England Coast Path Stretch: Felixstowe Ferry to Bawdsey



Report FFB 4: Wilford Bridge to Ferry Cliff

Part 4.1: Introduction

Start Point: Wilford Bridge (grid reference: TM2915 5012)

End Point: Ferry Cliff (grid reference: TM2776 4852)

Relevant Maps: FFB 4a to FFB 4b

- 4.1.1 This is one of a series of linked but legally separate reports published by Natural England under section 51 of the National Parks and Access to the Countryside Act 1949, which make proposals to the Secretary of State for improved public access along and to this stretch of coast between Felixstowe Ferry and Bawdsey.
- 4.1.2 This report covers length FFB 4 of the stretch, which is the coast between Kyson Point and Wilford Bridge. It makes free-standing statutory proposals for this part of the stretch, and seeks approval for them by the Secretary of State in their own right under section 52 of the National Parks and Access to the Countryside Act 1949.
- 4.1.3 The report explains how we propose to implement the England Coast Path ("the trail") on this part of the stretch, and details the likely consequences in terms of the wider 'Coastal Margin' that will be created if our proposals are approved by the Secretary of State. Our report also sets out:
 - any proposals we think are necessary for restricting or excluding coastal access rights to address particular issues, in line with the powers in the legislation; and
 - any proposed powers for the trail to be capable of being relocated on particular sections ("roll-back"), if this proves necessary in the future because of coastal change.
- 4.1.4 There is also a single Overview document for the whole of this stretch of coast, explaining common principles and background. This and the other individual reports relating to the stretch should be read in conjunction with the Overview. The Overview explains, among other things, how we have considered any potential environmental impacts of improving public access to this part of the coast, and this report, and other separately published assessments we refer to, then provides more detail on these aspects where appropriate.

Part 4.2: Proposals Narrative

The trail:

- 4.2.1 Generally follows existing walked routes, including public rights of way, along most of this length.
- 4.2.2 Mainly follows the shoreline guite closely and maintains good views of the estuary.
- 4.2.3 Includes seven sections of new path between Wilford Bridge and the public footpath near Garden Wood, Sutton Hoo.
- 4.2.4 Follows a route similar to the existing public right of way but departs from this in places in order to follow the existing walked route (maps FFB4a to FFB4b sections FFB-4-S013 and FFB-4-S014 and sections FFB-4-S021 to FFB-4-S034).

Protection of the environment:

In this part of the report, we explain how we have taken account of environmental protection objectives in developing our proposals for improved coastal access.

- 4.2.5 The following designated sites affect this length of coast:
 - Deben Estuary SPA
 - Deben Estuary SSSI
 - Ferry Cliff SSSI
 - Deben Estuary RAMSAR
- 4.2.6 Natural England is satisfied that the proposals for coastal access in this report are made in accordance with relevant environmental protection legislation. For more information about how we came to this conclusion in respect of the natural environment; see the following assessments of the access proposals that we have published separately:
 - A Habitats Regulations Assessment relating to any potential impact on the conservation objectives of European sites.
 - Our Nature Conservation Assessment, in which we document our conclusions in relation to other potential impacts on nature conservation.

The following table brings together design features included in our access proposals to help to protect the environment along this length of the coast.

4.2.7 Measures to protect the environment

Мар	Route section numbers	Design features of the access proposals	Reason included		
FFB 4a	FFB-4-S001 to FFB-4- S009	■ Access to the margin from 2 metres seaward of the western edge of The Lower Track between Wilford Bridge and Little Haugh will be excluded all year round, adjacent to route sections FFB-2-S001 to FFB-2-S009. See map E4 below and in the Overview and the Habitat Regulations Assessment accompanying this report for further detail.	The narrow mouthed whorl snail is a Qualifying Feature of the Deben Estuary Ramsar site. This measure is included to prevent loss of or damage to this feature or its supporting habitat due to trampling on the trail or the coastal margin.		

Part 6b of the Overview includes some contextual information about protecting the environment along this length of coast.

