually will not be significantly affected by the access proposals between Calshot and Gosport. There is, however, the possibility that any minor effects could have a cumulative effect with any similar minor effects for other species. Other species assessed in the NCA and mentioned within table 8 above (grey plover, dunlin, redshank, wigeon and great crested grebe) have been identified to use the same areas as those of the main component species. The potential for increased disturbance on the assemblage as a whole, taking into account the risk to other component species, is considered insignificant because of the reasons listed above for the individually species. The target to reduce disturbance to all main component species has been addressed in the design of the proposal. New signposting will encourage all users (both existing and new) to remain on the path. No new coastal access is being promoted and a year round exclusion of access (Section 25A) on intertidal mudflat and saltmarsh deemed unsuitable for access will reduce the risk of disturbance.

D3.3 Assessment of potentially adverse effects (taking account of any additional mitigation measures incorporated into the design of the access proposal) alone

Table 9. Assessment of adverse effect on site integrity alone

Risk to conservation objectives	Relevant design features of the access proposal	Can 'no adverse effect' on site integrity be ascertained? (Yes/No) Give reasons.	Residual effects?
Repeated disturbance to foraging or resting non-breeding water birds, following changes in recreational activities as a result of the access proposal, leads to reduced fitness and reduction in population and/or contraction in the distribution of Qualifying Features within the site.	Alignment along existing coastal access routes including permissive paths and public rights of way. New signposting and interpretation panels will direct visitors along the path and inform them of the site's sensitivities. An Optional Alternative Route (winter 'dry' route) at Calshot Marshes LNR will divert visitors away from water birds using the marshes. Section 25A restrictions on intertidal saltmarsh and mudflats not suitable for public access will reduce the interaction between Coast Path users and qualifying features.	**Yes.** The SPA water birds move around the mudflats at Southampton Water to utilise feeding opportunities. There is a lot of existing coastal access in the form of formal, promoted routes such as the Solent Way in addition to public rights of way and worn down tracks. Most visitors use these existing routes but there is evidence of activity on the intertidal where these birds feed making disturbance more likely. The promotion of the path will encourage users (both existing and new) to keep on the England Coast Path through effective signposting and no new coastal access is being proposed along the stretch. Section 25A restrictions on unsuitable areas of intertidal will exclude access on coastal margin along the stretch, further reducing the risk of disturbance on the birds that use the mudflat and saltmarsh. The proposed route alignment will also complement existing access management measures at both the local and regional scale.	**Yes**
Disturbance to breeding ringed plover, following changes in recreational activities as a result of the access proposal, leads to reduction in the abundance and distribution of the Qualifying	Alignment along existing coastal access routes along the base of Hook Spit and the front of Titchfield Haven NNR. Complementing existing access management proposals at Hook Spit by installing a new interpretation panel and new signposting. The alignment of the coast path along the main road	**No.** Ringed plover are known to breed in low numbers at Hook Spit (Hook with Warsash LNR) and Titchfield Haven NNR. The proposal does not propose new coastal access at the Spit and complements existing access management measures by installing an interpretation panel at the base of the Spit. Improved way marking will encourage users (both existing and new) to remain on the path. As concluded above, the	**No**

Features within the site and a resultant reduction in the non-breeding population	seaward of Titchfield Haven NNR will not affect existing access levels and patterns within the reserve.	coast path will not affect access levels or patterns at Titchfield Haven NNR.	
Disturbance to breeding terns and gulls, following changes in recreational activities as a result of the access proposal, leads to reduction in the abundance and distribution of the Qualifying Features within the site.	Alignment along existing coastal access routes. New signposting along the road at Titchfield Haven NNR will encourage users to remain on the path.	**Yes.** Key sites for breeding terns and gulls have been identified as the Hamble Estuary as a whole however Titchfield Haven NNR is the only site where nesting is known to occur. Where there is the possibility for interaction between coast path users and breeding terns and gulls along the estuary, there are no suitable nesting habitat. The promotion of the coast path will not affect the access levels or patterns within Titchfield Haven NNR where terns and gulls are known to nest.	**No**
The installation of access management infrastructure may lead to the reduction in the extent and distribution of qualifying natural habitats and habitats of the qualifying species	Our proposals will see the installation of 7 new signposts and 1 interpretation panel within European designated land. The works will be installed adjacent to the existing path and away from more sensitive areas. Installation method will be checked at establishment stage and further assessment under the Habitats Regulations made, as necessary, prior to works being carried out.	**Yes.** The total loss of designated land is approximately $1m^2$ and is considered not a risk to the sites' conservation objectives. The scale of loss (less than 0.25 m^2) can be regarded as 'trivial' in the context of the conservation objectives for the feature, and the nature of the works (two way marking posts) will not adversely affect the continuity and functioning of the habitat types or their transitions. As the signs are intended to guide people along the existing coastal path they will also help to minimise any potential impact on the wider habitat. The location of posts and installation method will be finalised at the establishment stage. Assessment of possible impacts on the European site will need to be	**No**

