



Access and Sensitive Features Appraisal

Coastal Access Programme

This document records the conclusions of Natural England’s appraisal of any potential for environmental impacts from our proposals to establish the England Coast Path in the light of the requirements of the legislation affecting Natura 2000 sites, SSSIs, NNRs, protected species and Marine Conservation Zones.

Jaywick to Harwich, Essex

August 2017

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This appraisal should be read alongside Natural England’s related Coastal Access Report in which the access proposal is fully described and explained

<https://www.gov.uk/government/collections/england-coast-path-jaywick-to-harwich>

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1. Our approach

Natural England's approach to protection of sensitive features under the Coastal Access Programme is set out in section 4.9 Coastal Access: Natural England's Approved Scheme 2013. We call our internal processes to support this approach 'Access and Sensitive Features Appraisal' or ASFA.

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 proposals are 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 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.

2. Scope

In this part of the document we define the geographic extent for the appraisal and the features that are included. Note that this appraisal is concerned with ecological, geological and geomorphological features; any other possible sensitivities, including landscape and historic features, are discussed in our coastal access report.

2.1 Geographic extent

This appraisal presents Natural England's assessment of the proposals to establish the England Coast Path between Jaywick and Harwich in Essex (JWH stretch, see map A of The Overview and maps i to vi below).

The stretch includes the towns of Clacton, Holland on Sea, Frinton, Walton on the Naze and the eastern shore of Harwich. As well as more built up areas with associated seafront promenades, the stretch includes The Naze peninsular and Hamford Water National Nature Reserve (NNR). The Naze has a stretch of cliffs of geological importance (see section 3.12). Hamford Water NNR is an extensive tidal inlet which has marsh grasslands, creeks, mud and sand flats, salt marshes, islands and beaches. It is described by [Natural England](#) as "of international importance for breeding [little terns](#) and wintering [dark-bellied brent geese](#), wildfowl and waders, and of national importance for many other bird species." Rare plants include [hog's fennel](#) and [slender hare's-ear](#). The main invertebrates are worms and thin-shelled molluscs. Hamford Water is also designated as a RAMSAR site, Special Protection Area (SPA), Site of Special Scientific Information (SSSI) and Special Area of Conservation (SAC).

The stretch has been divided into 6 subsections for the purposes of this assessment, which reflect the chapters of the Report to the Secretary of State.

These are:

1. **Jaywick to Holland-on-Sea**
2. **Holland-on-Sea to Walton-on-the-Naze**
3. **Walton-on-the-Naze to Walton Mere**
4. **Walton Mere to Beaumont Quay**
5. **Beaumont Quay to Dovercourt**
6. **Dovercourt to Harwich.**

Jaywick is a small settlement originally built as holiday homes which have over time become permanent residences. The seafront is a popular destination particularly in summer although there are few visitor attractions. Clacton is a much bigger town, and a very popular seaside resort. The seafront is very busy, particularly in summer and Clacton Pier is the centrepiece to the town's attractions. Towards Holland-on-Sea, the beaches and seafront are less busy, though walking and cycling are popular activities here.

The trail will be aligned along existing public rights of way along the whole of this subsection. No new access is being created. The majority of the land on which the trail will be aligned is owned by Tendring District Council.

2.1.2 Holland on Sea to Walton on the Naze

The map below shows the extent of this subsection between the red arrows.

Map ii: Holland-on-Sea to Walton-on-the-Naze



Key:

England Coast Path, existing PRoW - Pink

England Coast Path, trail alignment on other existing publically walked route – Red

Outer Thames Estuary SPA – Beige hatching

Holland Haven Marshes SSSI – Beige shading

Hamford Water NNR and RAMSAR – Blue hashing and blue line

Hamford Water SSSI and SPA – Beige hashing and shading.

Much of this subsection of the trail is along the seawall or sea promenade beside the foreshore, generally sandy beaches of varying widths. It is largely an urban, paved subsection except for a small section between Holland-on-Sea and Frinton-on-Sea.

This subsection begins at the Holland-on-Sea Cliff SSSI and the proposed trail will pass along its landward edge. Holland-on-Sea is an urban district contiguous with the Clacton-on-Sea conurbation. There are fewer visitor attractions than at Clacton. However the seafront is a popular destination, particularly in summer. The proposed trail follows the existing public footpath and cycleway north of the town, passing through the edge of Holland Haven Marshes SSSI. The route is then aligned along the top of the concrete seawall as far as Frinton-on-Sea. From Frinton, the proposed trail follows the existing public footpath along the seafront promenade into Walton-on-the Naze.

Walton-on-the-Naze is a popular visitor destination particularly in summer. There are a number of visitor attractions such as cafes and pubs and Walton Pier is a popular destination. The proposed trail will continue past the pier along the seafront footway to the end of this subsection. .

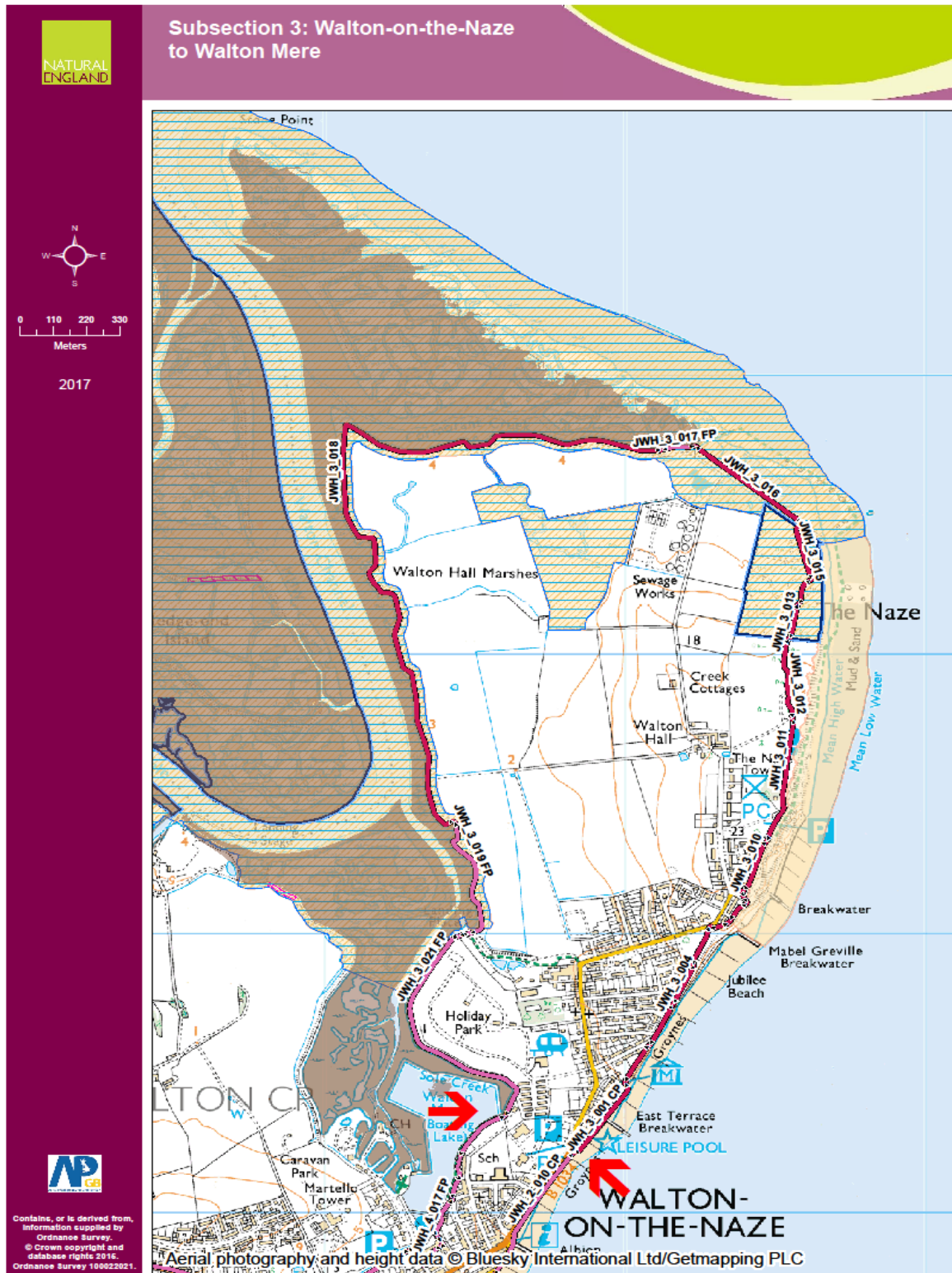
The trail will be aligned along existing public rights of way for most of this subsection. Along the top of the concrete seawall between Holland-on-Sea and Frinton-on-Sea, access rights to walk will be secured by our proposals. This section is already well used, being popular with walkers.

The majority of the land on which the trail will be aligned between Holland-on-Sea and Walton-on-the-Naze is owned by Tendring District Council.

2.1.3 Walton-on-the-Naze to Walton Mere

The map below shows the extent of this subsection between the red arrows.

Map iii: Walton-on-the-Naze to Walton Mere



Key:

England Coast Path, existing PRoW - **Pink**

England Coast Path, trail alignment on other existing publically walked route – **Red**

Coastal Saltmarsh and Mudflats – **Brown shading**

Hamford Water SSSI, SPA– **Beige hashing and shading**

Hamford Water RAMSAR – **Blue hashing**

Hamford Water NNR – **blue line**

Hamford Water SAC – **Pink hashing**

The Naze SSSI – **Beige shading**.

This subsection is quite varied in nature and begins within the urban area of Walton-on-the-Naze following the seafront/ promenade beside the foreshore, generally sandy beaches of varying widths. As the proposed trail enters The Naze, the terrain becomes less built up and follows the cliff top close to The Naze Tower. This part of the subsection is a popular visitor attraction. As the proposed trail heads north, there are fewer visitors.

The proposed trail passes through several designated areas at The Naze, Hamford Water SSSI, The Naze SSSI, Hamford Water RAMSAR and Hamford Water SPA. Roll back will apply to the section near to the cliff top. Although this area is already a popular visitor destination, the proposed trail does not follow existing rights of way at The Naze, apart from a short section at the northernmost point.

There is a proposal to create a new counterwall towards the northern section of The Naze. If this is constructed the trail will eventually be re-aligned along that as part of the roll-back. The beach leading to Stone Point will fall under coastal margin.

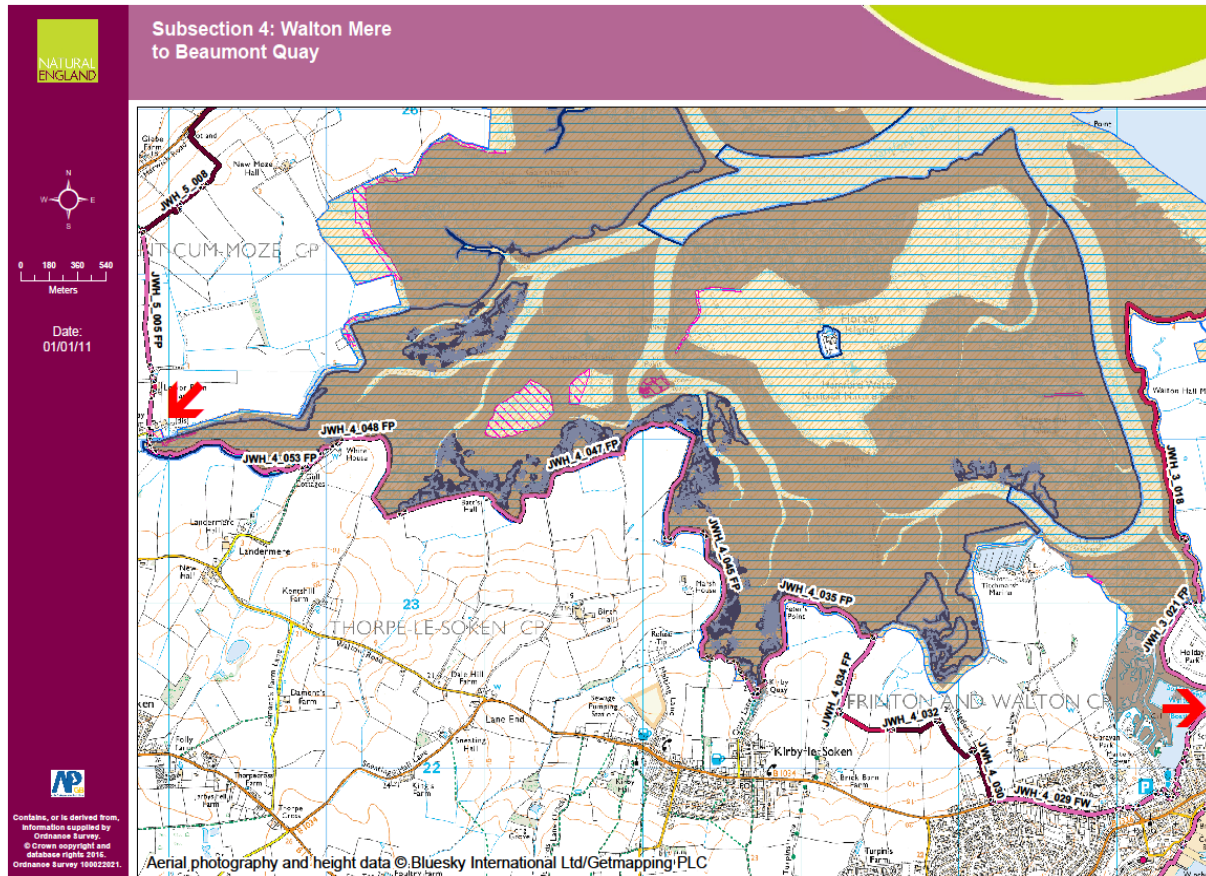
The land on which the trail will be aligned is owned by a mixture of private individuals and companies, as well as Tendring District Council.

Along the northern and western sections of The Naze, the proposed trail will follow an existing permissive route before being aligned onto a public footpath which continues back into Walton-on-the-Naze alongside Walton Mere. A Section 25A restriction will apply all of the saltmarsh and mudflats at The Naze.

2.1.4 Walton Mere to Beaumont Quay

The map below shows the extent of this subsection between the red arrows.

Map iv: Walton Mere to Beaumont Quay



Key:

England Coast Path, existing PRoW - **Pink**

England Coast Path, trail alignment on other existing publically walked route – **Red**

England Coast Path, trail alignment on non-existing publically walked route – **Dark red**

Coastal Saltmarsh and Mudflats - **Brown shading**

Hamford Water SSSI and SPA– **Beige shading and hashing**

Hamford Water RAMSAR – **Blue hashing**

Hamford Water NNR – **Blue line**

Hamford Water SAC – **Pink hashing**

This subsection begins within the urban area of Walton-on-the-Naze alongside Walton Mere and residential streets. Beyond the Martello tower site (currently under development) the proposed trail will largely follow the sea wall to the end of the subsection at Beaumont Quay. The Rigdons seawall breach and intertidal habitat creation means the proposed trail will be aligned slightly more inland to Island Lane.

Between Island Lane and Beaumont Quay, the proposed trail will be aligned on an existing PRoW on the seawall. Here it passes through several designated areas, Hamford Water SSSI, Hamford Water RAMSAR and Hamford Water SPA. There are also some areas of SAC, (designated for Fisher's estuarine moth) most notably between Landermere and Beaumont Quay. Away from the busier area around Walton-on-the-

Naze, this is a relatively remote area with few visitor attractions and quite long distances between intersecting PRowS.

The land on which the trail will be aligned is owned by a mixture of private individuals and companies. A small area of land near Beaumont Quay is owned by Essex County Council.

A Section 25A restriction will apply all of the saltmarsh and mudflats along this subsection. A Section 26(3) (a) nature conservation restriction will apply to Horsey Island, as well as the causeway (Island Road) which leads to it at low tide. A Section 26(3) (a) nature conservation restriction will also apply to land near to Coles Lane, Walton-on-the-Naze.

2.1.5 Beaumont Quay to Dovercourt

The map below shows the extent of this subsection between the red arrows.

Map v: Beaumont Quay to Dovercourt



Key:

England Coast Path, existing PRoW - Pink

England Coast Path, trail alignment on other existing publically walked route – Red

England Coast Path, trail alignment on non-existing publically walked route – Dark red

Coastal Saltmarsh and Mudflats – Brown shading

Hamford Water SSSI and SPA– Beige shading and hashing

Hamford Water RAMSAR – Blue hashing

Hamford Water NNR – **Blue line**

Hamford Water SAC – **Pink hashing.**

This subsection is a combination of a more inland alignment and a seawall route. From Beaumont Quay, the proposed trail is aligned north and then north-east along a mixture of existing PRow and new access. Near Little Oakley, the trail is aligned along a bridleway leading back to the seawall, which it then follows along existing PRow to the end of this subsection at Dovercourt.

Where the proposed trail follows the existing PRow on the seawall, it passes through several designated areas, Hamford Water SSSI, Hamford Water RAMSAR and Hamford Water SPA. There are some areas of SAC, (designated for Fisher's estuarine moth). This is a relatively remote area with few visitor attractions and limited car parking.

The land on which the trail will be aligned is owned by a mixture of private individuals and companies.

A Section 25A restriction will apply all of the saltmarsh and mudflats along this subsection.

2.1.6 Dovercourt to Harwich

The map below shows the extent of this subsection between the red arrows.

Map vi: Dovercourt to Harwich



Key:

England Coast Path, existing PRoW - Pink

England Coast Path, trail alignment on other existing publicly walked route – Red

Harwich foreshore SSSI – Beige shading

This subsection of the trail is wholly along the promenade beside the foreshore, generally shingle or sandy beaches of varying widths. It is entirely an urban, paved subsection.

This subsection begins at southern end of the seafront promenade at Dovercourt which is an urban district contiguous with the Harwich conurbation. There are a number of holiday caravan parks and beach huts close to the route. The proposed trail follows a mixture of existing public PRow and cycleway along the seafront into Harwich where this subsection ends.

Harwich is a popular visitor destination, particularly in summer. There are a number of visitor attractions such as cafes and pubs and the seafront promenade is popular with walkers and cyclists. Harwich is also a busy international port with two passenger ferry crossings per day to the Netherlands. There is also a railway station close to the proposed trail.

No new access is being created on this subsection and all of the land on which the trail will be aligned is owned by Tendring District Council.

2.2 Designated sites

Hamford Water NNR, Hamford Water Ramsar, Hamford Water SAC, Hamford Water SSSI, Hamford Water SPA, Harwich Foreshore SSSI, Clacton Cliffs and Foreshore SSSI, Holland on Sea Cliff SSSI, Holland Haven Marshes SSSI, The Naze SSSI, Blackwater, Crouch Roach and Colne Estuaries MCZ, Outer Thames Estuary SPA, Essex Estuaries SAC.

	1. Jaywick to Walton on the Naze	2. Walton-on-the-Naze to Walton Mere	3. Walton Mere to Beaumont Quay	4. Beaumont Quay to Dovercourt	5. Dovercourt and Harwich
<i>Clacton Cliffs and foreshore SSSI</i>	✓				
<i>Holland on Sea Cliff SSSI</i>	✓				
<i>Holland Haven Marshes SSSI</i>	✓				
<i>The Naze SSSI</i>		✓			
<i>Hamford Water SSSI</i>		✓	✓	✓	
<i>Hamford Water SPA</i>		✓	✓	✓	
<i>Hamford Water SAC</i>			✓	✓	
<i>Hamford Water RAMSAR</i>		✓	✓	✓	
<i>Hamford Water NNR</i>		✓	✓	✓	
<i>Harwich foreshore SSSI</i>					✓
<i>Blackwater, Crouch Roach and Colne Estuaries MCZ</i>	✓				
<i>Outer Thames Estuary SPA</i>	✓				
<i>Essex Estuaries SAC</i>	✓				

2.3 Context

Other stretches of the England Coast Path will be created in shared designated sites as follows;

<u>Designated site</u>	<u>ECP stretch</u>
<i>Blackwater, Crouch Roach and Colne Estuaries MCZ</i>	Salcott – Jaywick
<i>Clacton Cliffs and foreshore SSSI</i>	Salcott – Jaywick
<i>Outer Thames Estuary SPA</i>	Burnham-on-Crouch to Maldon
<i>Essex Estuaries SAC</i>	Salcott – Jaywick, Maldon to Salcott, Mersea Island, Burnham-on-Crouch to Maldon

2.4 Designated features

In the table below, all the qualifying features of the designated sites are listed, grouped under five broad headings: overwintering/passage birds; breeding birds; habitats, vegetation types and plant species; invertebrates; and geological/geomorphological features.

The English names used here for bird species are the British vernacular names as given in the British Ornithologists Union (BOU) British List. Appendix A gives British vernacular names and International Ornithological Congress (IOC) International English names for those species where the two differ.