Accessibility:

- 4.2.8 There are few artificial barriers to accessibility on the proposed route. However, the natural coastal terrain is often challenging for people with reduced mobility and this is the case on sections of our proposed route because:
 - The trail would follow an uneven path in places at Ferry Cliff (map 4b sections FFB-4-S020 to FFB-4-S034;
 - The trail includes series of approximately 30 steps at Ferry Cliff (map 4b section FFB-4-S034).
- 4.2.9 At Ferry Cliff, some steps will be replaced, so as to make them easier to use. We envisage this happening before the new access rights come into force, as part of the physical establishment work described below.

See part 6a of the Overview - 'Recreational issues' - for more information.

Where we have proposed exercising statutory discretions:

- 4.2.10 **Estuary:** This report proposes that the trail should contain sections aligned on the estuary of the River Deben, extending upstream from the open coast. Natural England proposes to exercise its functions as if the sea included the estuarial waters of that river as far as Melton near Woodbridge, where the A1152 crosses the estuary at Wilford Bridge (see report FFB3). See part 5 of the Overview for a detailed analysis of the options considered for this estuary and our resulting proposals.
- 4.2.11 **Landward boundary of the coastal margin:** We have used our discretion on some sections of the route to map the landward extent of the coastal margin to an adjacent physical boundary such as a fence line, pavement or track to make the extent of the new access rights clearer. See Table 4.3.1 below.
- 4.2.12 The Proposals Tables show where we are proposing to alter the default landward boundary of the coastal margin. These proposals are set out in columns 5b and 5c of table 4.3.1. Where these columns are left blank, we are making no such proposals, so the default landward boundary applies. See the note relating to Columns 5b & 5c [above Table 4.3.1] explaining what this means in practice.

See also part 3 of the Overview - 'Understanding the proposals and accompanying maps', for a more detailed explanation of the default extent of the coastal margin and how we may use our discretion to adjust the margin, either to add land or to provide clarity.

4.2.13 **Restrictions and/or exclusions:** We have proposed to exclude access by direction under the Countryside and Rights of Way Act (2000) in certain places along this section of coast.

Exclusion of access to the saltmarsh and mudflat on the Deben Estuary

- 4.2.14 Access to the saltmarsh and mudflat in the coastal margin will be excluded all year round, seaward of route sections FFB-4-S001 to FFB-4-S034, maps FFB4a and FFB 4b. This is proposed under section 25A of the Countryside and Rights of Way Act (2000) because we are satisfied that the land is unsuitable for public access. This exclusion does not apply to the route itself and will have no legal effect on land where coastal access rights do not apply. See map FFB E4 for further detail.
- 4.2.15 The section 25A restriction is proposed where it is considered that saltmarsh and flats are unsuitable for public access, notwithstanding any locally tolerated access. Safety is considered as part of the assessment along with the nature of the terrain and any natural risks that exist such as soft mud, hidden channels, potential to be trapped by rising tides, and suitability for walking. The intention is to prevent those who may be unfamiliar with the risks from using such areas.
 - The areas of saltmarsh on the river Deben are subject to regular tidal inundation, and are generally uneven and wet underfoot, incised with creeks and channels, some of which would not be readily apparent to walkers.
 - The areas of flat on the river Deben are predominantly soft mud at low tide that is difficult to walk on, which becomes inundated when the tide rises.
- 4.2.16 Because this area of the margin will have coastal access rights excluded from it under section 25A of the CROW Act, we do not expect there to be any impact on nature conservation features from new coastal access rights. Should the exclusion under section 25A become unnecessary at any time in the future we will consider the need for further measures to protect the designated features of interest, which may include restrictions or exclusions on coastal access rights under section 26(3)(a) to protect sensitive wildlife.

4.2.17 The directions we give are intended to avoid any new public rights being created over the area in question in view of the difficult terrain of saltmarsh and mudflats.

Narrow mouthed whorl snail in the coastal margin

4.2.18 Access to the margin will be excluded all year round between Wilford Bridge and Little Haugh, adjacent to route sections FFB-4-S001 to FFB-4-S009. This is proposed under Section 26(3)(a) of the Countryside and Rights of Way Act (2000) to protect narrow mouth whorl snails. See map FFB E4 for further detail.