		checked and confirmed as part of the SSSI assenting process prior to works being carried out.	
The trampling of designated features following changes in recreational activities as a result of the access proposal leads to the reduction in the extent and distribution of qualifying natural habitats and habitats of the qualifying species	The alignment of the Coast Path is along existing coastal access routes including permissive paths and public rights of way. All intertidal areas considered unsuitable for public access will be covered by Section 25A restriction excluding access to path users. No new coastal access rights will be made over sensitive habitat as part of the proposal. New signposts and interpretation panel will direct users along the existing paths and inform them of their sensitivities.	**Yes.** The proposed route alignment will complement existing access management measures at both the local and regional scale. The promotion of the path will not change the current access rates, patterns or use significantly and new signposting will encourage users to remain on the path. Section 25A restrictions on unsuitable areas of intertidal will be excluded from coastal margin having the added benefit of managing trampling on saltmarsh and mudflats. Access management measures are in place at Hook Spit for breeding birds but also effectively protects supralittoral sediment there. Where sensitive features are within protected LNRs, the Coast Path will not affect the existing access levels or patterns and does not create new coastal access.	**No**

Conclusion:

The following risks to conservation objectives identified in D1 are effectively addressed by the proposals and no adverse effect on site integrity (taking into account any incorporated mitigation measures) can be concluded:

- Disturbance to breeding birds, following changes in recreational activities as a result of the access proposal, leads to reduction in the abundance and distribution of the Qualifying Features within the site.
- Disturbance to breeding ringed plover, following changes in recreational activities as a result of the access proposal, leads to reduction in the abundance and distribution of the Qualifying Feature and the resultant reduction in the non-breeding population.
- Permanent loss of qualifying and/or supporting habitat, as a result of the installations of establishment works, leads to changes in distribution and extent of the feature within the site.
- Disturbance to sensitive features as result of repeated trampling, following changes in recreational activities as a result of the access proposal, leads to changes in distribution and extent of the feature within the site.

The following risks to achieving the conservation objectives identified in D1 are effectively addressed by the proposals and no adverse effect on site integrity (taking into account any incorporated mitigation measures) can be concluded, although there is some residual risk of insignificant impacts which will be further considered in combination with other plans or projects:

- Disturbance to non-breeding water birds, following changes in recreational activities as a result of the access proposals, leads to reduced fitness and reduction in population and/or contraction in the distribution of Qualifying Features within the site

D4 Assessment of potentially adverse effects considering the project 'in-combination' with other plans and projects

The need for further assessment of the risk of in-combination effects is considered here.

Natural England considers that it is the appreciable effects (from a proposed plan or project) that are not themselves considered to be adverse alone which must be further assessed to determine whether they could have a combined effect significant enough to result in an adverse effect on site integrity.

Step 1 – Are there any appreciable risks from the access proposals that have been identified in D3.3 as not themselves considered to be adverse alone?

Natural England considers that in this case the potential for adverse effects from the plan or project has not been wholly avoided by the incorporated or additional mitigation measures outlined in section D3. It is therefore considered that there are residual and appreciable effects likely to arise from this project which have the potential to act in-combination with those from other proposed plans or projects. These are:

- Disturbance to non-breeding water birds, following changes in recreational activities as a result of the access proposals, leads to reduced fitness and reduction in population and/or contraction in the distribution of Qualifying Features within the site

Step 2 – Have any combinable risks been identified for other live plans or projects?