Avian Features of the designated sites listed in 2.2	Clacton Cliffs and foreshore SSSI	Holland on Sea Cliffs SSSI	Holland Haven Marshes SSSI	The Naze SSSI	Hamford Water SSSI	Hamford Water SPA	Hamford Water SAC	Hamford Water RAMSAR	Harwich Foreshore SSSI	Blackwater, Crouch Roach and Colne Estuaries MCZ	Outer Thames Estuary SPA (See Section 3.16)
OVERWINTERING/PASSAGE BIRDS											
A046a dark-bellied brent goose <i>Branta bernicla bernicla</i> (non-breeding)			✓		✓	✓		✓			
A048 Shelduck <i>Tadorna tadorna</i> (non-breeding)					✓	✓					
A052 Teal <i>Anas crecca</i> (non-breeding)			✓		✓	✓					
A141 grey plover <i>Pluvialis squatarola</i> (non-breeding)					✓	✓		✓			
A137 Ringed plover <i>Charadrius hiaticula</i> (non-breeding)					✓	✓		✓			
A156 black-tailed godwit <i>Limosa limosa islandica</i> (non-breeding)					✓	✓		✓			
A160 Curlew <i>Numenius arquata</i> (non-breeding)					✓						
A144 Sanderling <i>Calidris alba</i> (non-breeding)					✓						
A050 – wigeon <i>Anas penelope</i> (non-breeding)			✓		✓						
A054 – pintail <i>Anas acuta</i> (non-breeding)					✓						
A149 dunlin <i>Calidris alpina alpina</i> (non-breeding)					✓						

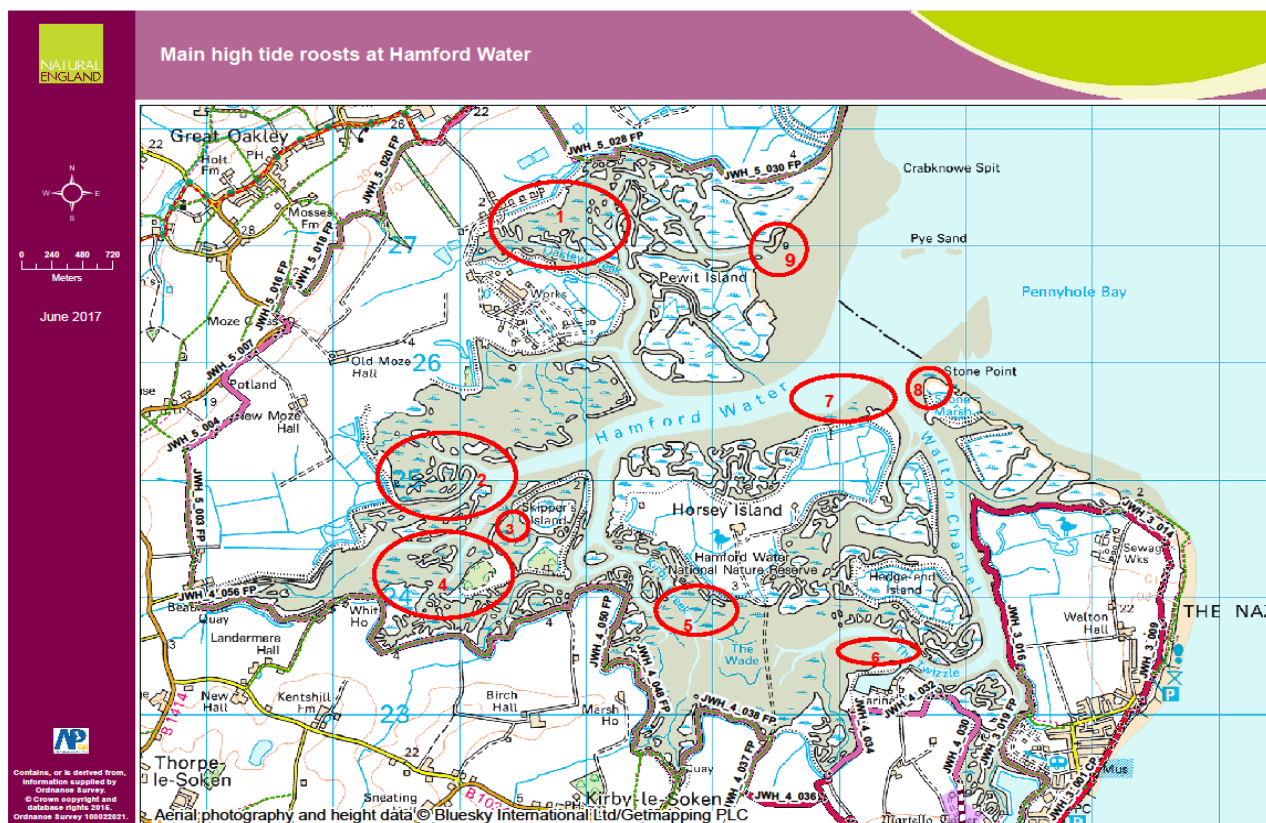
Avian Features of the designated sites listed in 2.2	Clacton Cliffs and foreshore SSSI	Holland on Sea Cliffs SSSI	Holland Haven Marshes SSSI	The Naze SSSI	Hamford Water SSSI	Hamford Water SPA	Hamford Water SAC	Hamford Water RAMSAR	Harwich Foreshore SSSI	Blackwater, Crouch Roach and Colne Estuaries MCZ	Outer Thames Estuary SPA See Section 3.1.6)
A162 Common redshank <i>Tringa tetanus</i> (non-breeding)					✓	✓		✓			
A132 pied avocet <i>Recurvirostra avosetta</i> (non-breeding)						✓		✓			
BREEDING BIRDS											
A137 ringed plover <i>Charadrius hiaticula</i> (breeding)				✓							
A195 little tern <i>Sterna albifrons</i> (breeding)				✓	✓						

Non avian Features of the designated sites listed in 2.2 INVERTEBRATES, HABITATS, VEGETATION TYPES AND PLANT SPECIES	Clacton Cliffs and foreshore SSSI	Holland on Sea Cliffs SSSI	Holland Haven Marshes SSSI	The Naze SSSI	Hamford Water SSSI	Hamford Water SPA	Hamford Water SAC	Hamford Water RAMSAR	Hamford Water NNR	Harwich Foreshore SSSI	Blackwater, Crouch Roach and Colne Estuaries MCZ	Outer Thames Estuary SPA
S4035 – fisher’s estuarine moth <i>Gortyna borelii lunata</i>							✓					
Vascular plant assemblage: Hog’s fennel <i>Peucedanum officinale</i> Slender hare’s-ear <i>Bupleurum tenuissimum</i> Golden samphire <i>Inula crithmoides</i> Lax-flowered sea-lavender <i>Limonium humile</i> Perennial glasswort <i>Salicornia perennis</i> Small cord-grass <i>Spartina maritima</i> Shrubby sea-blite <i>Suaeda vera</i> Dwarf Eel-grass <i>Zostera noltii</i>					✓							
SM13a – <i>Puccinellia maritima</i> saltmarsh (Common saltmarsh grass community) SM14 – <i>Atriplex portulacoides</i> saltmarsh					✓							
SD2 <i>Honkenya peploides</i> – <i>Cakile maritima</i> strandline community					✓							
GEOLOGICAL/ GEOMORPHOLOGICAL	✓	✓		✓						✓		
EC - Quaternary of the Thames	✓	✓										
EC – Mesozoic – Tertiary fish/ amphibians				✓						✓		
Saltmarsh morphology				✓					✓			
Intertidal mixed sediments				✓					✓			
Native oyster (<i>Ostrea edulis</i>)											✓	

2.5 Other features about which concerns have been expressed

Feature	Conservation interest
Non-breeding waterbird features identified as potential qualifying features of Hamford Water SPA	<p>The following are listed as potential SPA qualifying features because their passage/overwintering populations have reached internationally important status since Hamford Water was first designated:</p> <ul style="list-style-type: none"> • Waterbird assemblage (avocet, black-tailed godwit, dunlin, golden plover, grey plover, lapwing, ringed plover, ruff, dark-bellied brent goose, shelduck, teal, wigeon) • A026 - little egret <i>Egretta garzetta</i> (non-breeding) • A157 - bar-tailed godwit <i>Limosa lapponica</i> (non-breeding) • A632 – golden plover <i>Pluvialis apricaria</i> (non-breeding) • A671 - Knot <i>Calidris canutus</i> (non-breeding).
lapwing <i>vanellus vanellus</i> (breeding)	Red status – bird of conservation concern. HLS and CS target species. The species is known to breed on Horsey Island, the Rigdons intertidal site, Longmarsh Reserve and Walton Hall marshes
avocet <i>Recurvirostra avosetta</i> (breeding)	Protected under Schedule 1 of the Wildlife and Countryside Act 1981. The bird, their nest, eggs and young are fully protected at all times. It is an offence to intentionally or recklessly disturb when nesting (RSPB 2010). The species is known to breed on Horsey Island, the Rigdons intertidal site and Longmarsh Reserve.
yellow wagtail <i>Motacilla flava</i> (breeding)	Red status – bird of conservation concern. HLS target species.
marsh harrier <i>Circus aeruginosus</i> (breeding)	Protected under Schedule 1 of the Wildlife and Countryside Act 1981. The birds, their nests, eggs and young are fully protected at all times. It is an offence to intentionally or recklessly disturb when nesting (RSPB, 2010).
barn owl <i>Tyto alba</i> (breeding)	Protected under Schedule 1 of the Wildlife and Countryside Act 1981. The birds, their nests, eggs and young are fully protected at all times. It is an offence to intentionally or recklessly disturb when nesting (RSPB, 2010).
Common seal <i>Phoca vitulina</i> and grey seal <i>Halichoerus grypus</i>	Common seals and grey seals are protected in UK waters by the Offshore Marine Conservation (Natural Habitats, & c.) Regulations 2007, Conservation of Habitats and Species Regulations 2010, Wildlife and Countryside Act 1981 and the Conservation of Seals Act 1970.

Map vii. The main high tide roosts at Hamford Water, with main roost species composition listed in the table below. (Source: Zoe Ringwood and Leon Woodrow).



Roost site number	Main species composition	Roost site number	Main species composition
1	Curlew, grey plover, redshank, teal, black headed gulls	6	Lapwing, golden plover, dunlin, knot
2	Grey plover, avocet lapwing shelduck, teal, wigeon, oystercatcher, dunlin, redshank	7	Ringed plover, dunlin, grey plover
3	Curlew, teal, redshank, mallard	8	Oystercatcher, gadwall, Shoveler, dunlin, grey plover
4	Brent geese, wigeon, teal	9	Oystercatcher, ringed plover, common sanderling, cormorant
5	Oystercatcher, black tailed godwit, bar tailed godwit, knot, avocet		

3. Baseline conditions and environmental sensitivities

In this part of the document we identify any of the features mentioned above that are potentially sensitive to changes in access, and rule out from further consideration those that are not.

3.1 Overwintering and passage waterbirds

Composition of feature group - where applicable
<p>Non-breeding SPA, SSSI and Ramsar waterbird features: dark-bellied brent goose, shelduck, teal, grey plover, ringed plover, black-tailed godwit, curlew, sanderling, wigeon, pintail, dunlin, common redshank. These species are all waders and wildfowl that are found at nationally or internationally important numbers at Hamford Water.</p> <p>In addition, the feature group includes waterbirds that are not currently included within the features of the protected sites, but that have in recent years been recorded at internationally or nationally important numbers (SPA qualifying features) at Hamford Water. These are knot, little egret, bar-tailed godwit and golden plover. The site also supports an important waterbird assemblage that is an SPA qualifying feature. The assemblage which includes avocet, black-tailed godwit, dunlin, golden plover, grey plover, lapwing, ringed plover, ruff, dark-bellied brent goose, shelduck, teal and wigeon.</p>
Current conservation status and use of the site
<p>Hamford Water is a large shallow estuarine basin that is of importance to passage and overwintering waterbirds, due to the shallow and sheltered nature of the basin and the rich invertebrate fauna that it supports. It is of particular importance as a refuge for waterbirds during periods of severe winter weather (Cook <i>et al.</i>, 2013). The Wetland Bird Survey (WeBS) results indicate that Hamford Water was the 19th most important site for waterbirds in the UK in 2014/15 (Frost <i>et al.</i>, 2016). In the five year period 2010/11 to 2014/15 the total number of waterbirds recorded at the site ranged from 41,404 to 63,372, with an average of 52,212. Over this period numbers of all non-breeding bird species features within the SSSI, SPA and Ramsar site were above the target level, with the exception of ringed plover, black-tailed godwit and pintail (SSSI only feature).</p> <p>Virtually the entire area of Hamford Water SPA, SSSI and Ramsar site is surveyed for wintering bird numbers at high tide between October and March as part of the WeBS. Results show that the areas of Horsey Island and Garnhams Island support the highest counts of wetland birds at high tide. Indeed these two areas supported over half of the total waterbirds recorded at Hamford Water during the five year period 2010/11 to 2014/15 and Horsey Island supports high enough counts for it to be designated an SPA for waterbird assemblage in its own right. The areas of Landermere and Skipper's Island also record high counts of waterbirds when taking into consideration the smaller area over which surveys are conducted. The Horsey Island area supported the highest numbers of all non-breeding bird species protected within the Hamford Water SPA, SSSI and Ramsar sites for the period 2010/11 to 2014/15.</p>

The majority of waterbirds in this feature group, including the large majority of the waders, feed mainly or exclusively on exposed intertidal sediments and saltmarsh at low tide and congregate to roost on higher areas of saltmarsh or shingle at high tide. As well as being sufficiently high, roost sites need to have low vegetation, good visibility all round, and be undisturbed. Maintaining the integrity of the main roost sites is particularly important because they are used by large numbers of birds 'commuting' to/from a much larger foraging area. The main roost sites at Hamford Water are summarised by Panter and Liley (2016). Leon Woodrow (pers comm.) explains that the main high tides roosts are Horsey Island (including the island itself, the sand/shingle on the north eastern corner and the saltmarsh along the southern shore), Pewit Island, Stone Point lagoon, Skipper's Island, Hedge-end and Three Corner Island and the saltmarsh to the west of Titchmarsh Marina and around Coles Creek.

Low tide counts are conducted at least every six years between November and February through the WeBS Low Tide Counts scheme, which aims to monitor and assess the importance of intertidal areas for wintering waterbirds in the UK. The scheme provides information on the low water distribution of birds and how the birds make use of the site for feeding. It also provides the information needed to assess the potential effects on waterbird populations of a variety of human activities which effect intertidal habitats, such as developments and recreational activities. Hamford Water was one of sixteen areas where low tide counts were conducted in 2014/15 (Frost *et al.*, 2016). In 2014/15 high densities of waterbirds, especially golden plover, teal, wigeon and knot, were recorded on the intertidal areas between Horsey Island and Hedge-End Island. To the south of Horsey Island in the area known as The Wade, high counts of golden plover, knot, lapwing, dunlin and avocet were recorded on the mudflats. Other areas with high counts at low tide were the intertidal areas to the south of New Island and Pewit Island.

WeBS alerts are issued to identify wintering bird species that have undergone major declines. Where declines have exceeded 50% high alerts are issued and where declines lie between 25% and 50% medium alerts are issued (Cook *et al.*, 2013). At Hamford Water high alerts have been issued for ringed plover, lapwing, ruff and black-tailed godwit and medium alerts for dark-bellied brent goose, wigeon, golden plover and dunlin. The declines for ringed plover, lapwing, ruff, wigeon and golden plover reflect both regional and UK trends for these species, but the declines for black-tailed godwit, dark-bellied brent goose and dunlin do not reflect regional or UK trends and may be due to site based factors. The main areas for non-breeding ringed plover at Hamford Water are Horsey Island, Irlams, Pewit Island and Stone Point and for black-tailed godwit the highest numbers are recorded in the Horsey Island and Skipper's Island areas. The highest counts of dark-bellied brent geese were recorded within the Horsey Island area, with significant counts also recorded at Garnhams Island and Landermere.

The main period for which non-breeding birds are present at Hamford Water is the autumn passage period (August to October) and the winter period (October/November to March). From WeBS count data for September and October (the site is not surveyed in August) for the period 2010/11 to 2014/15, the highest numbers of birds during the passage period are recorded from the Horsey island area, followed by Garnham's Island, Pewit Island and Skipper's Island respectively. The autumn passage period supports particularly high numbers of black-tailed godwit, bar-tailed godwit, redshank, curlew, golden plover and knot. Sandwich tern and common tern are also recorded frequently during the passage period, as well as the occasional arctic tern. Up to 47 sandwich terns have been recorded on Horsey island during this period.

In addition to the intertidal habitat, areas of wet grassland and fresh/brackish water to the landward side of the seawall are important to a number of species of non-breeding waterbirds, including dark-bellied brent

goose, lapwing, curlew, golden plover and wigeon. These areas are predominantly coastal grazing marsh and include Horsey Island (especially the eastern marshes); the Walton Hall Marshes to the west of The Naze; the grazing marsh to the south of New Moze Reservoir; Longmarsh reserve; and Cunnyfur marsh to the west of Bramble Island. Brent geese also regularly feed on the grassland either side of Coles Lane to the south of Titchmarsh Marina and on arable fields around Hamford Water.

Ecological sensitivities to changes in access

Overwintering and passage waterbirds are sensitive to disturbance (Coyle and Wiggins, 2010) and therefore potentially to changes in access. Behavioural responses of birds to human presence in coastal areas are often very obvious: large bird flocks may be seen flying away from people and areas with regular human disturbance often have few birds (Stillman *et al.*, 2007). Disturbance to wintering and passage waterbirds can have a number of impacts, including a reduction in time spent feeding due to repeated flushing; increased energy expenditure; avoidance of areas of otherwise suitable habitat and increased stress (Panter and Liley, 2016; Stillman *et al.*, 2007).

The impact of disturbance on survival and condition of overwintering coastal birds will depend on the birds' ability to compensate for lost feeding time and extra energy expenditure (Stillman *et al.*, 2012). The ability of birds to compensate will depend on food availability and the provision of undisturbed areas within the vicinity. During periods of severe winter weather, particularly when the ground is frozen, waterfowl have difficulty obtaining enough food and face reduced prospects for survival (JNCC, 2015). During such weather it is important that birds are not disturbed to avoid them using their depleting energy reserves. In autumn newly arrived migrants with depleted energy reserves will also be vulnerable to disturbance, as will migrants feeding-up before leaving for their arctic feeding grounds in the spring.

The distance at which birds will be disturbed will vary depending on a variety of interacting factors including bird species, flock size, type of disturbance, sight lines and the birds' previous experience at the site or elsewhere. Panter and Liley (2016) were commissioned by Natural England to provide a summary of key bird species and their distribution along the Essex coast to provide background information for the assessment of sensitive features as a consequence of the coast path. They mapped mudflat within 60m of the shoreline at Hamford Water as a means of indicating areas most vulnerable to disturbance at the site. The distance of 60m was chosen as this is considered a rough distance at which most birds will respond to the presence of people, based on distances described in Stillman *et al.* (2012). However, the distance of disturbance will vary according to a number of factors and Stillman *et al.* (2012) did indicate that birds were responding at distances ranging from 16m to 200m. Panter and Liley (2016) state that the percentage of mudflat within 60m of the shore is particularly high in WeBS sectors at The Naze, Bramble Island and Landermere, suggesting shoreline access in these areas has the potential to affect a high proportion of the available mud feeding area.

Anecdotal observations at Hamford Water from Natural England staff when assessing possible stretches of the coast path, particularly in areas with no current public right of way, did suggest that the distance of disturbance could be over 100m. At Hamford Water, the areas with the highest counts of wintering and passage waterbirds, including the areas of Horsey Island, Garnham's Island and Skipper's Island, do not currently have any public access and numbers of birds in these locations are likely to be particularly sensitive to any changes in access. Indeed, with regards to Horsey Island it has been stated that the control of visitor access to the island should be retained at all costs to maintain the site in its current excellent

conditions for wintering birds (CJT Ecology, 2013a).

Much of the sea wall on the mainland around Hamford Water already has a public right of way or permissive footpath, but there is one significant length of wall between the Beaumont Quay and the north of Bramble Island that currently has no public right of way. This length of wall runs past the important intertidal areas to the north of Landermere and past Garnham's Island, as well as the wet grassland areas at the Longmarsh Reserve, the coastal grazing marsh to the south of Old Moze Reservoir and Cunnyfur Marsh to the west of Bramble Island. Any change in access over the winter along this stretch is likely to cause disturbance to overwintering birds.

Disturbance of the main high tide roost sites (see figure 7) is likely to be especially significant because of the large numbers and variety of birds using them. The birds' energy expenditure may be increased both directly (particularly if they are repeatedly flushed) and indirectly (if disturbance forces birds to roost further from their preferred feeding areas). The main roost sites are on or around the main Islands at Hamford Water, including Horsey Island, Hedge-end Island and Skipper's Island, as well as Stone Point and saltmarsh to the west of Titchmarsh Marine (as described above). Consequently, these areas are particularly sensitive to any increase in disturbance.

Species that feed on wet grassland/ coastal grazing marsh and arable areas to the landward side to the sea wall are likely to be more susceptible to land-based disturbance than those feeding more or less exclusively in the intertidal zone. This includes dark-bellied brent goose, a species that will use a range of inland habitats, including arable crops and pasture, for feeding, resting and preening. The most important areas of wet grassland in the Hamford Water area are directly behind the sea wall/borrowdyke and therefore at least part of the area of suitable landward habitat utilised by this species will be close to a footpath along the sea wall. Where the coast path will be routed inland the impact of such a route on wintering species that feed/roost inland of the sea wall will need to be assessed.

Conclusion: Due to the ecological sensitivity of wintering and passage waterbirds to changes in access, the potential interactions with proposals for the England Coast Path will be considered further as part of this appraisal.

3.2 Breeding ringed plover (SSSI feature)

Current conservation status and use of the site

Ringed Plovers are solitary nesters that breed primarily on sand or shingle beaches. They can, however, be found nesting at gravel pits, on short grassland, saltmarsh or open arable land (Conway *et al* 2008; Birdlife international, 2014b). They have an extended breeding season which may last from late March to early September. Egg-laying normally starts in early April and there can be 2 or 3 broods (Snow & Perrins 1998), so flightless young may still be present in August, particularly if early nesting attempts fail. As a breeding species the ringed plover is a Species of European Conservation Concern. It is protected under the Wildlife and Countryside Act 1981 (as amended) against intentional killing and injuring. This includes damage, destruction or taking of a nest, eggs or young while it is in use or being built during the breeding season.

There is evidence that breeding ringed plovers are declining nationally. Conway *et al.* (2008) described a decline of around 37% between 1984 and 2007, but a small range expansion was recorded in the recent BTO Atlas (Balmer *et al.* 2013). In 2007, a British Trust for Ornithology (BTO) report recorded 30 pairs of ringed plover in Hamford Water SSSI (Conway *et al* 2008). Regular breeding bird surveys have been conducted on Horsey Island (CJT Ecology, 2004, 2007 and 2013) and pairs of ringed plover were recorded in May 2004, 2007 and 2013 respectively. The number of pairs at Hamford Water has decreased since SSSI notification and this may be reflecting national trends, but factors at a local level such as increases in recreational access cannot be ruled-out as a contributing factor.

Gibson (2014) conducted a detailed survey of breeding ringed plover, which included recording the number and location of nests/breeding pairs and assessing the condition and distribution of suitable habitat for the species across Hamford Water. A total of 31 pairs (maximum) of ringed plover were observed in four localities within Hamford Water: Horsey Island, Stone Point, Irlams beach/Pewit Island and the beach area south of Dovercourt around South Hall Creek. All pairs were located within areas of open sand/shingle habitat and it was noted that the habitat was ideal with wide sand and shingle beaches and sparse dune vegetation, sufficient to hide chicks in but not too dense. The surveys recorded breeding ringed plover on all areas with suitable nesting habitat.

Occasionally ringed plovers have been recorded nesting in open grassy areas to the landward side of the sea wall within Hamford Water (Simon Cox, pers comm), and occasionally on sparse areas of spring sown crops such as potatoes or sugar beet (Julian Novorol, pers comm.). Gibson (2014) did survey a number of areas of grassland within Hamford Water SSSI, both on and behind the seawall, but did not find any nesting ringed plover within these localities. In 2016 the Hamford Water warden (Leon Woodrow pers comm) surveyed breeding ringed plover and recorded pairs in generally the same areas of sand/shingle habitat as Gibson (2014).