The narrow mouth whorl snail is an internationally protected feature of the Deben Estuary. The Habitat Regulations Assessment concluded that allowing access seaward of the trail could cause a significant effect by trampling the delicate vegetation which could result in the complete destruction of the snails at this location.

- 4.2.19 These directions will not prevent or affect:
 - any existing local use of the land by right: such use is not covered by coastal access rights;
 - any other use people already make of the land locally by formal agreement with the landowner, or by informal permission or traditional toleration; or
 - use of any registered rights of common or any rights at common law or by Royal Charter etc.

Any such use is not prohibited or limited by these arrangements.

See part 8 of the Overview - 'Restrictions and exclusions' - for a summary for the entire stretch.

4.2.20 **Coastal erosion:** Natural England is able to propose that the route of the trail would be able to change in the future, without further approval from the Secretary of State, in response to coastal change. This would happen in accordance with the criteria and procedures for 'roll-back' set out in part 7 of the Overview.

Natural England may only propose the use of this roll-back power:

- as a result of coastal erosion or other geomorphological processes or encroachment by the sea, or
- in order to link with other parts of the route that need to roll back in direct response to such changes.
- 4.2.21 Column 4 of table 4.3.1 indicates where roll-back has been proposed in relation to a route section. Where this is the case, the route, as initially determined at the time the report was prepared, is to be at the centre of the line shown on maps FFB 4a and FFB 4b as the proposed route of the trail.
- 4.2.22 If at any time in the future any part of a route section upon which roll-back has been specified needs, in Natural England's view, to change in order for the overall route to remain viable, the new route for the part in question will be determined by Natural England without further reference to the Secretary of State. This will be done in accordance with the criteria and procedures described under the title 'Roll-back' in part 7 of the Overview and section 4.10 of the Coastal Access Scheme. If this happens, the new route will become the approved route for that section for the purposes of the Order which determines where coastal access rights apply.

On sections for which roll-back is <u>not</u> proposed in table 4.3.1, the route is to be at the centre of the line shown on maps FFB 4a and FFB 4b as the proposed route of the trail.

Other future change:

4.2.23 At this point we do not foresee any need for future changes to the access provisions that we have proposed within this report.

See part 7 - 'Future changes' of the Overview for more information.

Establishment of the trail:

4.2.24 Below we summarise how our proposed route for the trail would be physically established to make it ready for public use before any new rights come into force.

Establishment works will only start on this length of coast once these proposals have been approved by the Secretary of State. The works may therefore either precede or follow the start of establishment works on other lengths of coast within the stretch, and detailed in their separate reports.

- 4.2.25 Our estimate of the capital costs for physical establishment of the trail on the proposed route between Wilford Bridge and Ferry Cliff is £2,500 and is informed by:
 - information already held by the access authority, Suffolk County Council, in relation to the management of existing public rights of way;
 - the conclusions of our deliberations in relation to potential impacts on the environment; and
 - information gathered while visiting affected land and talking to the people who own and manage it about the options for the route.
- 4.2.26 There are four main elements to the overall cost:
 - A number of new waymarking signs would be needed, in particular on route sections where other public rights of way intersect the trail.
 - Some gap creation will be necessary on sections FFB-4-S002 to FFB-4-S009.
 - Some steps will be replaced at Ferry Cliff.
 - A revetment will be created to manage the slope at section FFB-4-S009.

Table 1 shows our estimate of the capital cost for each of the main elements of physical establishment described above.

Table 1: Estimate of capital costs

Item	Cost
Signs	£500
Gap creation	£1,000
Steps	£700
Revetment	£300
Project management	£400

Total £2,900 (Exclusive of any VAT payable)

4.2.27 Once the Secretary of State's decision on our report has been notified, and further to our conversations with land managers during the route planning stage, Suffolk County Council will liaise with affected land owners and occupiers about relevant aspects of the design, installation and maintenance of the new signs and infrastructure that are needed on their land. Prior to works being carried out on the ground, all necessary permissions, authorisations and consents will be obtained. All such works would conform to the published standards for National Trails and the other criteria described in our Coastal Access Scheme.