Table 10. Review of other live plans and projects

Competent Authority	Plan or project	Have any insignificant and combinable effects been identified?
New Forest District Council	New Forest Local Plan 2016-2036	**No.** The Appropriate assessment associated with the plan considers the risk of recreational pressure to qualifying features of all European sites. The plan concludes that reliance can be placed on mitigation. A Recreation Management Strategy has been developed to be implemented over the planning period that incorporates SANG (suitable alternative natural greenspace) and SAMM (strategic access management and monitoring) designed to avoid effects of increased visitors and urbanisation which arise from additional housing near a European site. As a result the Appropriate Assessment concludes no adverse effect alone or in combination.
	Fawley Waterside Development	**No.** The Appropriate Assessment associated with this project has concluded that there will be negligible residual risks from this development. Due to the proximity of the development site to European designated sites the shadow HRA (used because the local planning authority has yet to develop their own HRA) has identified risks to the European sites during demolition, construction and operation. Mitigation measures for the demolition and construction phase of the development are set out in a Demolition Environmental Management Plan and Construction Environmental Management Plan. Mitigation measures for the operational phase of the development includes the provision of SANG, a new Nature Park that incorporates a Coastal Nature

		Reserve, a ranger team to operate across the Nature Park and financial contributions to the Solent Recreation Mitigation Partnership (SAMM).
New Forest National Park Authority	New Forest National Park Local Plan 2016-20136	**No.** The Appropriate assessment associated with the plan considers the risk of recreational pressure to qualifying features of all European sites. The plan concludes that reliance can be placed on mitigation. A Recreation Management Strategy has been developed to be implemented over the planning period that incorporates SANG (suitable alternative natural greenspace) and SAMM (strategic access management and monitoring) designed to avoid effects of increased visitors and urbanisation which arise from additional housing near a European site. As a result the Appropriate Assessment concludes no adverse effect alone or in combination.
Southampton City Council	Centenary Quay Masterplan 08/00389/OUT Former Vosper Thornycroft Site	**No.** The Appropriate assessment associated with the project has identified the possible risks to SPA birds both onsite and in the wider Weston Shore area. On site the assessment concluded that there will be no adverse effects as the site is not used by birds, no access to the foreshore will be made available and wardens and signage will mitigate any further risks. Resources will be secured through the Section 106 Agreement to address disturbance to the wider Weston Shore area (SAMM). A description of the development follows. Redevelopment of the site to provide a mixed use development comprising: 1,620 dwellings, retail, restaurants and cafes, offices, yacht manufacture business, industrial, storage and distribution uses, 100 bedroom hotel ,28 live/work units, community uses, two energy centres with associated, new public spaces, river edge and quay, new means of access and associated highway/ environmental improvements.
Eastleigh District Council	Eastleigh Local Plan 2016-2036	**No.** The Appropriate assessment associated with the plan considers the risk of recreational pressure to qualifying features of all European sites. The plan concludes that reliance can be placed on mitigation. A Recreation Management Strategy has been developed to be implemented over the planning period that incorporates SANG (suitable alternative

		natural greenspace) and SAMM (strategic access management and monitoring) designed to avoid effects of increased visitors and urbanisation which arise from additional housing near a European site. As a result the Appropriate Assessment concludes no adverse effect alone or in combination.
Fareham District Council	Fareham Local Plan 2036	**No.** At the time of writing, the emerging local plan has yet to completely assess the impact of increased development on European sites. The most recent assessment is the Likely Significant Effect screening assessment [Ref 8]. It is considered in the assessment that there will be a need to further assess recreational disturbance at the Appropriate Assessment stage. The screening assessment states further that Local Plan proposed policy NE3 will require new development to contribute to the Solent Recreation Management Plan. In light of this, we do not consider there are insignificant or combinable risks from this emerging local plan.
Environment Agency	North Solent Shoreline Management Plan (NSSMP)	**No.** The NSSMP's aim is to balance the management of coastal flooding and erosions risks, with natural processes, and the consequences of climate change. As a result of the plan, adverse effects could not be avoided at the Solent and Southampton Water SPA and Ramsar site and Solent Maritime SAC and compensatory habitat creation was necessary to comply with the Habitats Regulations. In light of this, no insignificant or combinable effects from the plan have been identified.
Natural England	Implementation of coastal access from Highcliffe to Calshot	**Yes.** The Access and Sensitive Features Appraisal for this stretch has identified the following insignificant and combinable risks: • Possible small increase in disturbance to breeding water birds.
	Implementation of coastal access from Gosport to Portsmouth	**No.** Our proposals for coastal access between Gosport and Portsmouth may also affect designated sites on this stretch. We have previously made an assessment of our proposals for this stretch and no insignificant and combinable risks were identified in that assessment.