Ecological sensitivities to changes in access

Breeding Ringed Plover are known to be very susceptible to human disturbance and this can impact numbers locally (Liley & Sutherland 2007; JNCC, 2013). Human activities such as walking, including exercising dogs on and off leads, cause disturbance to breeding ringed plover and this can have a major impact on breeding density at coastal sites. Indeed disturbance can lead to desertion of nests, trampling of eggs and increased predation rates (Liley and Sutherland, 2007; Medeiros *et al.*, 2007). Ringed plover are particularly vulnerable to disturbance as their nesting season largely coincides with the summer holiday period and the sand/shingle habitat they use for nesting is very popular for seaside recreation.

Conclusion: : Due to the ecological sensitivity of breeding ringed plover to changes in access, the potential interactions with proposals for the England Coast Path will be considered further as part of this appraisal.

3.3 Breeding Little Tern (SPA and SSSI feature)

Current conservation status and use of the site

The little tern is fully protected under Schedule 1 of the Wildlife and Countryside Act and as such it is an offence to intentionally or recklessly disturb the species (adults and their young) at, on or near an 'active' nest (RSPB, 2010). Little tern is also protected at a European level under Annex 1 of EU Birds Directive (JNCC, 2016) and is amber listed in Birds of Conservation Concern 4 (Eaton *et al.* 2015). Breeding little tern is a designated feature of Hamford Water SSSI and SPA.

The Hamford Water area is of national importance for breeding little tern, with the most recent 5 year mean of 39 pairs (2010-2014) representing 2.1% of the GB breeding population. A comparison of this 5 year mean at Hamford Water SPA with historical populations at the other UK SPAs where the species is a qualifying feature given in Stroud *et al.* (2001) results in Hamford Water being ranked the 13th most important site for the species in the UK. A consultant surveyor (Gibson, 2014) recorded 37 breeding pairs of little tern in Hamford Water in 2014 and observations by the site warden (Leon Woodrow pers comm.) recorded an estimated 33 and 32 pairs in 2015 and 2016 respectively, although the number of apparently occupied nests recorded was lower.

Little Terns nest in small loose colonies on sparsely vegetated sand, pebble and shingle islands, spits, bars and beaches, as well as islands within coastal lagoons (Natural England, 2012; Birdlife International, 2014a). They excavate a scrape in areas with little or no vegetation. In Essex, they generally arrive at their nesting areas from late April to early May (Wood, 2007). Egg-laying begins from mid-May to early June and there may be more than one brood (Snow & Perrins, 1998). Numbers of adults and young peak around July/early August in Essex, with most leaving for their West African wintering grounds by mid-September (Wood, 2007).

Up to 2004 little terns were recorded nesting at three areas in Hamford Water, but since then they have only been recorded at one main area: Horsey island. In 2017, however, there were two pairs recorded nesting within an area cordoned-off from public access at Stone Point. The shingle ridge where they nest at Horsey Island supports optimum habitat conditions for nesting little terns and is also undisturbed, with no public access (Gibson, 2014). The two other historic colonies do still support suitable habitat with sand and shingle banks, sparse vegetation, and a nearby food source, but the areas are subject to a degree of disturbance from public access.

Of the five species of tern which regularly breed in Great Britain, little tern is the smallest and has the most limited foraging range: mean range of 2.1 km, mean of recorded maxima of 6.3 km and maximum ever recorded in the literature being 11 km (Thaxter *et al.* 2012). Whilst breeding at Hamford Water little terns are frequently observed foraging in the shallower water along the edges and mouths of creeks and channels within the Hamford water estuarine basin. They are also frequently seen foraging in the shallow

waters around the Pennyhole bay area and along the coast between Walton-on-the-Naze and Dovercourt, as well as up to 1.8km out to sea (Natural England, 2015; Parsons *et al*, 2015). There is a proposed marine extension to Hamford Water SPA to protect important marine foraging areas for little tern (Natural England, 2016).

Ecological sensitivities to changes in access

Nesting little terns are sensitive to human disturbance, as well as flooding and predation (Madeiros *et al.*, 2017). Gibson (2014) suggests that increased disturbance from walkers and motorbikes at historic nesting locations in Hamford Water may have been responsible for them being abandoned and that Horsey Island is favoured due largely to its lack of public access. The little tern breeding colony at Horsey Island would almost certainly be impacted by disturbance from humans and dogs if public access were to be encouraged in the vicinity. As with breeding ringed plover, little terns are particularly vulnerable to disturbance as their breeding season coincides with the summer period and the beach habitat where they are found is popular for recreation.

Although the two other historic breeding colonies have not supported nesting little terns for over 10 years, there are suitable areas of habitat in these localities and it is possible that little terns will return to breed in future years. Little terns were recorded in these localities by Gibson (2014), mainly using the areas for feeding, but one courtship pair was noted. Consequently it is of importance that these potential breeding sites do not experience an increase in activities that could cause disturbance and deter little terns from returning to nest.

The suitable breeding habitat for little tern is largely the same as that for ringed plover and therefore the current measures put in place for managing access for breeding ringed plover (see Section 3.2) are also relevant for little tern.

Although little terns forage primarily within marine areas they will also forage within creeks and channels within areas of saltmarsh. Therefore any changes in access that result in an increased disturbance to such areas may influence the foraging behaviour of little terns.

Conclusion: Due to the ecological sensitivity of breeding little tern to changes in access, the potential interactions with proposals for the England Coast Path will be considered further as part of this appraisal.

3.4 Other priority breeding birds (Schedule 1; Birds of Conservation Concern)

Composition of feature group - where applicable

The feature group includes: lapwing *vanellus vanellus*, avocet *Recurvirostra avosetta*, yellow wagtail *Motacilla flava*, and marsh harrier *Circus aeruginosus*.

Current conservation status and use of the site

In England all wild birds, their nests and their eggs are protected by law under the Wildlife and Countryside Act 1981 (as amended) (RSPB, 2010). A bird's breeding season varies according to the species and the season, but tends to be between March and August. Certain rare species, including avocet, marsh harrier and barn owl are afforded extra protection under Schedule 1 of the Act and for these species it is an offence to intentionally or recklessly cause disturbance while they are nesting. Lapwing and yellow wagtail are both included on the Red List of Birds of Conservation Concern (Eaton *et al.*, 2015) and have experienced a severe (at least 50%) decline in breeding population over the past 25 years or longer term period.

The avocet's nest is a scrape that can be located in a variety of sites, including bare sand, dried mud, short grass, dead vegetation and built-up mounds of debris (Birdlife International, 2017). They particularly like to nest on sparsely vegetated low islands. At Hamford Water the main area for nesting avocet is Horsey Island (CJT Ecology, 2007 and 2013). Nesting avocets are also recorded at Walton Hall Marshes (CJT Ecology, 2013b) and Longmarsh Reserve (Trevor Clifford, pers comm.) and in recent years have been recorded at the Rigdons Intertidal habitat creation site.

Lapwings show a preference for breeding on wet grasslands and meadows with short swards and patches of bare soil (Birdlife International, 2017a). They will also breed on arable fields, especially spring-tilled arable land. The nest is a shallow scrape in short vegetation and the breeding season is from March to July. Lapwing breed in good numbers on Horsey Island with between 8 and 39 pairs recorded annually during surveys conducted between 1999 and 2013 (CJT Ecology, 2013). At Walton Hall Marshes 21 pairs were recorded in 2013 (CJT Ecology, 2013b). Lapwing are also known breed at Longmarsh Reserve and there are other suitable areas of wet grassland to the south of new Moze Reservoir and at Cunnyfur marshes to the west of Bramble Island. Nesting lapwing could potentially be found on suitable arable land around the Hamford Water area.

The yellow wagtail is a summer breeding visitor to the UK, arriving from early April onwards (BTO, 2016). The species favours damp habitats, such as wet meadows and grazing marshes, but will also use arable habitats for breeding. UK breeding populations declined by nearly 75% between 1967 and 2013 and the species was added to the Red List of birds of conservation concern in 2009. At Hamford Water the species is found predominantly in areas of wet grassland and this largely reflects that described above for lapwing.

Marsh Harriers require areas of extensive wetland and the nest is a pile of reeds built in dense marsh vegetation (Birdlife International, 2017). Birds are in their breeding areas from April through to September. Numbers are increasing in the UK and the species is thought to be recovering from historic declines. At Hamford Water marsh harriers are regularly recorded nesting within the reed beds at Bramble Island and

have also been reported to occasionally nest in the reeds at Longmarsh Reserve (Leon Woodrow pers comm).

Ecological sensitivities to changes in access

During the breeding season the impacts of disturbance are different to over the winter as birds are tied to particular nest locations/ territories and therefore particularly vulnerable to disturbance in that locality (Panter and Liley, 2016). At this time of year the birds are under the additional stresses of territorial defence, egg laying and chick rearing, so any further stresses from disturbance may impact their breeding success rate. Recreational activities, such as walking along the coast, tend to be more popular over the spring and summer period and therefore the level of disturbance is likely to be higher than at other times of the year. Bird breeding sites that are close to a public footpath are vulnerable to the added risk that dogs may be off leads and not under control, resulting in a higher level of disturbance.

The most sensitive areas for disturbance to breeding avocet, lapwing and yellow wagtail are similar and include Horsey Island, Walton Hall Marshes, Longmarsh Reserve and possibly the coastal grazing marsh to the south of New Moze reservoir and Cunnyfur marshes. All of these areas, with the exception of Walton Hall Marshes, do not currently have any public access within the vicinity. Walton Hall Marshes is an extensive area of coastal grazing marsh and although it does have a permissive footpath along the sea wall there are substantial areas of undisturbed wet grassland landward within the sea wall.

The main area utilised by breeding marsh harrier is the extensive area of reed bed at Bramble Island and due to its locality it is inaccessible. The Longmarsh Reserve area that is occasionally used by breeding marsh harrier is not close to any public access and is potentially susceptible to any changes in access in that area.

Conclusion: : Due to the ecological sensitivity of breeding lapwing, avocet, yellow wagtail and marsh harrier to changes in access, the potential interactions with proposals for the England Coast Path will be considered further as part of this appraisal.

3.5 Barn owl

Composition of feature group - where applicable
The barn owl <i>Tyto alba</i> is a breeding species. It is a schedule 1 bird of conservation concern.
Current conservation status and use of the site
<p>In England all wild birds, their nests and their eggs are protected by law under the Wildlife and Countryside Act 1981 (as amended) (RSPB, 2010). A bird's breeding season varies according to the species and the season, but tends to be between March and August. The barn owl is afforded extra protection under Schedule 1 of the Act and for this species it is an offence to intentionally or recklessly cause disturbance while they are nesting.</p> <p>The barn owl tends to nest in holes or cavities in trees or undisturbed buildings, such as barns or outbuildings. They will also regularly nest in suitable nest boxes. The nesting season is generally from March to August, but some pairs will breed twice with second clutches laid in July and in these instances the breeding season will extend into the autumn. In the Hamford Water area a substantial number of barn owl nest boxes have been erected in suitable habitat to the landward side of the sea wall, including within rough grassland and arable areas. The boxes are checked annually and a good number support nesting barn owls across the area</p>
Ecological sensitivities to changes in access
<p>Breeding barn owls are not as specific to habitat and particular area as the other breeding birds detailed in this section and are therefore not as likely to be significantly affected by changes to access as a consequence of the coast path. There are many options for breeding barn owls in locations not in close proximity to the coast path.</p> <p>Conclusion: Barn owl is not considered to be sensitive to changes in access in this instance and is therefore ruled out of further consideration in this appraisal.</p>

3.6 Fisher's estuarine moth (SAC feature)

Composition of feature group - where applicable
The feature group includes both Fisher's estuarine moth <i>Gortyna borelii lunata</i> and its sole larval foodplant, hog's fennel <i>Peucedanum officinale</i> , which is itself a nationally scarce and Red Data Book species.
Current conservation status and use of the site
<p>Fisher's estuarine moth is a rare and vulnerable species with a localised population distribution in the UK, due to its very specific habitat requirements. The moth is protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and under Schedule 2 of the Conservation of Habitats and Species Regulations 2010.</p> <p>The moth is restricted to areas of rough grassland where hog's fennel, its sole larval foodplant, grows. The Hamford Water area is the main stronghold for the moth in the UK, where it inhabits a number of islands and stretches of sea wall and areas landward of the sea wall on the mainland (Tarpey 1999; Ringwood, 2004). The main areas have been protected as a Special Area of Conservation (SAC) for Fisher's estuarine moth (see http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0030377)</p> <p>The life history and habitat requirements of Fisher's estuarine moth have been well researched in the UK (Ringwood <i>et al.</i>, 2002; Ringwood, 2004; Ringwood, <i>et al.</i>, 2004). Suitable habitat for the moth comprises an abundance of hog's fennel, together with an abundance of coarse grasses. Long coarse grasses, such as cock's-foot, couch and false oat-grass, are required to fulfil the moth's egg laying requirements.</p> <p>The moth has an annual life cycle: it is in the egg stage over the winter, from September/October through to April/early May; the larval stage occurs from April through to August; pupation lasts for about a month during August/September and the flight period starts in early September and runs through to about the third week in October. The larvae are stem borers and feed within the stems of hog's fennel from April through to June and then below ground within the plant's rootstock during July and August, when a characteristic 'frass' volcano can be found at the base of plants supporting larvae. Pupation occurs below ground within a bored-out chamber between the rootstock of Hog's Fennel and the surrounding soil.</p> <p>The distribution of suitable habitat for Fisher's estuarine moth within Hamford Water SSSI follows the Hamford Water SAC boundary (see map C below). Populations of the moth are monitored annually in both the larval and adult stage. The Hamford Water area supports approximately 70% of the UK population of this species. The main areas for the moth are Skipper's Island, Bramble Island, Horsey Island and stretches of sea wall on the mainland. The islands do not have public access and nor does one stretch of sea wall, between the Beaumont Quay and Bramble Island and a stretch of wall between Walton Mere and Titchmarsh Marina. Other areas along the sea wall inhabited by the moth do have a public right of way along the crest of the sea wall and this is cut at least annually by Essex County Council to maintain the footpath. This annual cut results in the crest of sea wall in these locations not being suitable habitat for Fisher's estuarine moth. This management has been in place as long as the public rights of way and it is accepted that these areas do not provide habitat for the moth.</p> <p>Many of the areas where the moth is found are on low-lying coastal land that is vulnerable to flooding. There is a programme in operation to create new areas of habitat for the moth on higher ground, away from the threats of coastal inundation, as part of a long-term conservation strategy (Ringwood, 2006). This</p>

has resulted in the creation of new areas of habitat on grassland and arable land landward of the sea wall around the north Essex coast and especially in the vicinity of Hamford Water.

The optimum management for Fisher's estuarine moth is to conduct the minimum amount of cutting necessary to maintain a rank grassland habitat and prevent scrub encroachment. The life cycle of the moth requires that great consideration be given to the timing of any habitat management works (Ringwood, 2004). The ideal time for site management is August, which is before the flight season and when the species is feeding/pupating underground. The moth lays its eggs on long grass during its flight season in September/October. Therefore although management at this time of the year will not directly damage the moth, it must be ensured that much of the site is left unmanaged to provide an abundance of long grass to meet the moth's egg laying requirements during its flight season in September/October. It is also important to rotate management, so that the same area is not managed in consecutive years. If the same area were to be cut year on year this would result in it not being suitable as habitat for Fisher's estuarine moth as there would be no provision of long grass for egg-laying during its flight season.

Ecological sensitivities to changes in access

Areas with hog's fennel and Fisher's estuarine moth are sensitive to changes in access, due to the threats of trampling and changes in management. Any area that is mown annually would become unsuitable habitat for the moth and therefore routing the coastal footpath through areas where hog's fennel grows that do not currently have a public right of way, would result in a removal of habitat for this rare and legally protected moth. Trampling caused through opening-up areas to regular access, even if they were not mown annually, would bring with it concerns. This is of particular concern in areas currently not open to public access, such as the seawall between Beaumont Quay and Bramble Island where significant quantities of hog's fennel occur. The moth's life cycle is above ground during the egg (September to April), early larval (April to July) and adult (September to late October) stages and would be vulnerable to trampling as a result of access.

The coast path will require annual mowing and will also result in localised trampling of habitat. As explained above, the islands where the moth is found do not have public access and nor does one significant stretch of sea wall between the Beaumont Quay and Bramble Island. Therefore the addition of a path into areas where hog's fennel grows in these localities would result in the removal of suitable habitat for the moth. On the mainland, there are also considerations about the impact of any spreading room to the landward side of the sea wall on populations of hog's fennel and Fisher's estuarine moth that occur there.

Conclusion: Due to the ecological sensitivity of Fisher's estuarine moth to changes in access, the potential interactions with proposals for the England Coast Path will be considered further as part of this appraisal.

3.7 Vascular plant assemblage (SSSI feature)

Composition of feature group - where applicable
The Vascular plant assemblage (VPA) at Hamford Water includes the following eight species: hog's fennel <i>Peucedanum officinale</i> ; slender hare's-ear <i>Bupleurum tenuissimum</i> ; golden samphire <i>Inula crithmoides</i> ; lax-flowered sea-lavender <i>Limonium humile</i> ; perennial glasswort <i>Salicornia perennis</i> ; small cord-grass <i>Spartina maritima</i> ; shrubby sea-blite <i>Suaeda vera</i> and dwarf eel-grass <i>Zostera noltii</i> .
Current conservation status and use of the site
<p>The eight species listed within the SSSI vascular plant assemblage at Hamford Water are all nationally scarce or nationally rare species found on intertidal habitats or coastal grassland. Hog's fennel and slender hare's-ear are both grassland species found above the saltmarsh line on and behind the sea wall. Shrubby sea-blite and Golden samphire are species of mid-upper saltmarsh and lax-flowered sea lavender, perennial glasswort and small cord-grass are species of mid-low saltmarsh. Dwarf eel-grass is found within intertidal mudflats</p> <p>The distribution of hog's fennel is well understood at Hamford Water (see Section 3.6) and largely follows the boundary of Hamford Water SAC. It is found on grassland areas on islands, along the sea wall (on the seaward slope, crest, landward slope and folding) on the mainland, along the edges of borrowdykes and ditches, within field margins and also on areas of grassland on farmland (where it has been established as part of a conservation project for Fisher's estuarine moth). The distribution of slender hare's-ear is less well understood at Hamford Water, but it particularly favours areas of open vegetation and where there's regular disturbance along and behind the sea wall.</p> <p>Shrubby sea-blite and golden samphire frequently occur along the seaward side of the sea wall at Hamford Water within the driftline saltmarsh zones, on the mainland and on islands around the site. The plants are also found within the vegetated shingle to saltmarsh transition zones at Stone Point, Stone Marsh, Pewit Island and Irlams beach and within mid-upper saltmarsh communities around the site. The distribution of perennial glasswort, small cord grass and dwarf eel grass is not well understood at the site, other than to say that they have the potential to occur anywhere there's suitable habitat.</p>
Ecological sensitivities to changes in access
<p>Hog's fennel and its associated rare insect fauna, both Fisher's estuarine moth (see Section 3.6) and the rare British Red Data Book listed micro-moth <i>Agonopterix putridella</i> (Ringwood, 2004), would be susceptible to trampling and changes in management as a consequence of additional access in areas where the plant grows. Slender hare's-ear could potentially benefit from light to moderate poaching as a consequence of increased pedestrian access along sea walls and foldings, but the benefits of this would need to be assessed along with any changes in management as a consequence of changes in access.</p> <p>Herbaceous saltmarsh plants, including golden samphire, lax-flowered sea lavender, perennial glasswort and small cord grass would be sensitive to trampling and poaching as a consequence of any access to areas of saltmarsh. Shrubby sea-blite is a woody perennial and would be less sensitive to trampling than the more sensitive herbaceous plants, but would potentially be sensitive to changes in management. The fact that both golden samphire and shrubby sea-blite occur within the upper saltmarsh and strandline communities along the seaward side of the sea wall make them more likely to be on or in the vicinity of any new access route and therefore potentially more susceptible to the impacts of changes in access. As dwarf eel-grass inhabits areas of intertidal mudflat, it is unlikely to be impacted by any changes to terrestrial</p>

access.

Conclusion: Due to the ecological sensitivity of the vascular plant assemblage to changes in access, the potential interactions with proposals for the England Coast Path will be considered further as part of this appraisal.

3.8 Herbaceous Saltmarsh habitat (SSSI feature)

Composition of feature group - where applicable

Saltmarsh communities: SM13a - *Puccinellia maritima* (common saltmarsh grass) saltmarsh, *Puccinellia maritima* dominant sub-community and SM14 - *Atriplex portulacoides* (sea purslane) saltmarsh.

Overwintering and breeding waterbirds.

Current conservation status and use of the site

The main saltmarsh types around Hamford Water, as elsewhere on the Essex coast, are NVC communities SM13 and SM14, dominated by common saltmarsh grass *Puccinellia maritima* and sea purslane *Atriplex portulacoides* respectively. These two communities, which often occur as mosaics, predominate across the low-mid to mid-upper saltmarsh zones and are notified features of Hamford Water SSSI. The SSSI objectives are to maintain the saltmarsh extent, condition and range of zonation at the site. Typical species of the pioneer zone are glasswort spp. and annual sea-blite; the mid to upper zones common saltmarsh grass, sea lavender and sea aster; and in the mid to upper zone golden samphire and sea purslane.

The importance of saltmarsh is a combination of its flood and coastal defence function and the assemblage of plants and animals it supports (Adnitt *et al.*, 2007). Saltmarshes are dynamic features which naturally experience change in extent, morphology and floristic composition over time. Saltmarsh habitat is declining around the coast of Essex as a result of coastal squeeze, which is a process where sea level rise is causing erosion but the saltmarsh cannot shift landward because of the presence of man-made coastal defences.

The vegetation of saltmarshes is composed of specialist salt tolerant communities. In addition to the specialist vegetation interest saltmarshes support large numbers of both rare and abundant invertebrates, which are a mixture of marine, freshwater and terrestrial species. Saltmarshes are an extremely important habitat for a range of waterbirds that use the habitat for a variety of purposes, including roosting, feeding, moulting and breeding (Adnitt *et al.*, 2007). Throughout the year bird numbers fluctuate, with the greatest density of birds using saltmarsh during the passage and winter months. The upper levels of saltmarsh are also important habitat for a number of bird species during the breeding season. Indeed approximately 50% of the UK's breeding population of redshank is supported by saltmarsh habitat.