Maintenance of the trail:

- 4.2.28 Because the trail on this length of coast will form part of the National Trail being created around the whole coast of England called the England Coast Path, we envisage that it will be maintained to the same high quality standards as other National Trails in England (see The New Deal; Management of National Trails in England from April 2013: details at Annex A of the Overview).
- 4.2.29 We estimate that the annual cost to maintain the trail between Wilford Bridge and Ferry Cliff will be £1,100 (exclusive of any VAT payable). In developing this estimate we have taken account of the formula used to calculate Natural England's contribution to the maintenance of other National Trails.

Part 4.3: Proposals Tables

See Part 3 of Overview for guidance on reading and understanding the tables below

4.3.1 Section Details: Maps FFB 4a and FFB 4b Wilford Bridge to Ferry Cliff

Key notes on table:

- 1. Column 2 an asterisk (*) against the route section number means see also table 4.3.2: Other options considered.
- 2. Column 4 'No' means no roll-back is proposed for this route section. 'Yes normal' means roll-back is proposed and is likely to follow the current feature (e.g. cliff edge/beach) for the foreseeable future as any coastal change occurs.
- 3. Column 4 'Yes see table 4.3.3 means roll-back is proposed, but refer to that table below about our likely approach to implementing it for this route section. This is because a more complex situation exists in this case and consideration must be given to how roll-back may happen in relation to excepted land, a protected site etc.
- 4. Column 5a Certain coastal land types are included automatically in the coastal margin where they fall landward of the trail if they touch it at some point. The relevant land type (foreshore, cliff, bank, barrier, dune, beach, flat or section 15 land see Glossary) is shown in this column where appropriate. "No" means none present on this route section.
- 5. Columns 5b and 5c Any entry in these columns means we are proposing to align the landward boundary of the coastal margin on this route section with the physical feature(s) shown in 5b, for the reason in 5c. No text here means that for this route section the landward edge of the margin would be that of the trail itself or if any default coastal land type is shown in 5a, that would be its landward boundary instead.

1	2	3	4	5a	5b	5c	6
Maps	Route section numbers	Current status of route sections	Roll-back proposed? (See Part 7 of Overview)	Landward margin contains coastal land type?	Proposal to specify landward boundary of margin (See maps)	Reason for landward boundary proposal	Explanatory notes
FFB 4a	FFB-4- S001*	Not an existing walked route	Yes – see table 4.3.3	No			
FFB 4a	FFB-4- S002*	Not an existing walked route	Yes - normal	No	Landward edge of track	Clarity and cohesion	
FFB 4a	FFB-4- S003*	Not an existing walked route	No	No			
FFB 4a	FFB-4- S004*	Not an existing walked route	No	No			
FFB 4a	FFB-4- S005*	Other existing walked route	No	No			
FFB 4a	FFB-4- S006*	Not an existing walked route	No	No	Landward edge of track	Clarity and Cohesion	

1	2	3	4	5a	5b	5c	6
Maps	Route section numbers	Current status of route sections	Roll-back proposed? (See Part 7 of Overview)	Landward margin contains coastal land type?	Proposal to specify landward boundary of margin (See maps)	Reason for landward boundary proposal	Explanatory notes
FFB 4a	FFB-4- S007*	Other existing walked route	No	No			
FFB 4a	FFB-4- S008*	Not an existing walked route	No	No			
FFB 4a	FFB-4- S009*	Not an existing walked route	No	No			
FFB 4b	FFB-4- S010	Public footpath	Yes - normal	No			
FFB 4b	FFB-4- S011	Public footpath	Yes – see table 4.3.3	No	Hedgerow	Clarity and cohesion	
FFB 4b	FFB-4- S012	Public footpath	Yes – see table 4.3.3	No			
FFB 4b	FFB-4- S013	Other existing walked route	Yes - normal	No			
FFB 4b	FFB-4- S014	Other existing walked route	Yes - normal	Yes- bank			The margin extends to the toe of the landward slope, by default.
FFB 4b	FFB-4- S015	Public footpath	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S016	Public footpath	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S017	Public footpath	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S018	Public footpath	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S019	Public footpath	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S020	Public footpath	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S021	Other existing walked route	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S022	Other existing walked route	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S023	Other existing walked route	Yes - normal	No	Landward edge of path	Clarity and cohesion	