In light of this review, we have identified insignificant and combinable effects are likely to arise from the following projects that have the potential to act in-combination with the access proposals:

- Implementation of coastal access from Highcliffe to Calshot

Step 3 – Would the combined effect of risks identified at Step 1 and Step 2 be likely to have an adverse effect upon site integrity?

In light of the conclusions of Steps 1 & 2, we have made an assessment of the risk of in combination effects. The results of this risk assessment, taking account of each qualifying feature of each site and in view of each site's Conservation Objectives, are as follows:

Table 11. Assessment of combined risk

Residual risk	In-combination effect	Assessment of risk to site conservation objectives	Potential adverse effect?
A higher frequency of interactions between people using the coast path and non-breeding water birds foraging close to the shore.	Increased use of the Coast Path is expected as a result of improvements to the quality of the path and its promotion as part of the England Coast Path. Other plans or projects that would increase local demand for recreational routes could similarly increase use of coastal paths and lead to more frequent interruptions to foraging behaviour.	The proposals for coastal access between Highcliffe and Calshot, and Calshot to Gosport has been designed to complement the Bird Aware Solent initiative. Both projects align their proposals along existing, well-used coastal access routes in order to limit changes to access levels and patterns around sensitive sites. Both projects also propose measures to complement the existing Bird Aware Solent initiative and other local level management techniques. The main risk to the conservation objectives from recreation is where people go on site and how they behave, rather than fluctuations in the numbers of people using the coastal path. We consider that both projects will make a positive contribution to managing recreational use of the site, in line with the management plan and conservation objectives.	No

D5. Conclusions on Site Integrity

Because the plan/project is not wholly directly connected with or necessary to the management of the European site and is likely to have a significant effect on that site (either alone or in combination with other plans or projects), Natural England carried out an Appropriate Assessment as required under Regulation 63 of the Habitats Regulations to ascertain whether or not it is possible to conclude that there would be no adverse effect on the integrity of a European Site(s).

Natural England has concluded that:

It can be ascertained, in view of site conservation objectives, that the access proposal (taking into account any incorporated avoidance and mitigation measures) will not have an adverse effect on the integrity of Solent and Southampton Water SPA and Ramsar site, Solent Maritime SAC, Solent and Dorset Coast pSPA or New Forest SAC SPA and Ramsar site either alone or in combination with other plans and projects.

PART E: Permission decision with respect to European Sites

Natural England has a statutory duty under section 296 of the Marine and Coastal Access Act 2009 to improve access to the English coast. To fulfil this duty, Natural England is required to make proposals to the Secretary of State under section 51 of the National Parks and Access to the Countryside Act 1949. In making proposals, Natural England, as the relevant competent authority, is required to carry out a HRA under Regulation 63 of the Habitats Regulations.

We, Natural England, are satisfied that our proposals to improve access to the English coast between Calshot and Gosport are fully compatible with the relevant European site conservation objectives.

It is open to the Secretary of State to consider these proposals and make a decision about whether to approve them, with or without modifications. If the Secretary of State is minded to modify our proposals, further assessment under the Habitats Regulations may be needed before approval is given.

Certification

Assessment prepared and completed by:	Pierre Fleet 	*On behalf of the Coastal Access Programme Team*
Date	02/07/2019	
HRA approved:	Andy Smith 	*Senior officer with responsibility for protected sites*
Date	02/07/2019	

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Appendix 1: Solent Waders and Brent Goose Strategy Classification List and Definitions

The following list defines the terms used to classify fields across the Solent under the in-preparation 2018 SWBGS (HIOWWT, 2018). As the strategy is still being prepared the below terms and definitions are subject to change.

Core Sites: These are considered essential to the continued function of the Solent wader and brent goose ecological network and have the strongest functionally-linkage to the designated Solent SPAs in terms of their frequency and continuity of use by SPA features.

Primary Support Sites: Contain land that, when in suitable management, make an important contribution to the function of the Solent wader and brent goose ecological network.