At Hamford Water, saltmarsh is found directly adjacent or very close to the seaward base of the sea wall around the majority of the estuarine basin. The most significant areas of saltmarsh close to the sea wall are found between Walton Hall Marshes and Stone Point, the Walton Mere area, Garnham's Island, Pewit

<p>Island and the South Hall Creek area. There are also significant areas of saltmarsh around the offshore islands of Horsey Island and Skipper’s Island and the islands of Hedge-End Island, Honey Island and Three Corner Island are almost entirely saltmarsh habitat and mudflats.</p>
<p>Ecological sensitivities to changes in access</p>
<p>Public access to an area of saltmarsh can cause localised trampling and possible disturbance to nesting birds and wintering wildfowl and waders (Adnitt et al., 2007). Even small numbers of pedestrians (particularly dog walkers) can cause disturbance to nesting and roosting birds (Boorman, 2003). The effects of trampling include an increase in bare, poached mud and a shorter less species-rich sward, which often reverts towards pioneer annual species. The loss of vegetation cover may also exacerbate erosion.</p> <p>Saltmarsh is not currently accessible to the public at Hamford Water and any changes to this would bring with it concerns about damage to sensitive saltmarsh vegetation and disturbance to breeding and overwintering birds. The fact that significant areas of saltmarsh are in close proximity to the sea wall means that they are relatively accessible areas of the intertidal zone and therefore particularly vulnerable to changes in access. Some of the nationally scarce species that are part of the vascular plant assemblage at Hamford Water (see Section 3.5) occur within the mid-upper saltmarsh along the sea ward side of the sea wall and would be sensitive to damage from trampling. In addition these higher areas of the saltmarsh also support important roost sites for overwintering birds and habitat for breeding birds, such as redshank.</p> <p>Conclusion: Due to the ecological sensitivity of herbaceous saltmarsh habitat to changes in access, the potential interactions with proposals for the England Coast Path will be considered further as part of this appraisal.</p>

3.9 Coastal shingle and strandline community (SSSI feature)

<p>Composition of feature group - where applicable</p>
<p>SD2 – <i>Cakile maritima</i> (sea sandwort) – <i>Honkenya peploides</i> (sea rocket) strandline community Breeding little tern and ringed plover.</p>
<p>Current conservation status and use of the site</p>
<p>The NVC community SD2 is characterised by sea sandwort and sea rocket and is the characteristic pioneer vegetation of sand and fine shingle strandlines on flat or gently sloping tops of beaches (Rodwell, 2000). At Hamford Water the typical plant species found in this community are sea rocket (<i>Honkenya peploides</i>), sea holly (<i>Eryngium maritimum</i>), sea spurge (<i>Euphorbia paralias</i>), sea sandwort (<i>Honkenya peploides</i>), yellow-horned poppy (<i>Glaucium flavum</i>), marram grass (<i>Ammophila arenaria</i>), sand couch (<i>Elytrigia juncea</i>) and lyme grass (<i>Leymus arenarius</i>), several of these species are locally rare and vulnerable.</p> <p>The main areas of sand and fine shingle strandlines at Hamford Water are located between Pewit Island</p>

and Dovercourt, The Naze and Stone Point and on the north east corner of Horsey Island. The extent of this feature was enhanced by a shingle/sand recharge in the late 1990s in these locations. The recharge material was sourced from Harwich Harbour when the channel was dredged. Sand and fine shingle sediment is dynamic and linked to physical processes operating at the site. The habitat is subject to periodic and seasonal variation in distribution. In certain localities, especially at Stone Point, the shingle is topped by low retreating sand dunes.

The sand and fine shingle strandline community is not only important botanically, but also supports important breeding populations of little tern and ringed plover (see Sections 3.2 and 3.3), as well as other breeding birds including avocet and oystercatcher.

Ecological sensitivities to changes in access

The plant communities of coastal shingle are fragile and trampling caused by access on foot, and particularly by vehicles, has damaged many sites (JNCC, 2004). In areas with frequent footpath access the vegetation shows obvious signs of wear and the line of disturbance is clearly visible. The habitat is particularly vulnerable as it popular for recreational use, especially during the spring/summer months.

At Hamford Water, the area between The Naze and Stone Point and to the south of Dovercourt around South Hall Creek is particularly popular with dog walkers and beach users. Any increase in access is likely to exacerbate pressures on the sensitive plant communities and breeding birds, especially ringed plover (see Section 3.2).

Conclusion: Due to the ecological sensitivity of coastal shingle and sand strandline community to changes in access, the potential interactions with proposals for the England Coast Path will be considered further as part of this appraisal.

3.10 Seals

Composition of feature group

Common seal *Phoca vitulina* and grey seal *Halichoerus grypus*.

Current conservation status and use of the site

Common and grey seals are protected in UK waters by the Offshore Marine Conservation (Natural Habitats, & c.) Regulations 2007, Conservation of Habitats and Species Regulations 2010, Wildlife and Countryside Act 1981 and the Conservation of Seals Act 1970. Along the coast of Essex both grey and common seals are protected all year from being killed, injured or taken under the Conservation of Seals (England) Order 1999.

There are high numbers of common seal at Hamford Water. In summer 2016 there was an exceptionally high count of 350, but numbers do fluctuate and on average the peak count tends to be around 200 (Leon Woodrow pers comm.). In 2016 there was at least 45 common seal pups born and reared at the site. Grey

seals are present in much smaller numbers, with a peak count of about 15 in 2016, and generally just a few pups born at the site in December.

Seals can be found in all sub-tidal areas within Hamford Water, as well as hauling-out on mud flats along the edges of creeks. The main areas for hauling-out and pupping are the creeks around Garnham's Island, Bramble Island and New Island. Over the winter Stone Point is also a favoured hauling-out area.

Ecological sensitivities to changes in access

Whilst seals are foraging off shore they are unlikely to be sensitive to any changes in land based coastal access. Seals are, however, likely to be sensitive to changes in access that will cause disturbance to their favoured locations for hauling-out and pupping. Onshore pedestrian activity has been found to cause disturbance to pupping seals at distances of up to 150-200m, with most disturbance caused at distances of less than 100m (Brown and Prior, 1998; Osinga *et al.*, 2012). At Hamford Water the main areas for hauling-out and pupping (the creeks around Garnham's Island, Bramble Island and New Island) do not currently have any public pedestrian access within the vicinity.

Conclusion: Due to the possible ecological sensitivity of seals to changes in access, the potential interactions with proposals for the England Coast Path will be considered further as part of this appraisal.

3.11 Holland Haven Marshes SSSI

Composition of feature group

Parsley Water-dropwort *Oenanthe lachenalii* and Grey Club-rush *Schoenoplectus lacustris* ssp *tabernaemontanii* both scarce in Essex are frequent here. The nationally scarce Brackish Water-crowfoot *Ranunculus baudotti* and Divided Sedge *Carex divisia* can also be found here. Terrestrial invertebrates include a strong population of Roesel's Bush-cricket *Bombus muscorum* as well as the Brown Argus butterfly *Aricia agestis*. Hen Harrier and Short-eared Owl hunt over the marshes in winter, which also support several species of wildfowl in particular Wigeon and Teal. Near the sea wall is the major area in Essex for Purple Sandpipers. Skylark, Yellowhammer and Yellow Wagtail breed here in summer and Autumn and Spring migration sees Spotted Redshank, Whimbrel and Black-Tailed Godwit among other species visit the area.

Current conservation status and use of the site

Holland Haven Marshes is an area (208ha) of reclaimed estuarine saltmarsh and freshwater marsh situated between Holland-on-Sea and Frinton-on-Sea. The site is bisected by Holland Brook and its tributaries, from which an extensive ditch system radiates. The ditch network represents an outstanding example of a freshwater to brackish water transition intimated by the aquatic plant communities, which include a number of nationally and locally scarce species, The adjoining grasslands are of importance in their own right as well as acting as a buffer zone to the ditch system. Further interest is provided by the aquatic and terrestrial invertebrates and the birds which frequent the area, especially in winter and a viewpoint and interpretation is provided close to the PRoW to allow visitors to enjoy the wildlife features here.

Ecological sensitivities to changes in access

The proposed trail here will be aligned along a PROW which is currently well used. It is anticipated there will be a negligible change in patterns of access and visitor numbers. The trail will lie some distance from the core areas of the SSSI.

Conclusion: Due to the negligible change in access at this location interactions with proposals for the England Coast Path are ruled out and this SSSI will not be considered further as part of this appraisal.

3.12 Geological and geomorphological features

Current conservation status and use of the sites

There are four features on the Jaywick to Harwich stretch of the ECP which fall under this category. These are Clacton Cliffs and Foreshore SSSI Holland-on-Sea Cliffs SSSI, The Naze SSSI and Harwich Foreshore SSSI. These are considered below.

1. Clacton Cliffs and Foreshore SSSI

Clacton Cliffs and Foreshore SSSI is a 26.1 ha SSSI split into three sections at Jaywick (Section 1, Loin Point on the foreshore), Clacton Golf Course (Section 2) and at Clacton sea front (Clacton Pier Section 3), on the Promenade between Wash Lane and Clacton Pier). Our proposed route would pass through only one of these, section 3 at Clacton. This SSSI is in favourable condition (2012).

Description and Reasons for Notification:

Clacton Cliffs and Foreshore SSSI was notified in 1986. Foreshore and cliff exposures and excavations in the Clacton District have provided one of the most important Pleistocene interglacial deposits in Britain. The celebrated Clacton channel deposits are a sequence of freshwater and estuarine sediments occupying a channel cut into an earlier gravel accumulation and the underlying Tertiary London clay. They have yielded abundant molluscan and mammalian fossil remains, fossil plants and pollen, all of which indicate a Hoxnian interglacial age. The deposits also contain the type site of the internationally significant Clactonian Industry which, based on a crude working technique, is believed to be stratigraphically earlier than the Acheulian culture. The relationship between the Clacton Channel deposits and the other Pleistocene sediments of the area is poorly understood. There is need for further study of this critical site, which provides important comparisons, in a British context, with the Hoxne and Swanscombe.

2. Holland on Sea Cliff SSSI

Holland-on-Sea Cliff SSSI is a small 0.095ha SSSI. Our proposed route would pass adjacent to the SSSI rather than through it. This SSSI is in unfavourable recovering condition (2010).

Description and Reasons for Notification:

Holland on Sea Cliff SSSI was notified in 1992. Cliff exposures at Holland-on-Sea comprise an important stratigraphic site closely related to the diversion of the Thames. The latter event, of great significance to the geomorphological evolution of the London Basin was the result of blocking of the early Thames Valley across central Essex by the Anglian glaciation. At Holland, two gravels are exposed, the site representing the type locality of both The 'Lower Holland Gravel' is recognised as the final terrace aggradation by the Thames before its diversion here including a small but significant contribution from the contemporary River Medway, which has been traced across eastern Essex to its confluence with the Thames in this area. The Medway deposit, although with a proportion of glacial outwash material, A gravel of this type could only have been deposited while the Thames was blocked by ice and not reaching the lower part of its valley since the eventual diversion of the Thames re-routed it via London and the old Medway in the area of the modern Thames estuary. The events represented in the Holland section are of great significance in the reconstruction of the Pleistocene history of the Thames. As they can be precisely attributed to the Anglian glaciation, they provide a fixed point within the terrace sequence of the eastern London Basin and a means of correlation with sequences where the Anglian is represented elsewhere in southern Britain and on the continent. The Holland cliff section therefore represents a stratigraphic site of considerable Importance.

3. The Naze SSSI

The Naze SSSI is a 22 hectare site, notified for its geological features. It is currently in favourable condition.

The Naze is owned and managed by Tendring District Council, largely as an area of open grassland. The main interest of this site is in the excellent cliff exposures of the earliest (Waltonian) sub-division of the Pleistocene Red Crag, which is rich in marine Mollusca and other invertebrate fossils. This overlies older Tertiary sediment. This is the type of site for the earliest recognised stage of the British Pleistocene sequence, the Waltonian. The site provides unrivalled sections in the Waltonian Crag essential to studies of Pleistocene stratigraphy, particularly with relevance to the lower limit of that period.

The site yields abundant plant material from the Tertiary London Clay. Sections here in the A1 and A2 divisions of the formation offer a unique opportunity to study the flora in situ. This is the only locality to yield angiosperms preserved as carbonaceous compressions, invaluable for the study of small seed fossils. A key Tertiary palaeobotanical locality.

This is an 'exceptional' site where a diverse bird fauna has been preserved in small pockets within the London clay along with other Lower Eocene plant and animal debris. An avifauna thought to be of a similar age has been recorded from the Mo Clay of Denmark. A small parrot (*Psittaciformes*) and a tiny raptor (*Falconiformes*) have been identified, but material indicates the presence of several other species including members of the orders Procellariiformes, Gruiformes, Charadriiformes and Cuculiformes. Eocene Procellariiformes and Charadriiformes have not been recorded outside Great Britain. The site is of considerable importance in the study of bird evolution.

4. Harwich Foreshore SSSI

Harwich Foreshore SSSI is notified due to its yielding of the only fossil flora with certainty attributable to the lowest division of the Eocene London Clay and specimens are abundant.

Ecological sensitivities to changes in access

Likely interaction of the England Coast Path alignment at Clacton Cliffs and Foreshore SSSI

At Loin Point (section 1), coastal engineering works have resulted in sand accretion and beach stabilisation. The formation of pioneer dunes and the planting of marram grass have buried the channel deposits further under the beach. Any revealed exposures are only likely to exist at extreme low water on the SSSI boundary.

At Golf course (section 2), the site is in good condition. There have been no encroachments or earthworks since notification, and the general golf course management has meant that at least 90% of the area is still open with presumably intact deposits below ground.

At Clacton Pier (section 3), the deposits are protected beneath the beach or by the concrete apron of the sea defences or promenade. As such the potential for re-exposure of the Channel deposits remains limited. Due to the nature of the deposits lying buried below the beach (Loin Point) and ground (Golf Course) It is believed the proposed ECP alignment will have no effect on sections 1 and 2 of this SSSI. Section 1 would fall under coastal margin, section 2 will not. Our proposed ECP alignment passes through only one of the three SSSI sections (section 3 Clacton Pier). Again, due to the protection of the deposits underground or by concrete sea defences, it is anticipated that the ECP will have no interaction with the SSSI here.

Likely interaction of the England Coast Path alignment at Holland on Sea Cliff SSSI

Natural England's view on management of this SSSI suggest maintaining an open cliff face to maintain geological interest in the site by enabling natural processes to flow freely. Collection of geological specimens may be acceptable, if undertaken in a responsible manner. The SSSI would fall within the coastal margin and therefore users would be able to collect specimens, however this is not thought likely to have a significant impact.

It is thought that there will be no interaction with the ECP and Holland on Sea SSSI. The most recent SSSI condition assessment was in 2010. It is recommended to undertake a further assessment by 2020 which will identify any changes subsequent to the opening of the ECP.

Likely interaction of the England Coast Path alignment at The Naze SSSI

The cliffs at The Naze will form a part of the coastal margin here. These cliffs are rapidly eroding, in particular where the recently built sea defences end (designed to protect The Naze Tower). Erosion however is necessary to maintain fresh geological outcrops. Reducing the rate of erosion usually results in rock exposures becoming obscured by vegetation and rock debris. The area is very popular with visitors. A negligible change in use of the site is predicted as a consequence of the trail (and fossil collection is common and positively encouraged, when conducted in a responsible manner), therefore no interaction with the proposals for the England Coast Path is likely.

Likely interaction of the England Coast Path alignment at The Harwich Foreshore SSSI

The inclusion of this area within the coastal margin will not pose any risk of damage to the special interest. Use and access to the area will remain unchanged. As a consequence of this there is no potential for interaction at this location.

Conclusion: No interactions with proposals for the England Coast Path are likely with all four of these SSSIs and therefore these will not be considered further as part of this appraisal.

3.13 Essex Estuaries SAC

Composition of feature group

The Essex Estuaries SAC is a typical, undeveloped, coastal plain estuarine system with associated open coast mudflats and sandbanks. The site comprises the major estuaries of the Colne, Blackwater, Crouch and Roach rivers and is important as an extensive area of contiguous estuarine habitat. The SAC feature H1130 Estuaries encompasses the independent mosaic of subtidal and intertidal habitats, which are closely associated with surrounding terrestrial habitats. Several of the component habitats – such as H1110 subtidal sandbanks, H1140 intertidal mudflats and sandflats, and H1330 Atlantic salt meadows – are Annex I habitat types and interest features of the Essex Estuaries SAC in their own right.

Ecological sensitivities to changes in access

Conclusion: The Estuaries SAC feature includes some intertidal habitat types that are potentially sensitive to land-based coastal access. However, their sensitive components are all interest features in their own right and so are considered separately (see sections 3.1 to 3.9).

3.14 Native oyster and native oyster beds

Composition of feature group

These features are set to recover under the Blackwater, Crouch, Roach and Colne Estuaries Marine Conservation Zone MCZ i.e. they're currently in unfavourable condition and need action to make sure they recover.

Natural England is delivering a management plan for these features with many stakeholders including the Kent & Essex Inshore Fisheries and Conservation Authority (IFCA). Native oysters are found sporadically throughout the MCZ, and some points are recorded relatively close to the proposed route. However, it is likely that these points recorded are individual oysters, as native oysters and beds are found in 2 to 5m of water depth and therefore it is unlikely that native oysters could live for very long outside of the intertidal area

Ecological sensitivities to changes in access

Native oysters need to be in an area where they are at the very least partially submerged regularly to survive.

Conclusion: Because the native oyster's typical habitat is inaccessible to walkers we can therefore rule out any potential impact of the proposed route on native oysters or native oyster beds in the MCZ. References: (Jackson 2007) and (MCZ conservation advice 2017).

3.15 Subtidal habitats

Composition of feature group

The following subtidal habitats are MCZ features (Blackwater, Crouch, Roach and Colne MCZ)

- subtidal course sediment
- subtidal mixed sediments
- subtidal biogenic reef.

Ecological sensitivities to changes in access

Found where we are not proposing any changes in access.

Conclusion: Due to the geographic separation of the feature and the alignment of the England Coast Path, the impacts of access are ruled out from further consideration in this appraisal.

3.16 The Outer Thames Estuary SPA

Composition of feature group

The Outer Thames Estuary SPA lies along the east coast of England, predominantly in the coastal waters of the southern North Sea between the Thames Estuary and the east Norfolk coast and covers an area of c. 3,800km². This SPA is classified for the protection of the largest aggregation of wintering red-throated diver (*Gavia stellata*) in the UK, an estimated population of 6,466 individuals, which is 38% of the wintering population of Great Britain.

Water depth within the site ranges from mean low water to 20-50m depth along the seaward boundary. Formal consultation on the existing Outer Thames Estuary SPA proposed extensions closed in July 2016 and would afford protection for little tern and common tern foraging areas, enhancing the protection already afforded to their feeding and nesting areas in the adjacent coastal SPAs.

Ecological sensitivities to changes in access

Found where we are not proposing any changes in access.

Conclusion: Due to the geographic separation of the feature and the alignment of the England Coast Path, the impacts of access are ruled out from further consideration in this appraisal.

4. Potential for interaction

In this part of the document we identify places where sensitive features are present *and* whether there could, or will not, be an interaction with proposed changes in access.

4.1 Jaywick to Holland-on-Sea

Outline of changes in access
<p>The majority of this section of the route will follow existing PRoWs (see Section 2.1.1 for a more detailed description). No new walked route is being created.</p> <p>Landward margin will be to the edge of the trail. Currently, the foreshore is accessible and will fall within the margin. Seaward spreading room along this section will be to the mean low water mark.</p> <p>This area is currently accessible to the public and there will be modest trail improvements such as signage, waymarking and interpretation boards. No rollback is proposed along this section.</p>
Potential for interaction (or lack of it)
<p>No interaction is anticipated on the proposed path or within the margin. The trail will follow existing public footpaths and seafront promenade.</p>

4.2 Holland-on-Sea to Walton-on-the-Naze

Outline of changes in access
<p>The majority of this section of the route will generally follow existing PRoWs (see Section 2.1.2 for a more detailed description).</p> <p>Landward margin will generally be to the edge of the trail. The trail will be aligned along the top of the concrete sea wall between Holland-on-Sea and Frinton-on-Sea providing new access rights here.</p> <p>Currently, the foreshore is accessible and will fall within the margin. Seaward spreading room along this section will be to the mean low water mark.</p> <p>This area is currently accessible to the public and there will be modest trail improvements such as signage, waymarking and interpretation boards. No rollback is proposed along this section.</p>
Potential for interaction (or lack of it)
<p>No interaction is anticipated on the proposed path or within the margin. The trail will follow existing public footpaths and seafront promenade.</p>

4.3 Walton-on-the-Naze to Walton Mere

Outline of changes in access

The majority of this section uses existing walked routes including public rights of way (see Section 2.1.3 for a more detailed description). In places where use of the path is permissive, a right of access will be secured. There is no significant margin landward of the trail. Currently, the foreshore is accessible and will fall within the margin. Seaward spreading room along this section will generally be to the mean low water mark. A Section 25A restriction will apply to the saltmarsh and mudflats.

Rollback will be proposed from Sunny Point to the north-easternmost point of The Naze. This area is currently accessible to the public and there is no potential for additional interaction with any sensitive features.

There will be modest trail improvements such as signage, waymarking and interpretation boards.

Potential for interaction (or lack of it)

No additional interaction is anticipated on the proposed path, as it follows the existing public footpath and permissive paths, away from sensitive features.

Much of the margin will have access excluded from it by direction under S25A.

Other priority breeding birds (Schedule 1; Birds of Conservation Concern)

At Walton Hall Marshes, there are breeding lapwing and avocet, and the wet grassland area of Walton Marshes provides ideal habitat for yellow wagtail. Because this area is landward of the trail and outside the coastal margin, no interaction is anticipated.

Herbaceous saltmarsh habitat (SSSI feature)

The most significant areas of saltmarsh close to the sea wall are found between Walton Hall Marshes and Stone Point, as well as the Walton Mere area. There is a high risk of trampling, as saltmarsh species are very sensitive (see Section 3.7). There will be a S25A exclusion of coastal access rights on the saltmarsh and intertidal mudflat, which will also protect herbaceous saltmarsh habitat therefore no interaction is anticipated.

There is potential for interaction with sensitive features within the coastal margin around Stone Point, (see Section 5.1).