1	2	3	4	5a	5b	5c	6
Maps	Route section numbers	Current status of route sections	Roll-back proposed? (See Part 7 of Overview)	Landward margin contains coastal land type?	Proposal to specify landward boundary of margin (See maps)	Reason for landward boundary proposal	Explanatory notes
FFB 4b	FFB-4- S024	Other existing walked route	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S025	Other existing walked route	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S026	Other existing walked route	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S027	Other existing walked route	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S028	Other existing walked route	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S029	Other existing walked route	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S030	Other existing walked route	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S031	Other existing walked route	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S032	Other existing walked route	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S033	Other existing walked route	Yes - normal	No	Landward edge of path	Clarity and cohesion	
FFB 4b	FFB-4- S034	Other existing walked route	Yes - normal	No	Landward edge of path	Clarity and cohesion	

4.3.2 Other options considered: Maps FFB 4a and FFB 4b - Wilford Bridge to Ferry Cliff

Maps	Route section numbers	Other options considered	Reasons for not proposing this option
4a	FFB-4-S001 to FFB-4- S009	We considered aligning the trail along the pavement adjacent to the A1152 and B1083 and past the Sutton Hoo (National Trust) visitor's centre.	 The A1152 and B1083 divert a considerable distance away from the shoreline. The pavements alongside these roads are narrow in places and the roads are very busy. It offers good views of the estuary as compared with the roads which do not. It is more direct and convenient for walkers and offers a superior user experience. Under this alternative option, our proposed route would become part of the accessible coastal margin by default under the legislation. As such the public would still have the right to walk along it and would likely choose to use it in preference to the road route because it is more direct and pleasant.
		We considered aligning the trail up and along some higher ground around the southern boundary of The Lodge, then adjacent to a field boundary fence before re-joining the track at a point to the south of it.	 Aligning the trail up and along the higher ground around the southern boundary of The Lodge would include users negotiating a steep slope where some steps may need to be installed to make it easier to negotiate. This would form a barrier to access for less able bodied users or walkers with pushchairs. It falls outside excepted land. It is more direct and convenient for walkers and offer a superior user experience. It offers better views of the estuary.

Maps	Route section numbers	Other options considered	Reasons for not proposing this option
		We considered aligning the trail through the western part of the garden (to the west of the track) of The Lodge which the landowner kindly considered to dedicate.	 Under this alternative option, our proposed route would become part of the accessible coastal margin by default under the legislation. As such the public would still have the right to walk along it and would likely choose to use it in preference to the slope because it is more direct and convenient. An alignment through the western part of the garden of The Lodge would have been complex, involving significant engineering works including shoring up a revetment wall and installing a new pedestrian bridge. The cost of these works would not have been proportionate to the benefits they would bring to trail users. We concluded that overall the proposed route struck the best balance in terms of the criteria described in chapter 4 of the Coastal Access Scheme.

Note: Any public rights of way not forming part of the proposed trail would remain available for people to use under their pre-existing rights.

4.3.3 Roll-back implementation – more complex situations: Maps FFB 4a and FFB 4b – Wilford Bridge to Ferry Cliff

Ма	ıps	Route section numbers	Features or sites potentially affected	Our likely approach to roll-back
FF	В 4а	FFB-4-S001	Buildings and their curtilage, garden.	If it is no longer possible to find a viable route seaward of the specified excepted land (e.g. buildings, curtilage, gardens etc), we will choose a route landward of it, following discussions with owners and occupiers.
FF	B 4b	FFB-4-S011 and FFB-4- S012	Buildings and their curtilage, gardens,	If it is no longer possible to find a viable route seaward of the specified excepted land (e.g. buildings, curtilage, gardens etc), we will choose a route landward of it, following discussions with owners and occupiers.