Secondary Support Sites: Offer a supporting function to the Core and Primary Support ecological network, but are generally used less frequently by significant numbers of SPA geese and waders. These sites become important when wader or brent goose populations are higher or when the habitat is in suitable management.

Low Use Sites: sites have the potential to be used by waders or brent geese. These sites have the potential to support the existing network and provide alternative options and resilience for the future network.

Candidate Sites: Sites that have records of high numbers of birds (max count equal to or greater than 100) and/or a total score equal to or greater than 3 but have less than 3 records in total

SPA Sites: sites within the SPA area that have bird records and form part of the ecological network.

Appendix 2: HRA Maps

Maps referenced within the body of the assessment can be found on the next pages.

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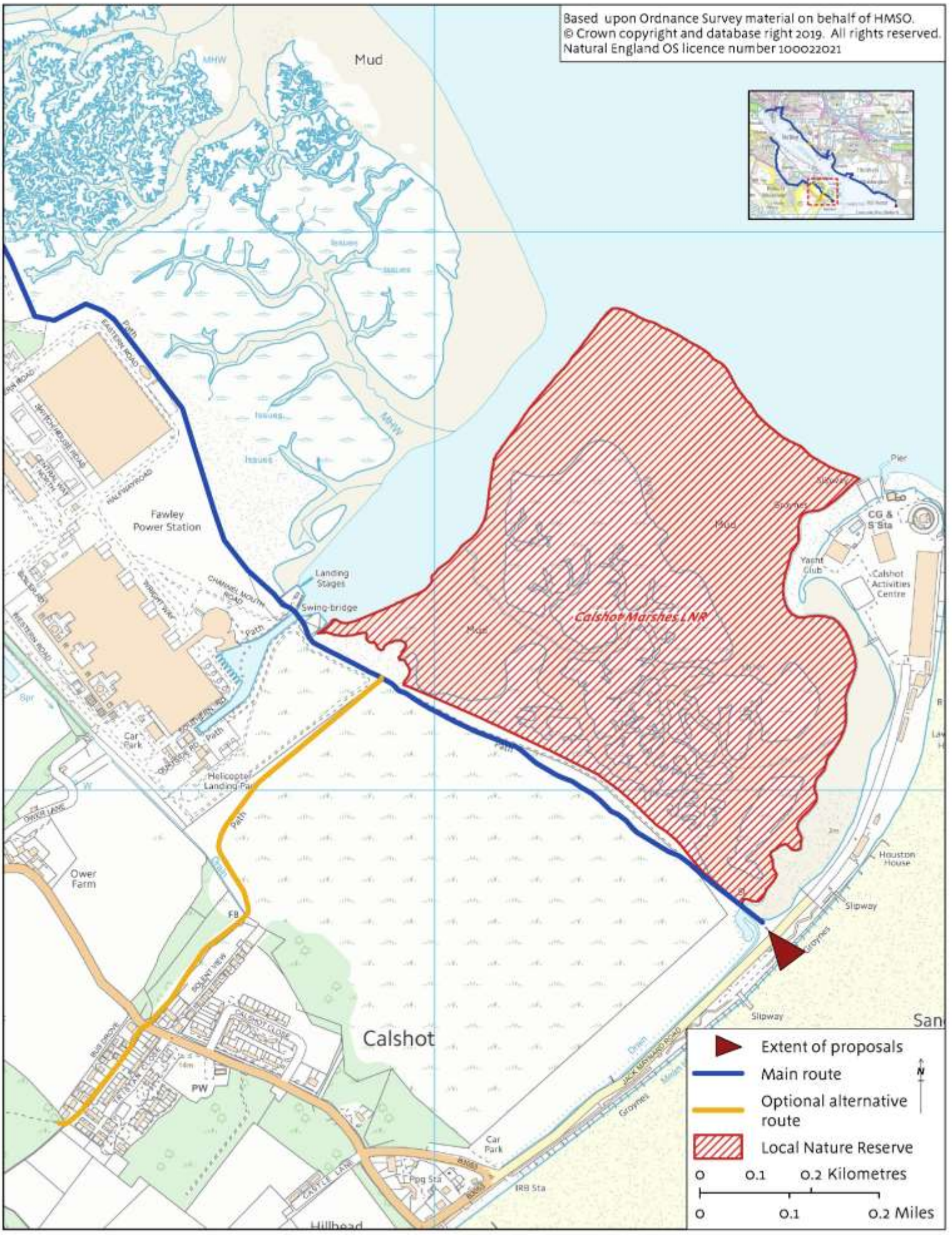
Coastal Access - Gosport to Portsmouth - Habitats Regulations Assessment