4.4 Walton Mere to Beaumont Quay

Outline of changes in access

The majority of this section uses existing walked routes including public rights of way although some new access is to be created (see Section 2.1.4 for a more detailed description). Where use of the path is permissive, a right of access will be secured. There is no significant margin landward of the trail. Currently, the foreshore is accessible and will fall within the margin. Seaward spreading room along this section will generally be to the mean low water mark or to the base of the sea wall.

A Section 25A restriction will apply to all saltmarsh and mudflats.

A Section 26 nature conservation restriction will apply to land at Coles Lane near Walton-on-the-Naze.

A Section 26 restriction will apply to Horsey Island and to the causeway (Island Road) which connects it to the mainland.

There will be modest trail improvements such as signage, waymarking and interpretation boards.

No rollback is proposed along this subsection.

Potential for interaction (or lack of it)

No additional interaction is anticipated on the proposed path, where it follows the existing public footpath along the sea wall and permissive paths, away from sensitive features.

Much of the margin will have access excluded from it by direction under S25A.

There is potential for interaction on this section where new access will be created such as in the area south of Titchmarsh Marina (see Section 5.2).

There is also the potential for interaction with some ecological sensitivities listed in Section 3 of this report and where the proposed route passes through designated sites (see Section 5.2).

Skipper's Island will not be in the margin as it is surrounded by a S25A exclusion and has no practical means of access to it.

Most of the margin will have access excluded from it by direction under S25A and S26. Some of the remaining margin (such as arable land) will be automatically excepted from the coastal access rights. There is potential for interaction within the coastal margin on Horsey Island where a S26 Restriction will be applied (See Section 5.2).

4.5 Beaumont Quay to Dovercourt

Outline of changes in access

The majority of this section of the route used existing PRoW (see Section 2.1.5 for a more detailed description). New access is being created between the PRoW north of Beaumont Quay and Moze Cross as well as between the PRoW near Dock Lane and opposite Little Oakley Hall. There will be modest trail improvements such as signage, waymarking and interpretation boards. Some small bridges will be required over ditches and a new culvert at Moze Cross.

The ECP will follow the line of the existing public footpath or permissive footpath along the seawall on the mainland around this section of Hamford Water. Where there is a gap in the public footpath along the seawall between Beaumont Quay and Bramble Island, the footpath will lead inland along existing public footpaths and two new sections of path.

The first new section of path is 1.8 km long, linking the existing footpath at Beaumont with another near Moze Cross and a second new section of path is 1km long, linking Dock Lane and a bridleway opposite Little Oakley Hall.

The coastal margin from the proposed path will extend to the mean low watermark. The saltmarsh and mudflat are unsuitable for general public access and will have coastal access rights excluded by direction under S25A.

No rollback is proposed along this subsection.

Potential for interaction (or lack of it)

No interaction is anticipated on the proposed line of the ECP, where it follows the existing public footpath along the seawall, or where it will be aligned on existing public footpaths. No interaction is anticipated along the two new sections of access inland, away from sensitive features.

Most of the margin will have access excluded from it under S25A. There is potential for interaction within the coastal margin between Beaumont Quay and Bramble Island (see Section 5.3).

There are designated sites along this section on and close to the seawall as shown on the map above. These are Hamford Water SSSI, Hamford Water RAMSAR, Hamford Water SPA and areas of SAC (designated due to the presence of significant populations of Fisher's estuarine moth). There is the potential for interaction here (see Section 5.3).

Seaward spreading room along this section will generally be to the edge of the trail along the inland sections and to the edge of the crest of the sea wall elsewhere. A Section 25A restriction will apply to the saltmarsh and flats throughout Hamford Water NNR.

4.6 Dovercourt to Harwich

Outline of changes in access

The majority of this section of the route uses existing PRow (see Section 2.1.6 for a more detailed description). No new access is being created. There will be modest trail improvements such as signage, waymarking and interpretation boards.

The proposed route will follow the line of the existing public footpath or seaside promenade for the entirety of this 3.3 km section. The proposed route is already a popular walked route and tourist attraction, with activities such as walking and cycling being common. Parts of the section also form National Cycle Route 1 and the Essex Way. A number of beach huts line the route, particularly in Dovercourt.

The coastal margin from the proposed path to mean low water will include the beach. Landward margin will be to the edge of the promenade.

Between Beacon Cliffs and the disused lighthouse near Harbour Crescent, the intertidal area that will form part of the seaward coastal margin is the Harwich Foreshore SSSI. There are no other designated areas along this subsection.

Seaward spreading room along this section will generally be to the mean low water mark.

No rollback is proposed along this subsection.

Potential for interaction (or lack of it)

For the remaining parts of this section of proposed route, the long history of high levels of public access on what is a traditional seaside promenade type thoroughfare, mean that the proposed route will have no impact on the area and as a consequence, there is no potential for interaction.

5. Assessment of any possible adverse impacts and mitigation measures

In this part of the document we look in more detail at sections of coast where there could be an interaction between the access proposal and sensitive features. We discuss possible risks to sensitive features and explain how these have shaped the design of our proposals and/or led to the inclusion of any specific mitigation measures.

5.1 The Naze, located between Walton-on-the-Naze to Walton Mere (Chapter 3)

5.1.1 Environmental sensitivity

The sensitive features / feature groups listed below occur in this subsection, along with the time when they may be present and their sensitivities. The nature of the possible interaction with these features is examined in detail in section 5.1.5.

In the vicinity of Stone Point there are the following features of ecological sensitivity:

- **Overwintering and passage waterbirds (SPA sensitive to disturbance in/near feeding and roosting areas, which include all habitats seaward of the Trail, particular during the core overwintering period of November to February)**
- **Vascular Plant Assemblage (sensitive to trampling and changes in management – found on saltmarsh and sea wall area)**
- **Seals (possible disturbance at favoured haul-out locations).**

Between the proposed trail and Stone Point there are:

- **Breeding ringed plover (SSSI feature - sensitive to disturbance during breeding period April to August in area of sand/shingle habitat between The Naze and Stone Point)**
- **Breeding little tern (SSSI and SPA feature - sensitive to disturbance during breeding period May to August in area of sand/shingle habitat between The Naze and Stone Point)**
- **Coastal shingle and strandline community (SSSI feature - sensitive to trampling)**
- **Herbaceous saltmarsh habitat (SSSI feature – sensitive to trampling).**

(See map viii below).

Map viii: Main features at The Naze



5.1.2 Current access provisions and use of site for recreation

The Naze country park belongs to Tendring District Council. It is a popular visitor destination for walkers, families, and naturalists alike. The area around the tower is a particularly popular visitor destination. There is a large car park and facilities such as toilets and three cafes (summer) as well as the recently opened Essex Wildlife Trust visitor centre. From the open grassy area to the area of scrub adjacent to the John Weston Nature Reserve the area is less well used though still popular. The beach is also a popular visitor destination.

The northern and western sections of The Naze are more remote and there are fewer visitors. Permissive access has historically been granted by the landowner, which means people can currently walk around the whole of The Naze peninsular. The beach leading to Stone Point is used by walkers. During summer months, the warden places signs on the beach and cordons-off certain areas asking walkers to avoid areas of nesting ringed plover and little terns.

5.1.3 Access proposal

The England Coast Path logo will be added to signage at appropriate locations and some new waymarking and interpretation signs will also be added along the path. No major infrastructural improvements will be required.

Landward spreading room

- Width of path within Walton-on-the-Naze
- To crest of seawall along northern and western parts of The Naze.

Seaward spreading room

- All land seaward of the trail will have Coastal Access rights, by default unless excepted or a restriction of exclusion is applied.

Section 25A restriction

- A Section 25A exclusion will apply to all saltmarsh and mudflat on this section (see map E in The Overview).

Excepted land

- None on this section.

Roll-back

- Roll-back will apply to the section of the trail close to the cliffs.

5.1.4 Predicted change in use of site for recreation

A small increase in the use of the trail.

A negligible change in the use of the margin.

There are many visitor facilities in the immediate vicinity of Walton and The Naze country park, and the introduction of the England Coast Path will raise the area's profile. We therefore expect a small increase in use of the trail here.

Permissive access will be formalised on the northern and western side of The Naze peninsula with good

views across Walton Channel and we therefore expect a small increase in use of the trail here.

We expect a negligible change to the *de facto* level of use of the margin (beaches) because these areas are already used by the public.

5.1.5 Possible adverse impacts to sensitive features

In this section we consider details of the access proposal and the predicted change in use described in sections 5.1.3 and 5.1.4, in order to assess the likelihood of possible adverse impacts on the sensitive features or feature groups.

Overwintering and passage waterbirds (disturbance in/near feeding and roosting areas, which include all habitats seaward of the Trail. Sensitivity heightened in core winter period November to February)

There is a high tide roost site at Stone Point with oystercatcher, gadwall, shoveler, dunlin and grey plover, potentially vulnerable to disturbance from access.

The trail avoids the area and so the access improvements we propose will steer people away from the roost site.

The roost site is within the margin, located at least two kilometres away from the trail. Due to its remote location, current access levels are low and we don't anticipate this to change significantly as a result of our proposals.

Breeding ringed plover (SSSI feature) and breeding little tern (SPA and SSSI feature)

Breeding ringed plover are found along the beach of Stone Point. The pairs are located within areas of open sand/shingle which is ideal habitat (see Section 3.2).

Up to 2004 little terns were recorded nesting on the beach at Stone Point. Little terns nested again in the 2017 breeding season.

At Stone Point the site warden erects signage at the main access points during the main bird breeding season (between 1 May and 1 August) to advise people to keep dogs under control and to walk below the high tide line, away from areas of suitable habitat where ringed plover and little terns could be nesting (Leon Woodrow pers comm.). Signs are also erected along the beach and sensitive areas are cordoned-off to advise people to keep away from the main nesting localities. The warden reports that the majority of people using the area follow the advice on the signage.

The trail avoids the nesting areas and so the access improvements we propose will steer people away from the site which is located within the margin away from the trail. Due to its remote location, current access levels are low and we don't anticipate this to change as a result of our proposals.

Seals

Stone Point is a favoured winter hauling-out area for seals which can be vulnerable to disturbance from onshore pedestrian access use. The trail avoids the haul out areas and so the access improvements we propose will steer people away from the site which is located within the margin away from the trail. Due to its remote location, current access levels are low and we don't anticipate this to change as a result of our proposals.

**Coastal shingle and strandline community (SSSI feature), Herbaceous saltmarsh habitat (SSSI feature)
Vascular Plant Assemblage (SSSI feature)**

One of the main areas of vegetated sand and fine shingle strandlines at Hamford Water is located between The Naze and Stone Point. Also, shrubby sea-blite and golden samphire are found within the vegetated shingle to saltmarsh transition zones at Stone Point and Stone Marsh. (*The distribution of perennial glasswort, small cord grass and dwarf eel grass is not well understood, other than to say that they have the potential to occur anywhere where there's suitable habitat*).

These species of plants are subject to a risk of trampling (see section 3.6). However, the trail avoids these areas of habitat and so the access improvements we propose will steer people away from it. The most significant area of saltmarsh is found between The Naze and Stone Point and around the northern area of Walton Hall Marshes.

All salt marsh and mudflat on this section of trail will be subject to a Section 25A restriction. We anticipate that this will be sufficient to protect saltmarsh and mudflat habitat and associated vegetation from trampling.

The area as a whole is fairly remote, and we anticipate a negligible increase in access to the margin with no discernible change to the pattern of use. We anticipate no significant impact on these features as a consequence of our proposals.

5.1.6 Any mitigation measures included in the access proposal and how they address the possible risks

The information board beside the trail at its closest proximity to Stone Point will be replaced. The sign will explain the importance of wildlife and shoreline vegetation and advise walkers of breeding ringed plover and little terns and the behaviour needed to avoid disturbing the nest sites. This will include asking people to keep their dogs under effective control and not to access cordoned-off areas during the breeding season.

5.1.7 Conclusion

We have fully considered the environmental sensitivities along this section with the current and predicted access levels. We anticipate a small increase in use where the proposed path will be aligned along existing paths, and a negligible increase in use within the margin.

The trail is aligned away from the most sensitive features of the roost site for waders and waterbirds and the nesting sites for ringed plover and little terns, which are located within the margin.

To reinforce the existing management we will replace the sign next to the trail to encourage responsible behaviour, raise awareness of sensitive features and help to reduce any impacts on them.

Within the margin there will be a S25A exclusion of coastal access rights on the saltmarsh and intertidal mudflat, which will also help to protect wintering and passage birds, the herbaceous saltmarsh habitat and species of the Vascular Plant Assemblage that are found on saltmarsh. The Section 25A exclusions have been applied for health and safety reasons rather than to protect the sensitive features of the protected sites. These exclusions are, however, very important in protecting sensitive features, including passage and wintering waterbirds, saltmarsh habitat and rare plant species, from possible damage and/or disturbance. If in the future there is a proposal to remove or relax the Section 25A exclusions, then an appraisal of the effects of those changes on sensitive features would be essential.

In taking account of the proposed margin's relatively remote nature, coupled with the existing management described above, we have concluded that this proposal addresses the concerns identified about likely changes in access.

5.2 Walton Mere to Beaumont Quay

5.2.1 Environmental sensitivity

The sensitive features / feature groups listed below occur in this subsection, along with the time when they may be present and their sensitivities. The nature of the possible interaction with these features is examined in detail in section 5.2.5.

- **Overwintering and passage waterbirds (disturbance in/near feeding and roosting areas), which include all habitats seaward of the Trail and, for some species, grazing marsh and arable fields inland of it; August to March/April, sensitivity heightened in core winter period November to February)**
- **Breeding ringed plover (SSSI feature - sensitive to disturbance during breeding period April to August in area of sand/shingle habitat at Horsey Island)**
- **Breeding little tern (SPA and SSSI feature - sensitive to disturbance during breeding period May to August in area of sand/shingle habitat at Horsey Island)**
- **Fisher's estuarine moth (SAC feature – sensitive to trampling damage and changes in management where it is found along the sea wall and folding on the mainland and on Skipper's Island and Horsey Island)**
- **Vascular plant assemblage (SSSI feature - sensitive to trampling and changes in management – found on saltmarsh and sea wall area)**
- **Herbaceous saltmarsh habitat (SSSI feature – sensitive to trampling)**
- **Coastal shingle and strandline community (SSSI feature – sensitive to trampling)**
- **Seals (sensitive to disturbance at favoured haul-out locations).**

The nature of the possible interaction with these features are examined in detail in section 5.2.5 below.

5.2.2 Current access provisions and use of site for recreation

The areas of PRow around Walton Mere are currently heavily used by local people. Dog walking is a popular activity. The urban areas of Walton-on-the-Naze are also busy as is the footway along the Kirby Road. Between the Kirby Road and Island Lane there is currently no public access.

Between Island Lane and Beaumont Quay at the end of this subsection, there is an existing public footpath on the sea wall. Due to the relatively remote nature of this part of the route and lack of visitor attractions or car parking, the footpath is lightly used, particularly in winter. There are few footpaths leading to the sea wall from surrounding villages which contributes to the tranquil nature of the area. There is no public access to the Hedge End Island or the privately owned Horsey Island or upon the causeway leading to it. There is no public access to Skipper's Island (owned by the Essex Wildlife Trust).

5.2.3 Access proposal

The England Coast Path logo will be added to signage at appropriate locations and some new waymarking and interpretation signs will also be added along the path. Some scrub clearance and minor infrastructural improvements will be required.

Approximately 4km of new access will be created between Kirby Road and Island Lane.

Landward spreading room

- Edge of path within Walton-on-the-Naze
- Edge of path between Rigdon's Lane and Island Lane
- Either to the edge of the path or crest of the seawall between Island Lane and Beaumont Quay.

Seaward spreading room

- All land seaward of the trail will have Coastal Access rights, by default unless excepted or a restriction of exclusion is applied.

Section 25A restriction

- A Section 25A exclusion will apply to all saltmarsh and mudflat on this section (see maps E, F and G in The Overview).

Nature conservation 26(3)(a) restriction

- A nature conservation 26(3)(a) restriction will apply to the fields south of Titchmarsh Marina (see map D in The Overview)
- A nature conservation 26(3)(a) restriction will apply to Horsey Island and the causeway (Island Road) leading to it (see map F in The Overview).

Excepted land

- Titchmarsh Marina. Park or garden, dockyard and airport (helipad for the marina).

Roll-back

- No roll-back will apply to the section of the trail.

5.2.4 Predicted change in use of site for recreation

A small increase in use of the trail.

A negligible change in use of the margin.

A small increase in use is predicted within the Walton-on-the-Naze urban fringe parts of this subsection including next to Walton Mere where there is a new housing development. This is because there are good visitor facilities in Walton-on-the-Naze and the introduction of the England Coast Path will raise the area's profile.

Where new access is to be provided between the Kirby Road, Walton-on-the-Naze and Island Lane there will naturally be an increase in use. The increase will however be lower where a short section of permissive access currently exists near Island Lane.

Between Island Lane and Beaumont Quay a small increase in use is predicted. This is because this section is relatively remote and there are few inter-linking paths from surrounding settlements and parking is limited.

We anticipate a negligible change to the *de facto* level of use of the margin. There are few beach areas and a Section 25A restriction will be applied on all salt marsh and mudflats on this section.

5.2.5 Possible adverse impacts to sensitive features

In this section we consider details of the access proposal and the predicted change in use described in sections 5.2.3 and 5.2.4, in order to assess the likelihood of possible adverse impacts on the sensitive features or feature groups.

Overwintering and passage waterbirds (disturbance in/near feeding and roosting areas, which include all habitats seaward of the Trail and, for some species, grazing marsh and arable fields inland of it; August to March, sensitivity heightened in core winter period November to February)

Section 3.1 described in detail the key threats posed to overwintering and passage waterbirds and the distances involved.

There are five high tide roosts along this section of trail (see figure 7), and the salt marsh and mud flats provide important habitat for a wide range of over-wintering and passage birds. The grazing marsh near Coles Lane, Walton-on-the-Naze is important habitat for over-wintering brent geese.

The five high tide roost sites (important for curlew, teal, brent geese, wigeon, oystercatcher, knot, avocet, lapwing, golden plover, dunlin, Shoveler, gadwall and grey plover) are located on mudflat and salt marsh, all land that will be subject to a Section 25A restriction. The high tide roost on Horsey Island will be subject to a Section 26 nature conservation restriction. These restrictions, combined with the fact that the roosts are some distance from the proposed trail, we anticipate will be sufficient to rule out any significant interaction with these features. A Section 26 nature conservation restriction will be applied to the grazing marsh at Coles Lane, Walton-on-the-Naze preventing access. This we anticipate will be sufficient to rule out any interaction with the relevant features.

There is currently no public access permitted on the islands within this section. Skipper's Island is owned by EWT And Horsey Island and Hedge End Island are both privately owned.

Breeding ringed plover (SSSI feature) and breeding little tern (SPA and SSSI feature)

Breeding ringed plover and little terns are found on Horsey Island. With its suitable habitat and lack of public access, Horsey island is the main breeding location within Hamford Water for the little tern and also supports good numbers of breeding ringed plover. Both species are located within areas of open sand/shingle habitat on the island.

The trail avoids the nesting areas completely and so the access improvements we propose will steer people away from the site. Horsey Island (and the causeway leading to it) will also be subject to a year round Section 26 nature conservation restriction. We therefore anticipate that our proposals will lead to no interaction with these features.

Fisher's estuarine moth (SAC feature)

The distribution of suitable habitat for Fisher's estuarine moth within Hamford Water SSSI follows the Hamford Water SAC boundary (see map C). The main areas for the moth within this subsection are Skipper's Island, Horsey Island and stretches of sea wall on the mainland, especially between Batts Hall and the Beaumont Quay.

The islands do not have public access, but other areas along the sea wall inhabited by the moth in this subsection do have a public right of way along the crest of the sea wall and this is cut at least annually by Essex County Council to maintain the footpath. This annual cut results in the crest of sea wall in these locations

not being suitable habitat for Fisher's estuarine moth. This management has been in place as long as the public rights of way and it is accepted that these areas do not provide habitat for the moth.

We anticipate that a combination of continued sympathetic mowing of the trail and a likely small increase in use on sections of sea wall where the moth is found will be sufficient to protect its habitat. A Section 26 restriction on Horsey Island will prevent coastal access rights from applying here and Skipper's Island will not form a part of the margin. We therefore anticipate no significant impact on this feature.

Vascular plant assemblage (SSSI feature), herbaceous saltmarsh habitat (SSSI feature) and coastal shingle and strandline community (SSSI feature)

The eight species listed within the SSSI vascular plant assemblage at Hamford Water are all nationally scarce or nationally rare species found on intertidal habitats or coastal grassland (See Section 3.7). These species are subject to a risk of trampling.

The most significant areas of saltmarsh close to the sea wall are found around the offshore islands of Horsey Island and Skipper's Island. The islands of Hedge-End Island, Honey Island and Three Corner Island are almost entirely saltmarsh habitat and mudflats. (There is a risk of trampling as saltmarsh species are sensitive).

Coastal shingle and strandline community features are found at Horsey Island which has no public access. The potential risk of damage to this habitat as a result of trampling is high.

We anticipate that there will be no likely interaction with these features for the following reasons:

- Fisher's estuarine moth - as stated above continued sympathetic mowing of the trail and just a likely small increase in use on sections of sea wall, as well as no public access to Skipper's Island and Horsey Island, will be sufficient to protect its habitat
- All salt marsh and mudflat on this section of trail will be subject to a Section 25A restriction. We anticipate that this will be sufficient to protect saltmarsh and mudflat habitat and associated vegetation from trampling.
- The most important area of coastal shingle and strandline community features are on Horsey Island which will be subject to a Section 26 nature conservation restriction. We anticipate that this will be sufficient to protect this feature.

Seals

Seals are likely to be sensitive to changes in access that will cause disturbance to their favoured locations for hauling-out and pupping (see Section 3.10). Within this subsection, seals can sometimes be seen on mudflats within 200m of the proposed route.

The parts of this section where seals can sometimes be seen is already a PRow. Due to its relatively remote location, current use levels are low and we anticipate just a small increase in use of the trail here. We therefore feel that the risk of increased disturbance to seals as a consequence of our proposals to be low and likely interaction with this feature is ruled out.

5.2.6 Any mitigation measures included in the access proposal to address possible impacts

Lockable gates will be installed to prevent access to the land subject to a Section 26 nature conservation restriction at Coles Lane, Walton-on-the-Naze.

An interpretation panel will be installed beside the trail at its closest proximity to Horsey Island causeway (Island Road) informing the public about the Section 26 and Section 25A restrictions. The sign will also

explain the importance of wildlife and shoreline vegetation. This will include asking people to keep their dogs under effective control.