In relation to all other sections where roll-back has been proposed, any later adjustment of the trail is likely to follow the current feature (e.g. cliff edge/beach) for the foreseeable future as any coastal change occurs.

Part 4.4: Proposals Maps

4.4.1 Map Index

Map reference	Map title
FFB 4a	Wilford Bridge to Little Haugh
FFB 4b	Little Haugh to Ferry Cliff
FFB E4	Proposed direction under S25A CROW

PROPOSALS

Trail Sections

Trail using existing public right of way or highway

Trail using other existing walked route

Trail not using existing walked route

■ Alternative route

Image Trail shown on other maps

■ Approved or open England Coast Path

Maps that show sections of the trail that follow the existing South West Coast Path as currently walked and managed use the following trail categories. Information on the existing status and infrastructure is not shown.

Trail using existing

South West Coast Path

Alternative or optional alternative route using existing South West Coast Path

Trail sections which follow existing public rights of way or highways are indicated by a suffix:

BW - Public bridleway

BY - Public byway

CP - Cycletrack (pedestrian)

CT - Cycletrack (cycles only)

FP - Public footpath

FW - Public footway (Pavement)

RB - Restricted byway

RD - Public road

Coastal Margin

Explanatory note

Part 3 of the Overview to the report explains where the landward boundary of the coastal margin falls by default. Our proposals include any suggested variation of this default boundary. The purple wash on the map indicates where as a result of our proposals the coastal margin would extend significantly to the landward side of the proposed route of the trail. The coastal margin may include some areas where coastal access rights do not apply, either seaward or landward of the proposed route of the trail: the Overview explains more about this. The landward boundary of the coastal margin may in due course move inland, if the trail rolls back under proposals in this report to respond to coastal change.



Coastal margin landward of the trail



Coastal margin landward of the trail which is existing access land

Other Information

Other access rights and routes

Public bridleways
Public byways
Public footpaths
Restricted byways

South West Coast Path

Sustrans national routes



Existing access land

Infrastructure types

For status of each, where shown on map, see colour codes below

Brid	ges:	Stiles:		Gates:	
	Clapper bridge	₿	Ladder stile	•	Bristol gate
	Footbridge	4	Lift-up stile		Field gate
	Quad bike bridge	*	Squeeze stile	•	Gateway with no gate
WIIII	Sleeper bridge	0	Step stile	☆	Kissing gate
	Vehicle bridge	⊗	Stone stile	$ \diamondsuit $	Pedestrian gate
				B	Wheelchair gate
Misc	ellaneous:				
×	Barrier	0	Cycle chicane	0	Interpretation panel
0	Boardwalk	•	Drainage	(j	Ramp
	Bollard		Drop-kerb	D	Revetment
•	Cattle grid		Gap in fence	3	Stepping stones
•	Culvert		Hurdle	•	Steps

Infrastructure status

Each symbol shown on the map is colour coded as appropriate, as in this example for a set of steps:

Existing steps to be retained

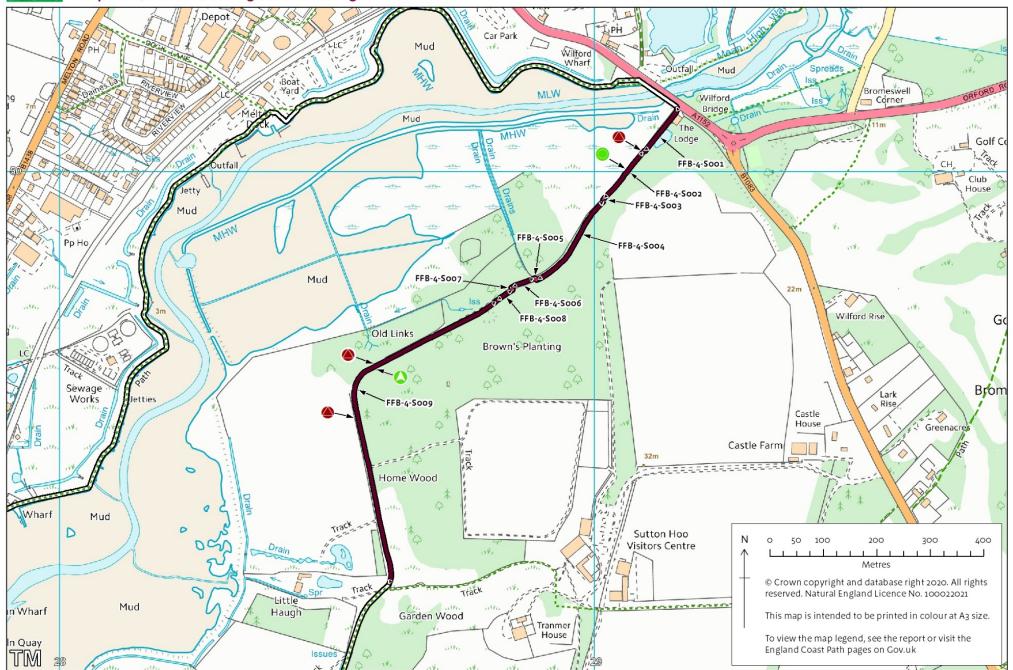
New steps required

 Existing steps to be removed

^{*} Please note that the items in this legend may not all be present on an individual map or report.

Coastal Access - Felixstowe Ferry to Bawdsey - Natural England's Proposals Report FFB 4 - Wilford Bridge to Ferry Cliff

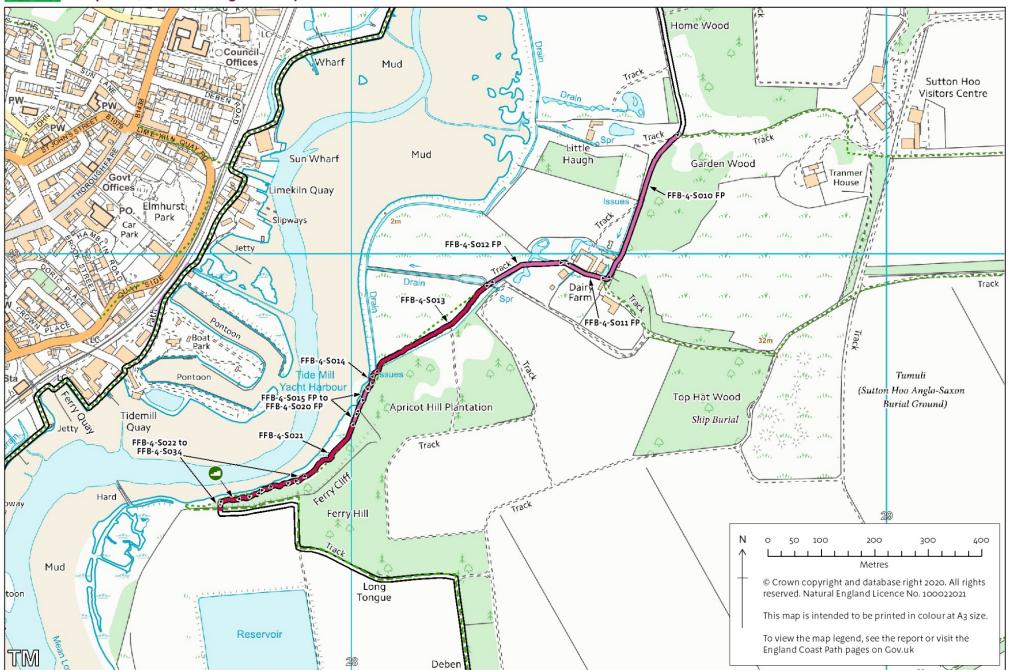
Map FFB 4a - Wilford Bridge to Little Haugh





Coastal Access - Felixstowe Ferry to Bawdsey - Natural England's Proposals Report FFB 4 - Wilford Bridge to Ferry Cliff

Map FFB 4b - Little Haugh to Ferry Cliff



Map FFB E4: Directions to exclude/restrict access - as proposed for area covered by Report FFB4

Map FFB E4: Directions to exclude/restrict access - as proposed for area covered by Report FFB4