MAP B

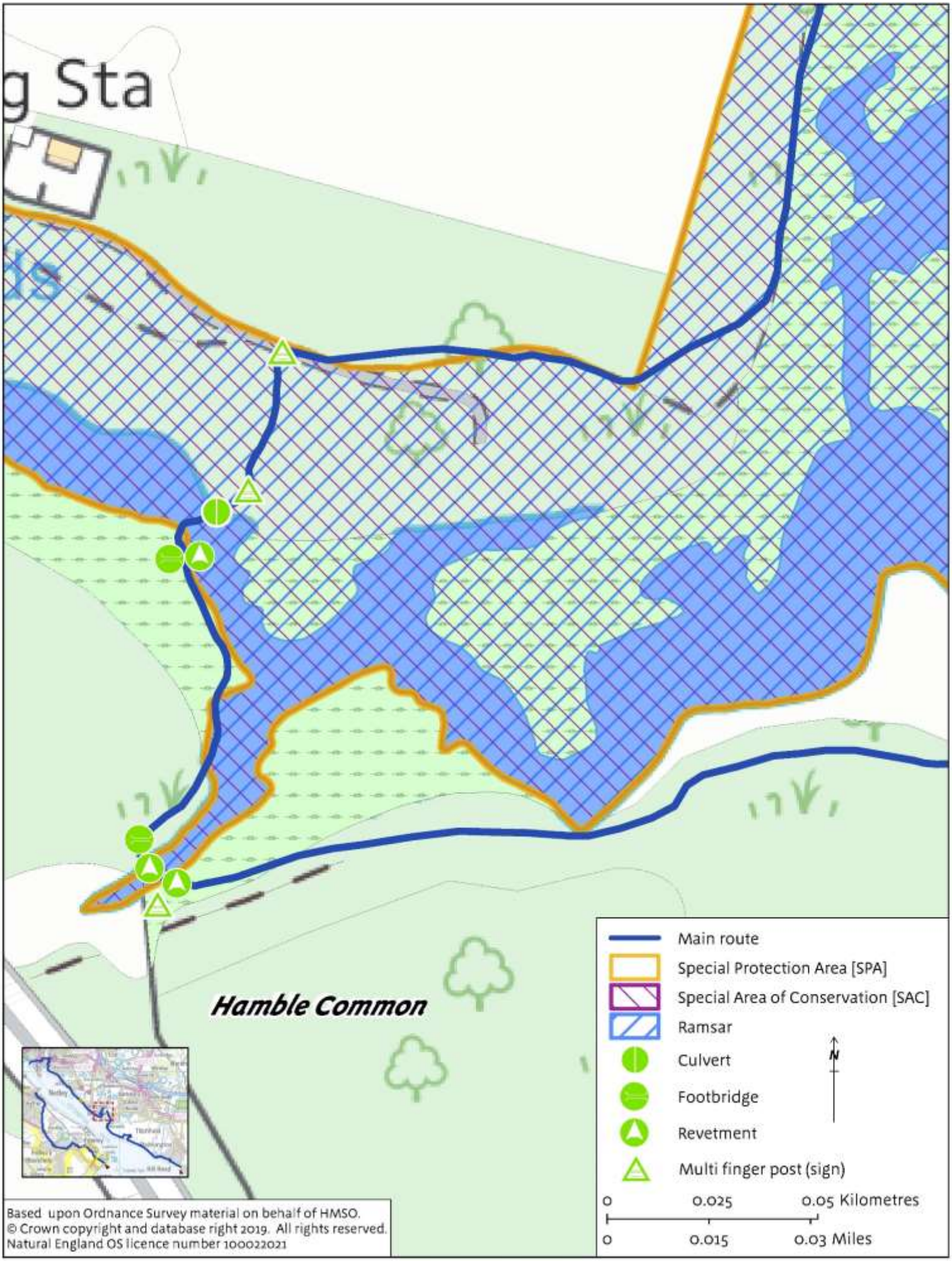
Optional Alternative Route at Calshot Marshes LNR