The areas with hog's fennel and Fisher's estuarine moth along this subsection are mostly in areas with a current public footpath, which will be used as the coast path route. Consequently there will be no changes in management required within these areas. The only consideration is that some areas supporting hog's fennel and the moth will be within the seaward spreading room, although it is considered that any increased risk of trampling in these localities is minimal.

5.2.7 Conclusion

We have fully considered the environmental sensitivities along this section with the current and predicted access levels. We anticipate a small increase in use where the proposed path will be aligned along existing paths, and a small increase in use within the margin.

The trail is aligned away from the most sensitive features of the roost site for waders and waterbirds and the nesting sites for ringed plover and little terns, which are located on land subject to a Section 26 nature conservation restriction.

To reinforce the existing management we will install new signage next to the trail to encourage responsible behaviour, raise awareness of sensitive features and help to reduce any impacts on them.

Within the margin there will be a S25A exclusion of coastal access rights on the saltmarsh and intertidal mudflat, which will also help to protect wintering and passage birds, vascular plant assemblage and the herbaceous saltmarsh habitat. The Section 25A exclusion has been applied for health and safety reasons rather than to protect the sensitive features of the protected sites. It is, however, very important in protecting sensitive features, including passage and wintering waterbirds, saltmarsh habitat and rare plant species, from possible damage and/or disturbance. If in the future there is a proposal to remove or relax the Section 25A exclusion, then an appraisal of the effects of those changes on sensitive features would be essential.

In taking account of the proposed margin's relatively remote nature, coupled with the existing management described above, we have concluded that this proposal addresses the concerns identified about likely changes in access.

5.3 Beaumont Quay to Dovercourt

5.3.1 Environmental sensitivity

The sensitive features / feature groups listed below occur in this subsection, along with the time when they may be present and their sensitivities. The nature of the possible interaction with these features is examined in detail in section 5.3.5

- **Overwintering and passage waterbirds (sensitive disturbance in/near feeding and roosting areas, which include all habitats seaward of the Trail and, for some species, grazing marsh and arable fields inland of it; August to March/April, sensitivity heightened in core winter period November to February)**
- **Breeding ringed plover (SSSI feature - sensitive to disturbance during breeding period April to August in area of sand/shingle habitat between Pewit Island and Dovercourt)**
- **Breeding little tern (SPA and SSSI feature – although the species has not nested in this area in recent years, the habitat between Pewit Island and Dovercourt is suitable and if nesting little terns return they will be sensitive to disturbance during breeding period May to August)**
- **Other priority breeding birds (Schedule 1; Birds of Conservation Concern – See Section 3.4) (disturbance in the vicinity of main breeding areas at Longmarsh Reserve, coastal grazing marsh south of New Moze Reservoir and Cunnyfur Marshes)**
- **Fisher’s estuarine moth (SAC feature – sensitive to trampling damage and changes in management where it is found along the sea wall and folding between the Beaumont Quay and Bramble Island and Bramble Island and Long Bank)**
- **Vascular plant assemblage (SSSI feature – sensitive to trampling and changes in management – found on saltmarsh and sea wall area)**
- **Herbaceous saltmarsh habitat (SSSI feature – saltmarsh species and sensitive to trampling. There are significant areas of saltmarsh in the area of Pewit Island, Garnham’s island, Bramble Island and between Bramble Island and South Hall Creek)**
- **Coastal shingle and strandline community (SSSI feature – sensitive to trampling within the area of sand/shingle habitat between Pewit Island and Dovercourt)**
- **Seals (sensitive to disturbance at main haul-out and pupping locations at Garnham’s Island, Bramble Island and New Island).**

5.3.2 Current access provisions and use of site for recreation

Much of the sea wall on the mainland around Hamford Water already has a public right of way or permissive footpath, but there is one significant length of sea wall between Beaumont Quay and the north of Bramble Island that has no existing public access along it. This length of sea wall passes the important intertidal areas to the north of Landermere and past Garnham’s Island, as well as the wet grassland areas at the Longmarsh Reserve, the coastal grazing marsh to the south of Old Moze Reservoir and Cunnyfur Marsh to the west of Bramble Island.

There is no significant settlement or visitor attraction on this section and access use on the existing rights of way along the seawall to the north of Bramble Island and in close proximity to it is light. The majority of

visits appear to be by local people, particularly dog walkers, who regularly return to the same place, and by long distance walkers. The area of beach (including Irlam's Beach and Middle Beach) between Pewit Island and West End Lane is frequently used for recreation, especially by dog walkers.

Towards the settlement of Dovercourt, usage on existing rights of way increases significantly, particularly by dog walkers and visitors from the nearby caravan park. There is a car park at Dovercourt (approx. 10 cars) as well as toilets, and a very small car park (approx. 4 cars) at Beaumont Quay.

The intertidal mudflats and saltmarsh are used by small numbers of people such as wildfowling groups and very low numbers of samphire collectors and bait diggers.

5.3.3 Access proposal

The England Coast Path logo will be added to signage at appropriate locations and some new waymarking and interpretation signs will also be added along the path. No major infrastructural improvements will be required.

Landward spreading room

- Generally to the edge of the trail.
- On seawall sections, to the edge of the crest of the seawall.

Seaward spreading room

- All land seaward of the trail will have Coastal Access rights by default, unless excepted or a restriction or exclusion is applied.

Section 25A restriction

- A Section 25A exclusion will apply to all saltmarsh and mudflat on this section (see maps G, H and I of the Overview).

Excepted land

- Land at, and surrounding Bramble Island (under the Explosives Regulations 2014). Other small parcels of excepted land include the curtilage of farm buildings.

Roll-back

- None on this subsection.

5.3.4 Predicted change in use of site for recreation

Small increase in level of use for the trail.

Large increase where new access is proposed.

No increase in use for the margin.

The limited parking and comparatively remote nature of this section means that only a small increase in walkers is anticipated. We expect a small increase in visitors walking longer distances along the trail and a small increase by local walkers, particularly dog walkers, is likely as the proposed route will enable some circular walks to be created. In the area just south of Dovercourt, existing use is moderate to heavy and no significant change to current access levels is anticipated.

There will be approximately 2.8km of new access between Beaumont Quay and Bramble Island, where the proposed route will be aligned along field margins which are currently not publically accessible. The relatively remote nature of the location of the new access and lack of large car parks suggests there will be light usage. None of the listed sensitive features are likely to be affected by this new access.

There will be no change to the current de facto level of use of the beaches within the margin. These areas are already utilised by the public and Coastal Access rights will not provide extra accessibility to the area. The beaches may, however, experience a slight increase in use as a result of more visitors to the area as a consequence of the coast path.

Coastal access rights will be excluded from Bramble Island all areas of saltmarsh and intertidal flat.

5.3.5 Possible adverse impacts to sensitive features

Overwintering and passage waterbirds (disturbance in/near feeding and roosting areas, which include all habitats seaward of the Trail and, for some species, grazing marsh and arable fields inland of it; August to March/April, sensitivity heightened in core winter period November to February).

Section 3.1 described in detail the key threats posed to overwintering and passage waterbirds and the distances involved.

Overwintering and passage waterbirds are sensitive to disturbance and therefore potentially to changes in access, as described in Section 3.1. Areas of this section, particularly Garnhams Island and Landermere are important areas for overwintering and passage birds and are therefore sensitive to disturbance.

There are three high tide roosts along this section of trail (see figure 7), and the salt marsh and mud flats provide important habitat for a wide range of over-wintering and passage birds. The grazing marsh east of Beaumont Quay is important habitat for over-wintering brent geese.

The three high tide roost sites (important for curlew, teal, grey plover, redshank, mallard, oystercatcher, avocet, knot and both black and bar-tailed godwit) are located on mudflat and salt marsh, all land that will be subject to a Section 25A restriction. This restriction, combined with the fact that the roosts are some distance from the proposed trail, we anticipate will be sufficient to rule out any significant interaction with these features.

There is currently no public access permitted on, or around Bramble Island within this section. This situation will continue in future.

Breeding ringed plover (SSSI feature)

Ringed Plovers are solitary nesters that breed primarily on sand or shingle beaches and are sensitive to human disturbance (See section 3.2).

Breeding ringed plover are found along Irlams beach/Pewit Island and the beach area south of Dovercourt around South Hall Creek. All pairs were located within areas of open sand/shingle habitat and it was noted that the habitat was ideal with wide sand and shingle beaches and sparse dune vegetation, sufficient to hide chicks in but not too dense. The surveys recorded breeding ringed plover on all areas with suitable nesting habitat.

It was noted by Gibson (2014) that the areas where breeding ringed plover were recorded at Hamford Water between Dovercourt and Pewit Island were subject to disturbance by human activities, especially the beach nearest to Dovercourt which is used heavily by dog walkers. It was also noted that the Stone Point area is heavily used by walkers and is accessed by boat at the northern most point, but that signage is put in place during the breeding season. The only site not subject to disturbance from human activities is Horsey Island, which has no public access. Gibson (2014) suggests that she has observed the breeding area for ringed plover at Hamford Water contract, with the birds moving deeper into the less disturbed areas.

Until 2017, there was no signage erected at the Dovercourt, Pewit Island and Irlam's beach areas used by nesting ringed plover. In 2017 the warden trialled using some simple signage to keep people away from the most sensitive nesting areas with some positive results.

Breeding little tern (SPA and SSSI feature)

Since 2004 little terns have not been recorded as nesting within this subsection. The historic colony at Irlam's Beach does still support suitable habitat with sand and shingle banks, sparse vegetation, and a nearby food source, but the area is subject to a degree of disturbance from public access. It is, however, possible that little terns will return to nest in this area and as they are sensitive to human disturbance (See Section 3.3) every effort should be made to manage access during the bird breeding season through appropriate signage.

Other priority breeding birds (Schedule 1; Birds of Conservation Concern) (disturbance)

The feature group includes: lapwing *vanellus vanellus*, avocet *Recurvirostra avosetta*, yellow wagtail *Motacilla flava*, marsh harrier *Circus aeruginosus* and barn owl *Tyto alba* (breeding).

- Avocets nest on the scrape on Longmarsh Reserve. Eight pairs nested in 2015/16 (Trevor Clifford).
- Lapwing also breed at Longmarsh Reserve.
- Yellow wagtail also breed at Longmarsh Reserve.
- Barn owls are found throughout this subsection with good numbers reported at Bramble Island (Gavin Sheill).

Other breeding species of note within this subsection include marsh harriers on the reed beds at Bramble Island and Longmarsh Reserve, reed warbler, reed bunting, sedge warbler, coot, moorhen, mute swan, mallard, little grebe, skylark, tufted duck, redshank and possibly shoveler and gadwall (Trevor Clifford). Our proposed alignment of the England Coast Path in this area will be inland and therefore away from any potential interaction with these features.

Fisher's estuarine moth (SAC feature)

The distribution of suitable habitat for Fisher's estuarine moth within Hamford Water SSSI follows the

Hamford Water SAC boundary (see map, Figure 8).

A key site for the Fisher's estuarine moth and its sole larval food plant, hog's fennel, is located along the section of the sea wall between Beaumont Quay and Bramble Island. Hog's fennel and Fisher's estuarine moth will be vulnerable to damage or destruction through trampling and the introduction of footpath management if public access were introduced here, endangering the survival of the Fisher's estuarine moth (See Section 3.6). Our proposed alignment of the England Coast Path in this area will be inland and therefore away from any potential interaction Fisher's estuarine moth.

The areas supporting Fisher's estuarine moth on Bramble Island will be within an excluded area and will not be affected by the coast path. The areas of sea wall with hog's fennel and Fisher's estuarine moth to the north of Bramble Island are within areas of current public access and there will be no new route or change in management as a result of the coast path. The seaward spreading room from footpath on the crest of the sea wall is unlikely to result in any significant trampling to sensitive areas supporting the plant and moth.

Vascular plant assemblage (SSSI feature) (trampling on sea wall and saltmarsh; surfacing or engineering works to improve the trail)

The eight species listed within the SSSI vascular plant assemblage at Hamford Water are all nationally scarce or nationally rare species found on intertidal habitats or coastal grassland (see Section 3.7).

These species are subject to a risk of trampling, but the S25 exclusion to saltmarsh and mudflats will minimise this risk.

Herbaceous saltmarsh habitat (SSSI feature) (trampling - saltmarsh species are sensitive)

Saltmarsh communities: SM13a - *Puccinellia maritima* (common saltmarsh grass) saltmarsh, *Puccinellia maritima* dominant sub-community and SM14 - *Atriplex portulacoides* (sea purslane) saltmarsh.

The most significant areas of saltmarsh close to the sea wall are found around New Island and Pewit Island. There are also significant areas of saltmarsh around the offshore islands of Horsey and Skipper's Islands. Saltmarsh species are particularly sensitive to trampling (see Section 3.8), but this risk will be minimised through the S25 exclusion.

Coastal shingle and strandline community (SSSI feature) (trampling from visitor access to beach/area of coastal shingle)

SD2 – *Cakile maritima* (sea sandwort) – *Honkenya peploides* (sea rocket) strandline community

The plant communities of coastal shingle are fragile and trampling caused by access on foot, and particularly by vehicles, has damaged many sites (see Section 3.9). The habitat is particularly vulnerable as it popular for recreational use, especially during the spring/summer months. Within this subsection, the area south of Dovercourt around South Hall Creek is particularly popular with dog walkers and beach users. Any increase in access is likely to exacerbate pressures on the sensitive plant communities and breeding birds, especially ringed plover (see Section 3.2) and little tern (see Section).

Seals

Whilst seals are foraging off shore they are unlikely to be sensitive to any changes in land based coastal access. Seals are, however, likely to be sensitive to changes in access that will cause disturbance to their favoured locations for hauling-out and pupping (See Section 3.10). Within this subsection, the main areas

for hauling-out and pupping are the creeks around Garnham's Island, Bramble Island and New Island. There is currently no public pedestrian access within the vicinity. Our proposed alignment of the England Coast Path in this area will be inland and therefore away from any potential interaction with seals.

5.3.6 Any mitigation measures included in the access proposal to address possible impacts

Restrictions

A Section 25 A restriction will be in place to exclude the saltmarsh and mudflats from coastal access rights.

The proposed trail will follow an inland route, avoiding the seawall and adjacent fields between Beaumont Quay and Bramble Island. This will protect passage, wintering and breeding birds from disturbance, and to protect areas of hog's fennel from damage or destruction through trampling.

Periods of concern year round for bird interests in this area:

- March to August core breeding period;
- August to October autumn passage period;
- October to March core wintering period.

Signage and interpretation

New information boards explaining the importance of wildlife and shoreline vegetation to the area are proposed in the most sensitive areas such as where the trail will pass closest to Irlam's Beach and the sensitive features associated with it.

Signs will advise walkers of the Section 25A exclusion on the saltmarsh and mudflats.

Spreading Room

Seaward spreading room will generally extend to the base of the seawall. The area of beach/shingle habitat between Pewit Island and Dovercourt will, however, be included in seaward spreading room. Although a significant increase in access as a result of the spreading room is not anticipated, there could still be a degree of increased usage and this may have impacts on breeding ringed plover and possibly breeding little terns within the area. As mitigation for this risk, appropriate informative signage will be erected during the bird breeding season and the most sensitive areas may be cordoned-off.

Landward spreading room will extend to the edge of the crest of the seawall. This will act to protect the features found on the folding described in section 5.3.5. Elsewhere, default spreading room to the trail edge will apply.

5.3.7 Conclusion

We have fully considered ecological sensitivities in this subsection between Beaumont Quay and Dovercourt alongside the current and predicted access levels. It is expected that new signage will encourage responsible behaviour, raise awareness of sensitive features and help to reduce any impacts on them. We have concluded that the use of the Section 25A restriction on public access to the saltmarsh and mudflat is likely to deliver all necessary mitigation. This exclusion has been applied for health and safety reasons rather than to protect the sensitive features of the protected sites. It is, however, very important in protecting sensitive features, including passage and wintering waterbirds, saltmarsh habitat and rare plant species, from possible damage and/or disturbance. If in the future there is a proposal to remove or relax the Section 25A exclusion, then an appraisal of the effects of those changes on sensitive features would be essential.

Our proposal to align the trail inland north of Beaumont Quay will protect sensitive areas of wintering birds and hog's fennel and Fisher's estuarine moth from disturbance. The elevated nature of this section will provide walkers with good views of the backwaters and will therefore maintain the route's coastal 'feel'.

At Bramble Island and surrounding land owned by EPC Groupe, existing legislation prevents public access (under the Explosives Regulations 2014). This will continue as it does now, effectively overruling coastal access rights here.

6. Establishing and maintaining the England Coast Path

In this part of the document we describe how the access proposal would be implemented and arrangements for ongoing management and maintenance once coastal access rights are in place.

Note that before the access proposal can be taken forward, the coastal access report must first be considered by the Secretary of State in light of any representations, any objections from affected owners or occupiers and the Appointed Person's recommendations as to how any objections should be determined.

6.1 Establishment

6.1.1 Works on the ground

Once approval for a coastal access report is received from the Secretary of State, any necessary works can be carried out on the ground to make the trail fit for use and prepare for opening. In this case, works on the ground would be carried out by Essex County Council.

An estimate of the total cost of works needed to establish the trail is given in our coastal access report for the stretch. The cost of establishment works will be met by Natural England. Essex County Council is responsible for ensuring they take appropriate steps to protect sensitive features whilst works on the ground are carried out, in line with any recommendations or conditions agreed in advance.

We have held preliminary discussions with Essex County Council about the works required and believe that it is feasible for them to be carried out without adverse effect on the designated sites considered in this appraisal providing that works affecting designated sites are informed and agreed in discussion with the relevant Natural England Responsible Officer (RO) as set out below.

Essex County Council will instigate the SSSI assent process by writing to us to confirm the timing of works and how operations to be undertaken in line with these conditions. Natural England will provide further advice as necessary.

The presence of legally protected species is an important consideration where works involve the destruction of existing physical features or the construction or maintenance of new or existing features where legally protected species are known or suspected to be present. Where legally protected species including breeding birds are known or suspected to be present all works should include appropriate mitigation in line with legislative guidelines

- European Protected Species are those species of plant and animal listed in Annex IV to EC Directive 92/43/EEC ('the Habitats Directive). For a complete list of European Protected Species in England & Wales refer to Schedules 2, 4 and 5 of the Conservation of Habitats & Species Regulations 2010.
- Wild birds are protected under the Wildlife and Countryside Act 1981, as amended, against intentional killing and injuring. This includes damage, destruction or taking of a nest, eggs or young while it is in use or being built during the breeding season March to August inclusive. The timing of

any works on habitats that may support birds, particularly those breeding, should take this into account.

- In addition to the protection afforded to all bird species; those listed on Schedule 1 of the Wildlife & Countryside Act 1981 receive additional protection against disturbance. This includes the intentional or reckless disturbance of birds and their young whilst they are at, on, or near an “active” nest.
- Plants and animals included on Schedules 5 & 8 of the Wildlife and Countryside Act 1981(as amended) are protected from killing and injuring and protection may also apply to their place of shelter.
- Badgers and their setts are protected under the Protection of Badgers Act 1992. Any works that may have a detrimental effect on these setts.
- Activities that affect these species may require a licence from Natural England’s licensing department and advice should be sought on any works that might affect them.

<p>Timing of works</p>	<p>Works should be timed to prevent or reduce disturbance of wintering wildfowl and waders by scheduling outside of the October to March period. If any works have to be conducted over the winter period severe winter weather restrictions will apply to works likely to disturb wintering wildfowl and waders.</p> <p>Where works are likely to affect breeding birds they should be timed to avoid the breeding season, for the majority of species this is March to August inclusive.</p>
<p>Use of heavy Machinery</p>	<p>Access routes for heavy plant and machinery should be discussed and agreed with the RO to avoid damage to the site or interest features and / or legally protected species.</p> <p>Screening of plant and machinery to prevent visual and noise disturbance of waterbirds or breeding birds should be considered where necessary in discussion with the Natural England responsible officer (RO).</p>
<p>Presence of Protected Species</p>	<p>Where legally protected species are known or suspected to be present all works should include appropriate mitigation in line with legislative guidelines.</p> <p>Some species are afforded extra levels of protection and a licence may be required. Advice as to the presence of legally protected species should be sought from the RO.</p>

Storage of Plant and Materials	Mitigation in preparation for the use of heavy machinery to prevent damage to sensitive site features. Measures may include screening of heavy machinery and storage in locations that will not damage or disturb the notified features of the site.
Pollution prevention and control	Pollution prevention and control measures must be agreed with the RO and the Environment Agency.
Biosecurity	Where necessary appropriate measures will be taken to prevent the transportation of invasive non-native species. RO to advise as and when necessary.

Essex County Council will instigate the SSSI assent process by writing to Natural England to confirm the timing of works and how operations will be undertaken in line with these conditions. Natural England will provide further ecological advice as necessary.

6.1.2 Implementation of mitigation measures

The mitigation measures described in Part 5 of this document ([5.1.5](#) [5.2.5](#) etc) will be implemented as follows:

Measure	Implementation
Section: Walton-on-the-Naze to Walton Mere	
Waymark post at entrance to wooded area at The Naze	Fixtures and posts for signage will be set in place with minimum disturbance using hand tools. Preferred timing of works: September – February.
Waymark Post close to S. end of sea wall at The Naze	Fixtures and posts for signage will be set in place with minimum disturbance using hand tools.
Sign at NE tip of The Naze	Fixtures and posts for signage will be set in place with minimum disturbance using hand tools.
Sign at N section of The Naze regarding the S25A exclusion	Fixtures and posts for signage will be set in place with minimum disturbance using hand tools.
Section: Walton Mere to Beaumont Quay	
Waymark post on seawall east of Titchmarsh Marina	Fixtures and posts for signage will be set in place with minimum disturbance using hand tools.
Waymark post on seawall west of Titchmarsh Marina	Fixtures and posts for signage will be set in place with minimum disturbance using hand tools.
Small footbridge over borrowdyke west of Titchmarsh Marina	Fixtures will be set in place with minimum disturbance using hand tools. Ensure pollution risk minimised.
Interpretation panel with S25A exclusion at seaward end of Island Lane	Fixtures and posts for signage will be set in place with minimum disturbance using hand tools.
Waymarking post close to sea wall 140m NW of Kirby Quay	Fixtures and posts for signage will be set in place with minimum disturbance using hand tools.
Multi finger post at Beaumont Quay	Fixtures and posts for signage will be set in place with minimum disturbance using hand tools.
Section: Beaumont Quay to Dovercourt	
Sign where bridleway reaches the sea wall regarding the S25A	Fixtures and posts for signage will be set in place with minimum disturbance using hand tools.

exclusion at EPC land boundary.	
Interpretation Panel close to Irlam's beach	Fixtures and posts for signage will be set in place with minimum disturbance using hand tools.

6.1.3 Local restrictions or exclusions

Where specific restrictions or exclusions have been included in the proposal and are approved by the Secretary of State, Natural England will give the necessary directions before public rights come into force to make the rights subject to those restrictions or exclusions.

6.2 Maintenance

Where there is a need for ongoing maintenance of any special measures proposed, this will become part of longer term arrangements for upkeep of the trail. An overall estimate of the ongoing cost of maintaining stretches of the England Coast Path is given in the relevant part of our report for the stretch.

6.3 Monitoring

Monitoring of the protected sites will continue through established programmes including our common standards monitoring protocols and other associated surveys and monitoring programmes. Issues concerning achievement of conservation objectives for a site will usually be investigated through these established programmes. In the event that public access may be a contributing factor to any problems highlighted as a consequence of this monitoring, coastal access provisions may need to be modified as part of the management response. This could involve responses such as appropriate signage or seasonal/permanent re-alignment of the trail.

The access authority will be responsible for ongoing monitoring of trail condition. Natural England will be tracking general trends, including in the number of people using the path, as part of our evaluation of the coastal access programme nationally.

Prior to opening the new trail checks will be made that establishment works, including any special mitigation measures required at this stage, have been implemented. Once the England Coast Path is open, there will be regular ongoing monitoring of the condition of the trail and its associated infrastructure. Any reports of anti-social behaviour by trail users will usually be dealt with by a trail manager in the first instance.

A Visitor Counter is to be installed along the proposed route between at Holland Haven.

6.4 Future changes

The access proposals in this document are designed to ensure appropriate protection of sensitive features, taking account of any mitigation measures that are included. The coast is a dynamic environment and in designing the access proposals we have taken account of any changes predicted by the Environment Agency as a result of coastal erosion or other geomorphological processes. Should it be necessary in the future to identify a new alignment for the trail in line with 'roll back' proposals in the stretch report, due care will be taken at that stage to minimise any potential impacts of this change on sensitive features. The same will be true if any unforeseen or planned other changes arise in the future (such as those at Walton-on-the-Naze, see the Overview document for details) that may require us to propose a variation of the access arrangements described in these proposals, following due procedures.

7. Conclusions

7.1 Overall conclusion – Natura 2000/ Ramsar sites

This section presents conclusions on the effects of the Jaywick to Harwich stretch of the England Coast Path proposal on the interest features of the following Natura 2000 and Ramsar sites:

Outer Thames Estuary Special Protected Area/ proposed SPA (SPA/pSPA)

Hamford Water SPA

Essex Estuaries SAC

Hamford Water SAC

Hamford Water RAMSAR

Blackwater, Crouch, Roach and Colne Estuaries Marine Conservation Zone (MCZ)

7.1.1 Population level effects

The table below summarises features or feature groups for which there might be non-significant residual effects of the ECP within the above sites, taking into account the mitigation measures included in the proposal.

From the information presented above in parts 3 to 5 of this appraisal document, Natural England concludes that, when considered alone, the proposal for this stretch of the England Coast Path is not likely to cause a significant adverse effect on any SPA, SAC or Ramsar site interest features. This conclusion takes account of the modifications made to our proposal to avoid or reduce the risk of effects as described in Part 5. However, the Conservation of Habitats and Species Regulations 2010 (as amended) also require an assessment of the effects of other ‘live’ plans or projects.

For each SPA, SAC or Ramsar site interest feature the table below gives our conclusion as to whether or not the proposal for this stretch of the England Coast Path could possibly cause an adverse effect. Where effects cannot be ruled out they are considered further as part of the in-combination assessment (7.1.2). It is worth noting that (i) all the effects listed in the table are assessed as non-significant for the reasons given in Part 5; (ii) some of the effects are not addressed by specific mitigation measures in the proposal because they are judged too small to require that and too diffuse for specific measures to be effective. These are nevertheless considered in the in-combination assessment.

Feature - or feature group	Conclusion
Overwintering/ passage birds feature group (SPA and RAMSAR site feature group – see section 3.1) A046a dark-bellied brent goose <i>Branta bernicla bernicla</i> (non-breeding) A048 Shelduck <i>Tadorna tadorna</i> (non-breeding) A052 Teal <i>Anas crecca</i> (non-breeding) A141 grey plover <i>Pluvialis squatarola</i> (non-breeding)	The following non-significant effect associated with the access proposal needs to be further considered alongside possible non-significant effects from other live plans or projects: possible small increase in disturbance to feeding or roosting waterbirds. Route sections affected: Walton-on-the-Naze to Walton Mere, Walton Mere to Beaumont Quay and Beaumont Quay to Dovercourt.

<p>A137 Ringed plover <i>Charadrius hiaticula</i> (non-breeding) A156 black-tailed godwit <i>Limosa limosa islandica</i> (non-breeding) A160 Curlew <i>Numenius arquata</i> (non-breeding) A144 Sanderling <i>Calidris alba</i> (non-breeding) A050 – wigeon <i>Anas penelope</i> (non-breeding) A054 – pintail <i>Anas acuta</i> (non-breeding) A149 dunlin <i>Calidris alpina alpina</i> (non-breeding) A162 Common redshank <i>Tringa tetanus</i> (non-breeding) A132 pied avocet <i>Recurvirostra avosetta</i> (non-breeding)</p>	
<p>Breeding birds A137 ringed plover <i>Charadrius hiaticula</i> (breeding) A195 little tern <i>Sterna albifrons</i> (breeding)</p>	<p>The following non-significant effect associated with the access proposal needs to be further considered alongside possible non-significant effects from other live plans or projects: possible small increase in disturbance to breeding ringed plover and little tern in areas of sand/shingle habitat. Route sections affected: Walton-on-the-Naze to Walton Mere, Walton Mere to Beaumont Quay and Beaumont Quay to Dovercourt.</p>
<p>S4035 – fisher’s estuarine moth <i>Gortyna borelii lunata</i></p>	<p>The following non-significant effect associated with the access proposal needs to be further considered alongside possible non-significant effects from other live plans or projects: possible small increase in trampling of host plant the hog’s fennel. Mowing regimes need to be carefully designed with Fisher’s estuarine moth in mind. Route sections affected: Walton Mere to Beaumont Quay (in particular between Batts Hall and Beaumont Quay) and Beaumont Quay to Dovercourt.</p>
<p>Vascular plant assemblage: Hog’s fennel <i>Peucedanum officinale</i> Slender hare’s-ear <i>Bupleurum tenuissimum</i> Golden samphire <i>Inula crithmoides</i> Lax-flowered sea-lavender <i>Limonium humile</i> Perennial glasswort <i>Salicornia perennis</i> Small cord-grass <i>Spartina maritima</i> Shrubby sea-blite <i>Suaeda vera</i></p>	<p>The following non-significant effect associated with the access proposal needs to be further considered alongside possible non-significant effects from other live plans or projects: possible small increase in trampling. Route sections affected: Walton-on-the-Naze to Walton Mere, Walton Mere to Beaumont Quay and Beaumont Quay to Dovercourt.</p>

Dwarf Eel-grass <i>Zostera noltii</i>	
SM13a – <i>Puccinellia maritima</i> saltmarsh (Common saltmarsh grass community) SM14 – <i>Atriplex portulacoides</i> saltmarsh	A Hamford Water wide Section 25A restriction which will apply to all saltmarsh and mudflat. This should minimise any potential impact from trampling, although this needs to be monitored. Route sections possibly affected: Walton-on-the-Naze to Walton Mere, Walton Mere to Beaumont Quay and Beaumont Quay to Dovercourt.
SD2 <i>Honkenya peploides</i> – <i>Cakile maritima</i> strandline community	The following non-significant effect associated with the access proposal needs to be further considered alongside possible non-significant effects from other live plans or projects: possible small increase in trampling. Route sections affected: Walton-on-the-Naze to Walton Mere, Walton Mere to Beaumont Quay and Beaumont Quay to Dovercourt.

7.1.2 In combination assessment

Table A - Other qualifying plans or projects

Competent Authority	Plan or project	Description
Tendring District Council	Tendring District draft Local Plan 2017-2033. Stage at time of writing: not yet adopted but has been out for consultation between June and August 2017. This will replace the policies in the adopted Tendring District Local Plan (2007).	<p>The new Local Plan will guide future development in Tendring and is critical for creating new job opportunities, attracting investment in new and improved infrastructure, protecting the environment and ensuring that new homes are built in the right locations and achieve the right standards of quality and design. The Local Plan predicts a likely 14% increase in population in Tendring by 2033.</p> <p>The Plan covers a broad range of local policies that will guide decisions on planning applications and development in the District up to 2033 and beyond.</p> <p>Braintree District Council, Colchester Borough Council and Tendring District Council, have formed the 'North Essex Authorities,' in conjunction with Essex County Council as a key partner in its strategic role for infrastructure and service provision, commissioned Place Services of Essex County Council to undertake an independent Sustainability Appraisal (SA) for a Strategic Section One for the respective Council's Local</p>

		<p>Plans. Sections One and Two of the Local Plans of Braintree, Colchester and Tendring form part of a suite of planning documents relevant to each area, including county-wide and local Plans</p> <p>The TDC Draft Local Plan states that North Essex will be an area of significant growth over the period to 2033 and beyond, (embracing positively the need to build well-designed new homes, create jobs and improve and develop infrastructure for the benefit of existing and new communities). In neighbouring Colchester Borough, the urban area of Colchester some 4,000 new homes are expected to be delivered over the Local Plan period. A key element of the spatial growth strategy for North Essex is the development of new sustainable ‘garden communities’.</p> <p>In Tendring District the draft Local Plan describes growth in settlements that are the most accessible to the strategic road network, public transport and offer a range of services. Clacton and Harwich with Dovercourt are classified as strategic urban settlements and will accommodate around 5,000 new homes. A new cross-boundary ‘garden community’ will be located in the west of the district and to the east of Colchester. The smaller urban settlements of Frinton with Walton and Kirby Cross, Manningtree with Lawford and Mistley, Brightlingsea and Weeley will accommodate between 1,500 and 2,500 new homes. The rural service centres and smaller rural settlements will accommodate around 1,500 new homes including a windfall allowance. Across the District, approximately 550 new homes per year will be built. (Calculation of housing need in the District is complicated by uncertainty arising from unattributed population change). Between 20 and 38ha of land is proposed to be used as new employment land up to 2033.</p> <p>Objective 8 of the Local Plan aspires to provide a network of interconnected multi-functional natural green and blue spaces which secures a net gain in biodiversity and geodiversity; promotes healthy lifestyles; and enhances the quality of the natural and built environment.</p>
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Table B - Other qualifying plans or projects

Competent Authority	Plan or project	Description
Tendring District Council	Planning application 17/00319/DISCON: former Martello Caravan Park Kirby Road, Walton On The Naze Essex CO14 8QP	<p>The development site of the former caravan park will deliver a mixture of residential and retail units. 216 homes are proposed. The development lies 500m from Hamford Water SSSI, Hamford Water SPA and the Hamford Water RAMSAR site. The fields (grassland) adjacent to the development are functionally linked land with the SPA and are managed to protect over-wintering Brent geese. The saltmarsh and mudflats also provide functionally linked land for over-wintering waterbirds. The development is currently underway and due for completion in 2019.</p> <p>NE’s advice for this project was to ensure a fence protects the fields from the development. Subsequent to this advice, the England Coast Path scheme began and it is proposed for a winter alternative route (as part of a S26(a) restriction (to protect the Brent geese) away from the development. The ECP will pass through the development and onto the seawall via a lockable gate. Signage and interpretation will inform people of the reasoning for the winter closure.</p>

At the time of carrying out this appraisal, Natural England is not aware of any other qualifying plans or projects that need to be considered.

Table C - Possible in combination effects

Non-significant effect – access proposal	Non-significant effect – other plan or project	In combination conclusion
Possible small increases in disturbance to SPA/Ramsar birds. Applies to: overwintering and passage waterbirds feature group; breeding little tern.	<p>Possible small increase in disturbance to SPA/ RAMSAR birds:</p> <ul style="list-style-type: none"> Planning application 17/00319/DISCON mixed residential/ retail development 216 homes. 	<p>We do not consider there will be a significant effect in combination for the following reasons:</p> <ol style="list-style-type: none"> 1) Natural England’s advice on the planning application includes recommendations for planning conditions to mitigate disturbance impacts to overwintering. 2) Our proposed winter alternative route means that ECP development here will not compromise NE’s advice on the

	<ul style="list-style-type: none"> • Tendring District Council Draft Local Plan. 	<p>original planning application.</p> <p>3) Diffuse recreational pressure arising from Local Plans (Tendring, Colchester, and Braintree). It is envisaged that additional visitor pressure will arise from new residents beyond the specific site identified above, most of whom will access by car. This impact pathway is anticipated to be mitigated by a strategic solution by relevant local authorities, and is expected to reduce residual in-combination disturbance / trampling effects to acceptable levels. At the time of writing, no further details are available.</p> <p>In terms of the emerging Tendring District Local Plan, The HRA of the Plan (prepared by LUC) advises that providing that a recreation avoidance mitigation strategy (RAMS) is prepared by Tendring District Council in partnership with the appropriate Local Authorities as necessary and detailed above, and is developed in close consultation with Natural England, and is ready for implementation prior to adoption, the Tendring District Draft Local (Plan Part 2) is not predicted to result in adverse effects on the integrity of the Hamford Water SPA/Ramsar, either alone, or in-combination with other plans and projects as a result of recreation. This conclusion includes consideration of the implementation of the England Coast Path.</p> <p>Natural England, in its response to the HRA of the draft Tendring Local Plan (June 2017), states: Based on the information provided in the appropriate assessment (AA), and provided each of the recommended safeguards are fully incorporated into the relevant</p>
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		policies, Natural England agrees that the Plan is unlikely to have an adverse effect on the integrity (AEOI) of the Essex Estuaries Special Area of Conservation (SAC) or to Hamford Water NNR, SSSI, SAC, SPA and Ramsar site.
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7.1.3 Overall screening decision

In the light of this appraisal, Natural England has reached this conclusion about the new access proposal:
(Mark one box only with an X as appropriate)

Outer Thames Estuary SPA/pSPA

No likely significant effect - as the new access proposal is unlikely to have a significant effect on the Outer Thames Estuary SPA/pSPA, either alone or in combination with other plans or projects, (taking into account any proposed mitigation measures) no further Habitats Regulations assessment is required;

OR

Likely significant effect - as the new access proposal is likely to have a significant effect on the Outer Thames Estuary SPA/pSPA, either alone or in combination with other plans or projects (despite any proposed mitigation measures), appropriate assessment is required to consider whether the new access proposal may proceed.

Hamford Water SPA

In the light of this appraisal, Natural England has reached this conclusion about the new access proposal:
(Mark one box only with an X as appropriate)

No likely significant effect - as the new access proposal is unlikely to have a significant effect on Hamford Water SPA, either alone or in combination with other plans or projects, (taking into account any proposed mitigation measures) no further Habitats Regulations assessment is required;

OR

Likely significant effect - as the new access proposal is likely to have a significant effect on Hamford Water SPA, either alone or in combination with other plans or projects (despite any proposed mitigation measures), appropriate assessment is required to consider whether the new access proposal may proceed.

Essex Estuaries SAC

In the light of this appraisal, Natural England has reached this conclusion about the new access proposal:
(Mark one box only with an X as appropriate)

No likely significant effect - as the new access proposal is unlikely to have a significant effect on the Essex Estuaries SAC, either alone or in combination with other plans or projects, (taking into account any proposed mitigation measures) no further Habitats Regulations assessment is required;

OR

Likely significant effect - as the new access proposal is likely to have a significant effect on the Essex Estuaries SAC, either alone or in combination with other plans or projects (despite any proposed mitigation measures), appropriate assessment is required to consider whether the new access proposal may proceed.

Hamford Water SAC

In the light of this appraisal, Natural England has reached this conclusion about the new access proposal:
(Mark one box only with an X as appropriate)

No likely significant effect - as the new access proposal is unlikely to have a significant effect on Hamford Water SAC, either alone or in combination with other plans or projects, (taking into account any proposed mitigation measures) no further Habitats Regulations assessment is required;

OR

Likely significant effect - as the new access proposal is likely to have a significant effect on the Hamford Water SAC, either alone or in combination with other plans or projects (despite any proposed mitigation measures), appropriate assessment is required to consider whether the new access proposal may proceed.

Hamford Water RAMSAR

In the light of this appraisal, Natural England has reached this conclusion about the new access proposal:
(Mark one box only with an X as appropriate)

No likely significant effect - as the new access proposal is unlikely to have a significant effect on Hamford Water RAMSAR, either alone or in combination with other plans or projects, (taking into account any proposed mitigation measures) no further Habitats Regulations assessment is required;

OR

Likely significant effect - as the new access proposal is likely to have a significant effect on the Hamford Water RAMSAR,, either alone or in combination with other plans or projects (despite any proposed mitigation measures), appropriate assessment is required to consider whether the new access proposal may proceed.

7.2 Overall conclusion: Sites of Special Scientific Interest (SSSIs)

Clacton Cliffs and Foreshore SSSI

In the light of this appraisal, Natural England has concluded that the new access proposal:
(Mark one box only with an X below)

complies with Natural England's duty to further the conservation and enhancement of the notified features of the SSSI, consistent with the proper exercise of its functions¹ - and accordingly the new access proposal may proceed as finally specified in this template

OR

would not comply with the duty referred to in (a) – and accordingly permission/ authorisation/ assent should not be given for the new access proposal in the form finally specified in this template, for the following reasons:

¹ The reference in 7.2 above to Natural England's functions includes its balanced general purposes for access, nature conservation and landscape under the NERC Act 2006, any specific statutory duties it may have to deliver specific improvements to public access, and the access-related policies and priorities it periodically agrees with Defra.

Holland-on-Sea Cliffs SSSI

In the light of this appraisal, Natural England has concluded that the new access proposal:
(Mark one box only with an X below)

complies with Natural England's duty to further the conservation and enhancement of the notified features of the SSSI, consistent with the proper exercise of its functions² - and accordingly the new access proposal may proceed as finally specified in this template

OR

would not comply with the duty referred to in (a) – and accordingly permission/ authorisation/ assent should not be given for the new access proposal in the form finally specified in this template, for the following reasons:

Holland Haven Marshes SSSI

In the light of this appraisal, Natural England has concluded that the new access proposal:
(Mark one box only with an X below)

complies with Natural England's duty to further the conservation and enhancement of the notified features of the SSSI, consistent with the proper exercise of its functions³ - and accordingly the new access proposal may proceed as finally specified in this template

OR

would not comply with the duty referred to in (a) – and accordingly permission/ authorisation/ assent should not be given for the new access proposal in the form finally specified in this template, for the following reasons:

² The reference in 7.2 above to Natural England's functions includes its balanced general purposes for access, nature conservation and landscape under the NERC Act 2006, any specific statutory duties it may have to deliver specific improvements to public access, and the access-related policies and priorities it periodically agrees with Defra.

³ The reference in 7.2 above to Natural England's functions includes its balanced general purposes for access, nature conservation and landscape under the NERC Act 2006, any specific statutory duties it may have to deliver specific improvements to public access, and the access-related policies and priorities it periodically agrees with Defra.

The Naze SSSI

In the light of this appraisal, Natural England has concluded that the new access proposal:
(Mark one box only with an X below)

complies with Natural England's duty to further the conservation and enhancement of the notified features of the SSSI, consistent with the proper exercise of its functions⁴ - and accordingly the new access proposal may proceed as finally specified in this template

OR

would not comply with the duty referred to in (a) – and accordingly permission/ authorisation/ assent should not be given for the new access proposal in the form finally specified in this template, for the following reasons:

Hamford Water SSSI

In the light of this appraisal, Natural England has concluded that the new access proposal:
(Mark one box only with an X below)

complies with Natural England's duty to further the conservation and enhancement of the notified features of the SSSI, consistent with the proper exercise of its functions⁵ - and accordingly the new access proposal may proceed as finally specified in this template

OR

would not comply with the duty referred to in (a) – and accordingly permission/ authorisation/ assent should not be given for the new access proposal in the form finally specified in this template, for the following reasons:

⁴ The reference in 7.2 above to Natural England's functions includes its balanced general purposes for access, nature conservation and landscape under the NERC Act 2006, any specific statutory duties it may have to deliver specific improvements to public access, and the access-related policies and priorities it periodically agrees with Defra.

⁵ The reference in 7.2 above to Natural England's functions includes its balanced general purposes for access, nature conservation and landscape under the NERC Act 2006, any specific statutory duties it may have to deliver specific improvements to public access, and the access-related policies and priorities it periodically agrees with Defra.

Harwich Foreshore SSSI

In the light of this appraisal, Natural England has concluded that the new access proposal:
(Mark one box only with an X below)

complies with Natural England's duty to further the conservation and enhancement of the notified features of the SSSI, consistent with the proper exercise of its functions⁶ - and accordingly the new access proposal may proceed as finally specified in this template

OR

would not comply with the duty referred to in (a) – and accordingly permission/ authorisation/ assent should not be given for the new access proposal in the form finally specified in this template, for the following reasons:

7.3 Overall conclusion – Hamford Water National Nature Reserve

In the light of this appraisal, Natural England has concluded that the new access proposal:
(Mark one box only with an X below)

will not compromise the management of Hamford Water National Nature Reserve for its conservation purpose of preserving features of special interest in the area

OR

would compromise the management of Hamford Water National Nature Reserve for its conservation purpose of preserving features of special interest in the area - and accordingly the new access proposal should not proceed in the form finally specified in this template, for the following reasons:

⁶ The reference in 7.2 above to Natural England's functions includes its balanced general purposes for access, nature conservation and landscape under the NERC Act 2006, any specific statutory duties it may have to deliver specific improvements to public access, and the access-related policies and priorities it periodically agrees with Defra.