Coastal Access - Calshot to Gosport - Habitats Regulations Assessment

MAP C

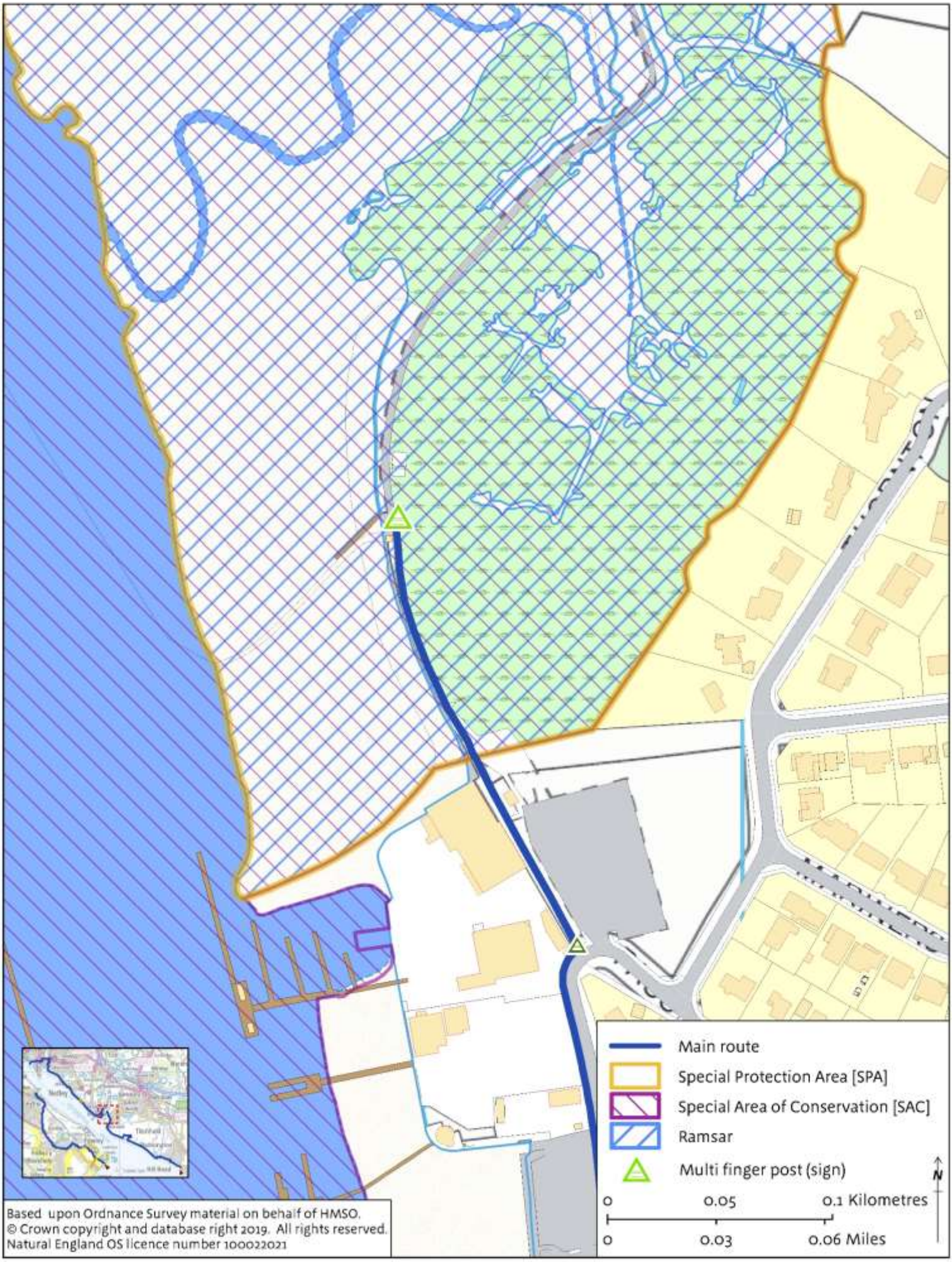
Infrastructure points at Hamble Common



Coastal Access - Calshot to Gosport - Habitats Regulations Assessment

MAP D

Hamble - Warsash: signpost at the eastern ferry jetty



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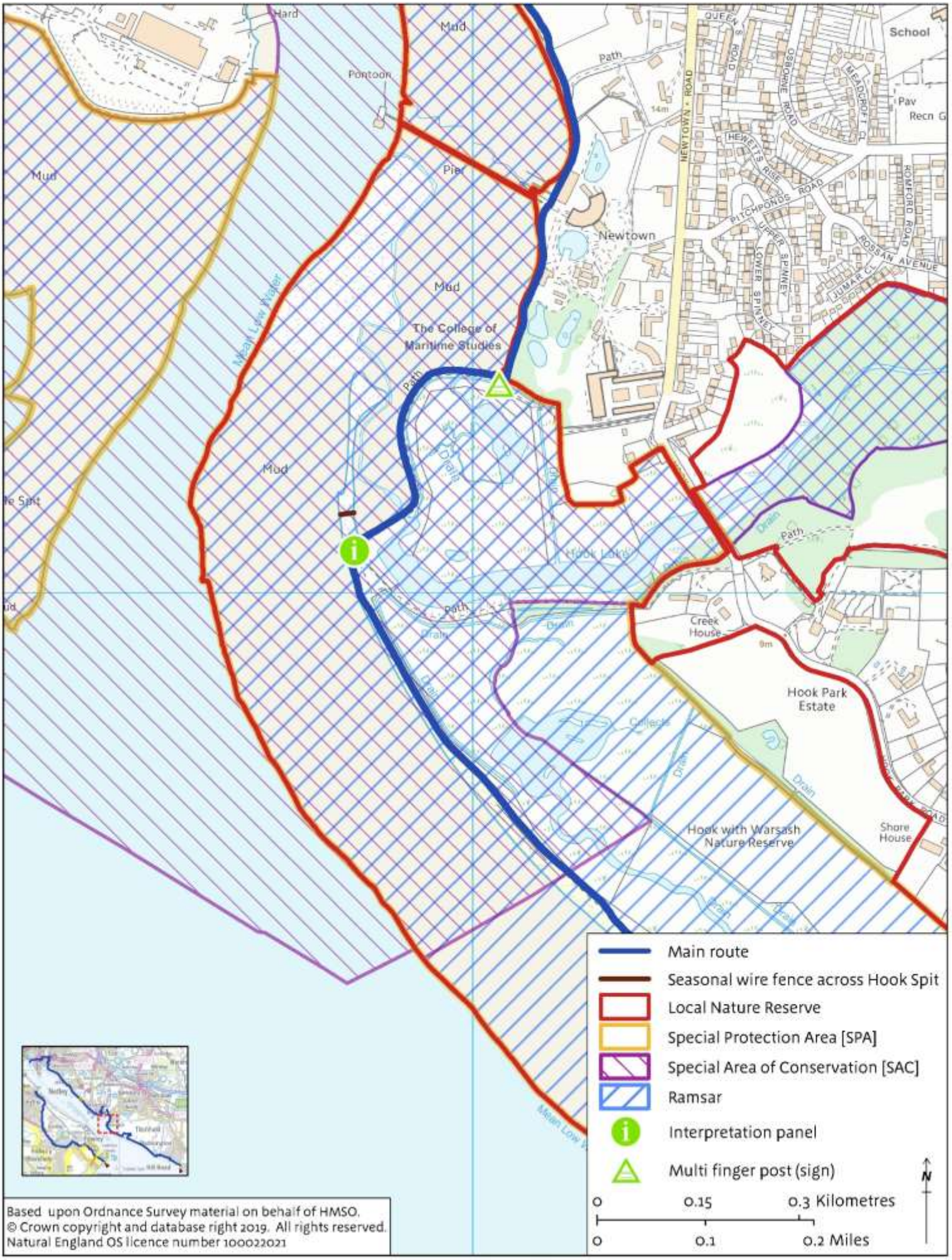
Coastal Access - Calshot to Gosport - Habitats Regulations Assessment

MAP E

Hook with Warsash LNR



Coastal Access - Calshot to Gosport - Habitats Regulations Assessment

MAP F

Hook with Warsash LNR

Coastal Access - Calshot to Gosport - Habitats Regulations Assessment

MAP G

Westfield Common: signpost on shingle beach