7.4 Overall Conclusion - Blackwater, Crouch, Roach and Colne Estuaries Marine Conservation Zone (MCZ)

In the light of this appraisal, Natural England has concluded that:
(Mark one box only with an X below)

the appropriate balance has been struck by the new access proposal between NE's conservation and access objectives, duties and purposes - and accordingly the new access proposal should proceed as finally specified in this template

OR

the appropriate balance referred to above has not been struck – and accordingly the new access proposal should not proceed in the form finally specified in this template, for the following reasons:

Reasons (where second box is ticked):

7.5 Hamford Water SSSI

In the light of this appraisal, Natural England has concluded that:
(Mark one box only with an X below)

the appropriate balance has been struck by the new access proposal between NE's conservation and access objectives, duties and purposes - and accordingly the new access proposal should proceed as finally specified in this template


OR

the appropriate balance referred to above has not been struck – and accordingly the new access proposal should not proceed in the form finally specified in this template, for the following reasons:


Reasons (where second box is ticked):

8. Certification

8.1 Certification – access proposal

I agree with the conclusions of this appraisal and am satisfied that the final access proposal, incorporating any special measures, is the least restrictive option necessary to ensure appropriate protection of sensitive features.		
Signed: 	Name: James Lamb	Date: 15 August 2017

8.2 Certification – environmental impacts

I agree with the conclusions of this appraisal and am satisfied that potential environmental impacts of the access proposal on the Outer Thames Estuary SPA/pSPA, Hamford Water SPA, Essex Estuaries SAC, Hamford Water SAC, Hamford Water RAMSAR, Blackwater, Crouch, Roach and Colne Estuaries Marine conservation Zone (MCZ), Clacton Cliffs and Foreshore SSSI, Holland-on-Sea Cliffs SSSI, Holland Haven Marshes SSSI, The Naze SSSI, Hamford Water SSSI, Harwich Foreshore SSSI and Hamford Water National Nature Reserve (NNR) have been fully addressed.		
Name: Nicola Orchard	Signed: 	Date: 15 August 2017

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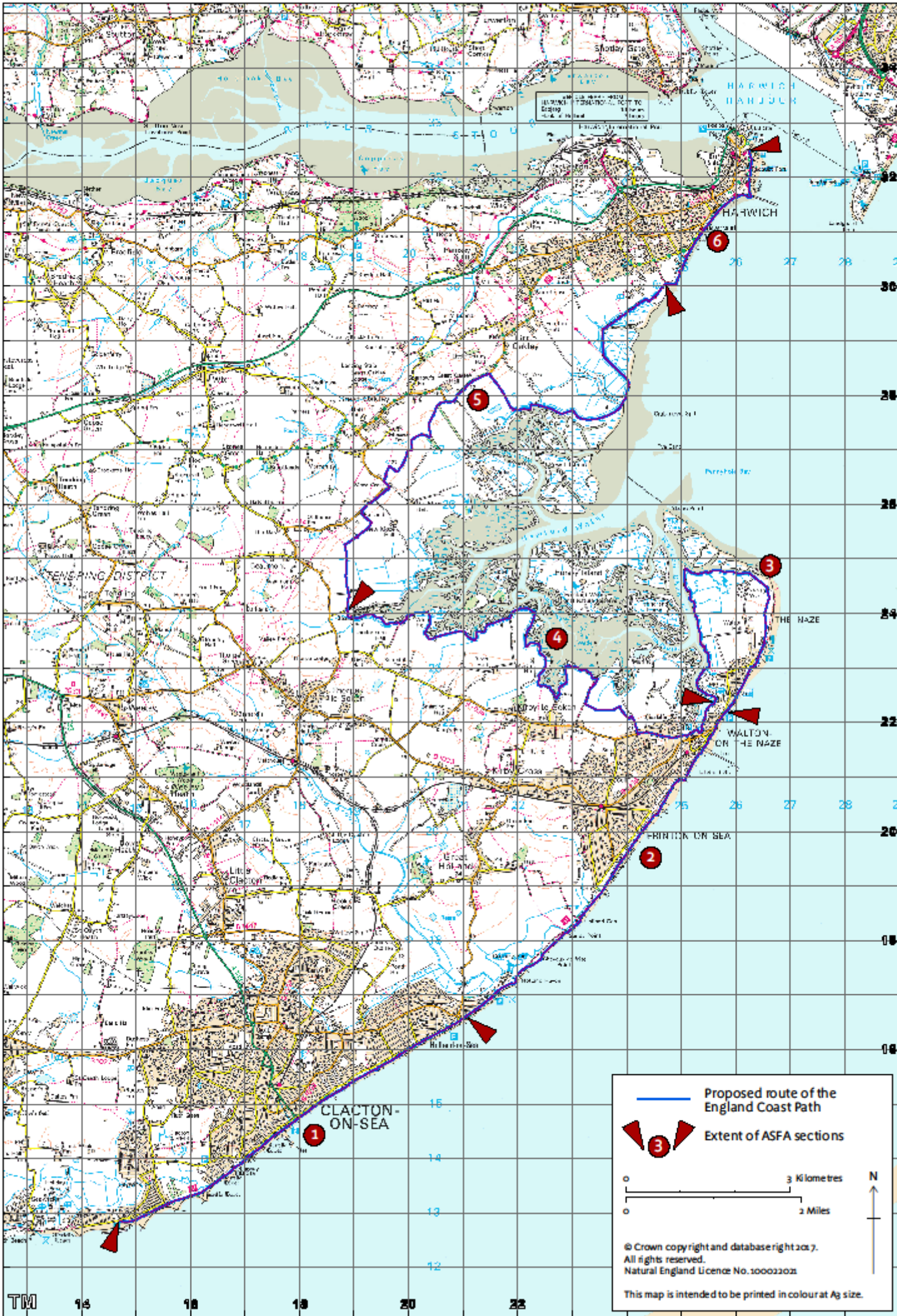
10. Appendices

Appendix A – Bird species mentioned in the text for which the IOC International English name differs from the British vernacular name

British vernacular name	IOC International English name	Scientific name
Brent goose	Brant goose	<i>Branta bernicla</i>
Shelduck	Common shelduck	<i>Tadorna tadorna</i>
Wigeon	Eurasian wigeon	<i>Anas penelope</i>
Teal	Eurasian teal	<i>Anas crecca</i>
Pintail	Northern pintail	<i>Anas acuta</i>
Shoveler	Northern shoveler	<i>Anas clypeata</i>
Pochard	Common pochard	<i>Aythya ferina</i>
Goldeneye	Common goldeneye	<i>Bucephala clangula</i>
Cormorant	Great cormorant	<i>Phalacrocorax carbo</i>
Avocet	Pied avocet	<i>Recurvirostra avosetta</i>
Oystercatcher	Eurasian oystercatcher	<i>Haematopus ostralegus</i>
Golden plover	European golden plover	<i>Pluvialis apricaria</i>
Lapwing	Northern lapwing	<i>Vanellus vanellus</i>
Ringed plover	Common ringed plover	<i>Charadrius hiaticula</i>
Curlew	Eurasian curlew	<i>Numenius arquata</i>
Turnstone	Ruddy turnstone	<i>Arenaria interpres</i>
Knot	Red knot	<i>Calidris canuta</i>
Greenshank	Common greenshank	<i>Tringa nebularia</i>
Redshank	Common redshank	<i>Tringa tetanus</i>
Bearded tit	Bearded reedling	<i>Panurus biarmicus</i>

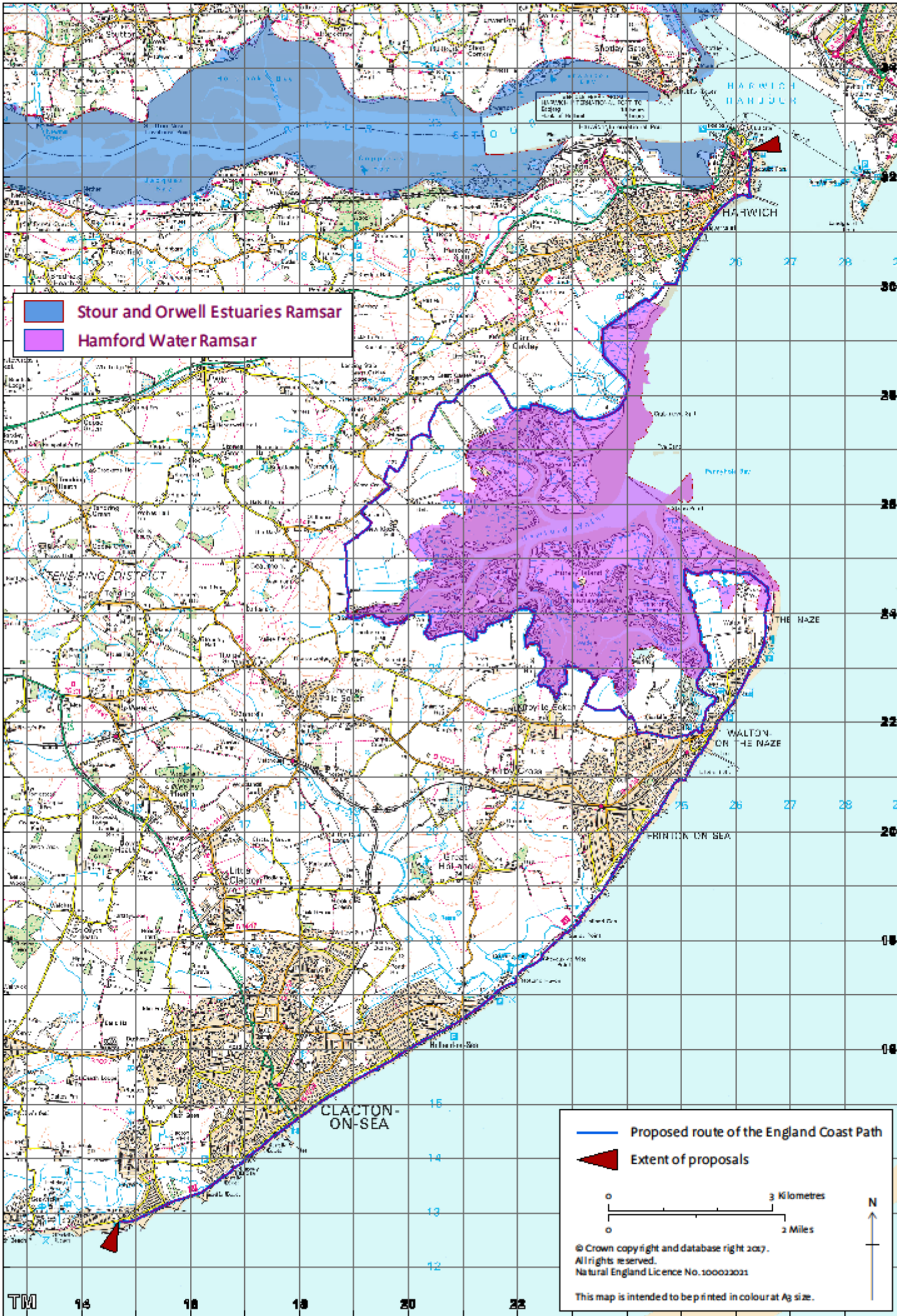
Source: BOU 2016.

A. Overview of ASFA sections



A. Overview of ASFA sections

B. Key designations - Ramsar sites



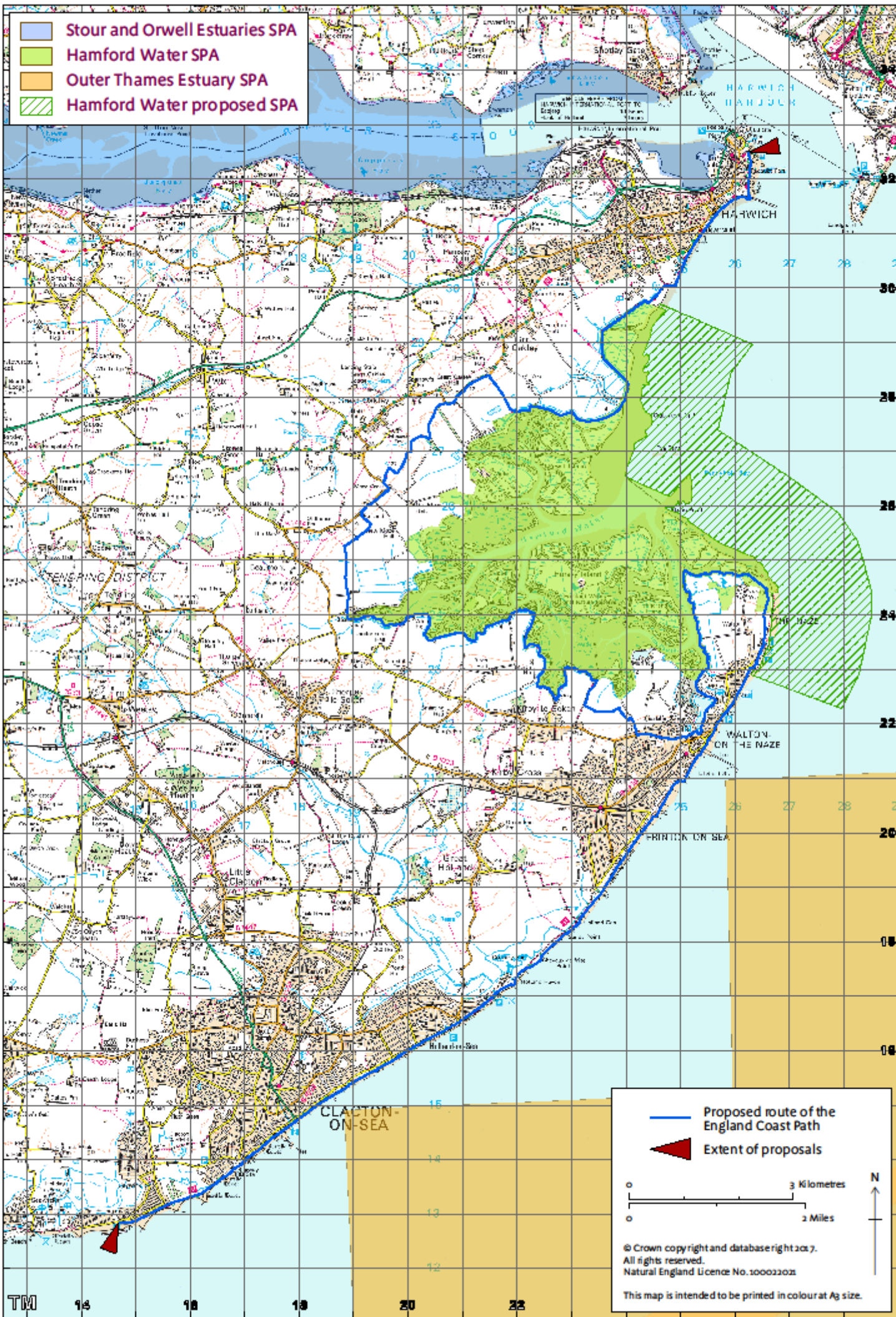
B. Key designations - Ramsar sites

C. Key designations - Special Areas of Conservation (SAC) & Marine Conservation Zone (MCZ)



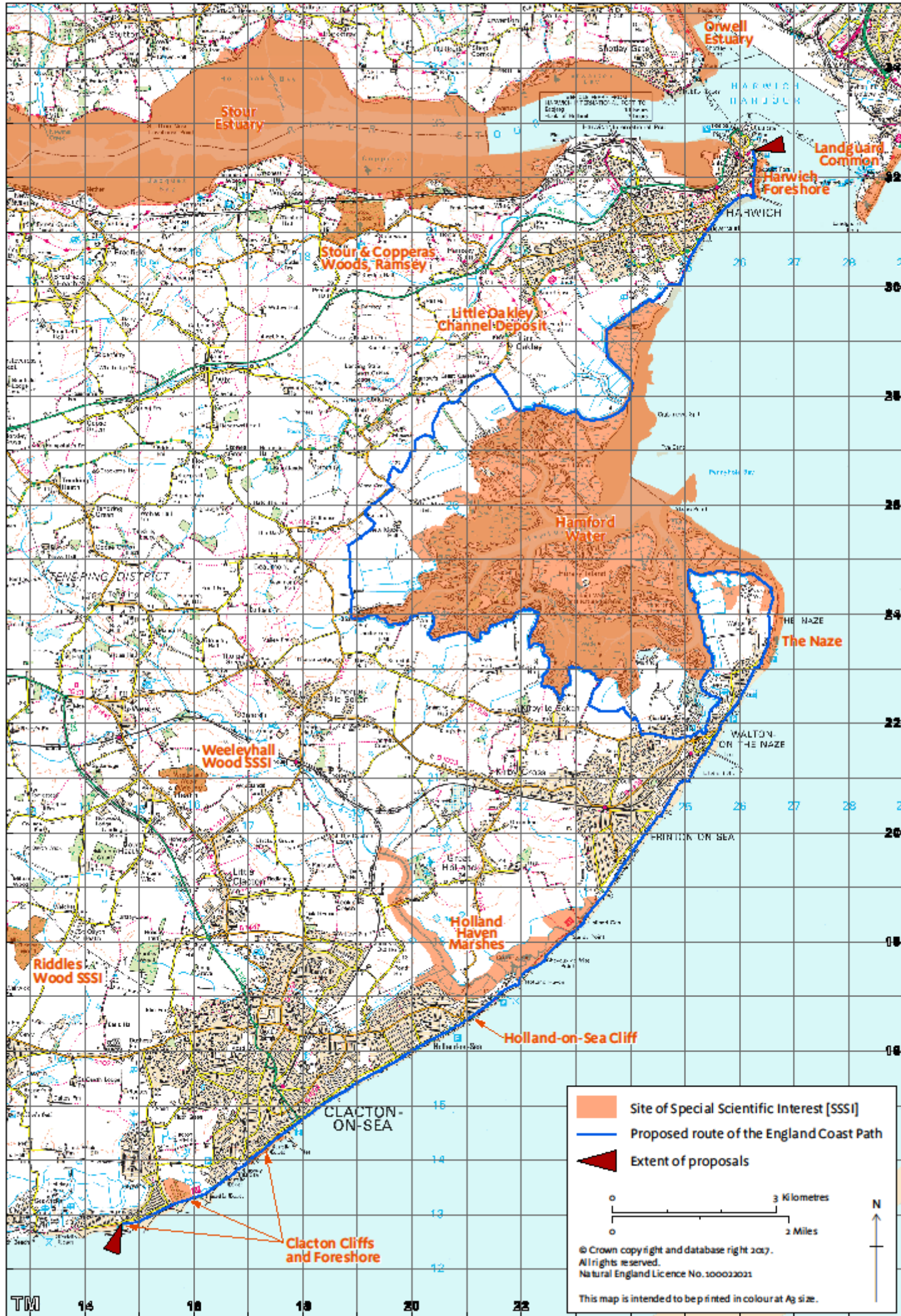
C. Key designations - Special Areas of Conservation (SAC) & Marine Conservation Zone (MCZ)

D. Key designations - Special Protection Areas (SPA)



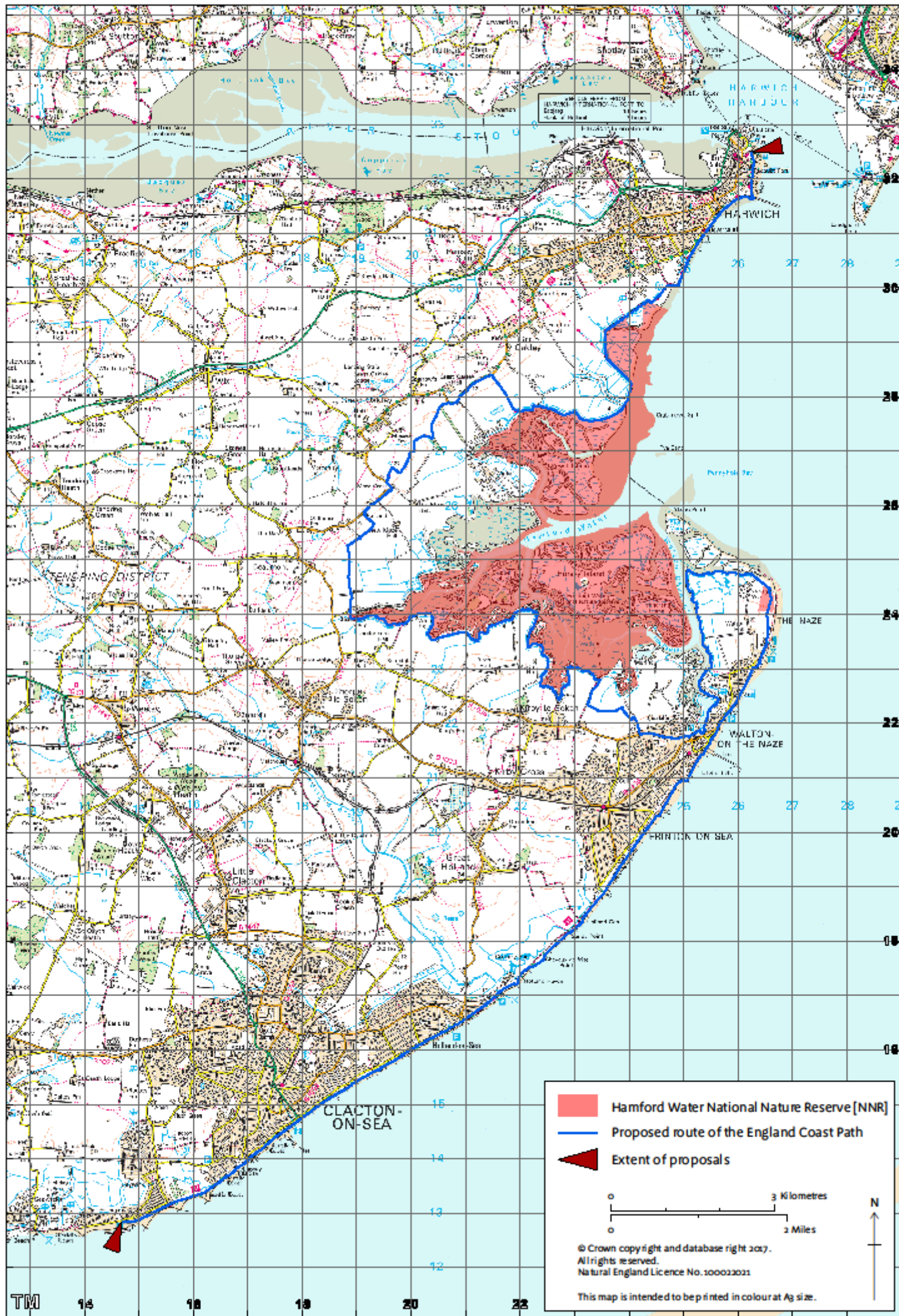
D. Key designations - Special Protection Areas (SPA)

E. Key designations - Sites of Special Scientific Interest (SSSI)



E. Key designations - Sites of Special Scientific Interest (SSSI)

F. Key designations - Hamford Water National Nature Reserve (NNR)



F. Key designations - Hamford Water National Nature Reserve (NNR)