

Coastal Works - Walton on the Naze – Statement in Support of Proposals (Design and Access Statement)

The Design and Access Statement as submitted in support of planning application 21/01450/FUL is as below. The Statement has been included as part of the current application to demonstrate the reasoning behind the consented works being required. As noted elsewhere in the information submitted as part of the current application, without the amended access arrangement to permit access to the foreshore those works are potentially unable to be implemented as a result of the erosion that has taken place, and removing the “connection” from the access over the sea wall to the foreshore itself.

The principles applied to the original proposals for location 4, the access, again as described elsewhere, i.e., minimal impact / temporary nature apply to the amended proposals. The materials also being in keeping with those for the consented works.

Design and Access Statement as submitted in support of 21/01450/FUL

Introduction

Works to the existing cliff face (Location 3; gabion works) as consented under have been undertaken and foreshore (Location 2; Soiltain, bagwork groynes) at the northern part of Walton on the Naze, and to a location known as the Short Wall (Location 1), in an area referred to as the Naze Peninsular, this statement is intended to provide a description of those works and information relating to the reasoning behind the measures being considered necessary and appropriate. (Information is also provided in relation to Location 4, the proposed access route to the other locations)

The works are not proposed to be long term measures but are intended to be in place sufficient time to allow decisions to be made regarding future policy in terms of protecting areas of significant national and international ecological importance, protecting infrastructure assets and providing flood protection. The current policy is identified in the text below, and the proposed works are in line with that policy.

A Pe-application Enquiry has been made of Tendring District Council (ref 21/30032/PREAPP) in relation to locations 2 and 3, groynes and gabion works, and which received a favourable response to the proposals. The recommendations made in the response have been taken into consideration and included in the documents provided in support of this planning application.

Background

The proposals consist of measures to manage the coastal erosion taking place between the current eastern extent of the formal flood wall at the northern promontory of the Naze Peninsular, where the flood wall ceases, and the low level soft cliffs commence, and some 400m to the west where a length of historic sea wall, projecting to the north of the formal flood wall is located.

To the eastern extent of the formal flood wall, where the length of the low level cliffs to the east exist, the land behind those cliffs is at a lower level. This land would become inundated should the cliffs be lost. Currently the regression is such that the “down slope” to the rear of the cliffs is being eroded from the seaward side as a result of tide and wave action. The short wall, to the west of the above location is what remains of a once considerably more significant sea wall, extending further out into the estuary. The sea wall that remains is the last means of preventing the action of the sea “attacking” Hamford salt marshes from the south, and exacerbating the already significant erosion taking place from the north. A map entitled; *Coastal Access-Jaywick to Harwich- Natural England proposals; Chapter 3: Walton-on-the-Naze to Walton Mere; Map 3b Sunny Point*

to *The Naze Nature Reserve*, is attached as Appendix 1 and on which the locations referenced above have been annotated.

Historically the area to the north east of the existing formal flood wall was occupied, at the end of the nineteenth century, by a rifle range and associated buildings which extended some 100m+ to the north of the current wall. At this time there also existed formal sea defences consisting of a sea wall beyond which were groynes and breakwaters. A similar arrangement of groynes and breakwaters extending over the area of cliffs, extending to the east. Over the subsequent years these areas have been subject to rapid erosion and as the defences were lost significant tracts of coastal environment were also lost as a result. The Short wall is all that is left of these sea defences. Prior to the construction of the current sea wall, which is believed to be in the late 1960's / early 1970's, to the north were salting's, where the rifle range formerly existed, with the area to the south west being not dissimilar environment to that which exists currently, and is in danger of being lost. The salting's themselves having subsequently been lost with only the existing tidal pools remaining, and which to area also in significant danger of inundation.

The soft cliffs to the south east of the end of the formal wall have suffered from erosion as a result of tidal and wave effects such that the cliff has been lost to such an extent that the rear slope is the down slope from the former cliff top which no longer exists. The cliff top having been above the current level of the top of cliff face. A footpath that used to historically be on the seaward side of the current cliff top has also been lost.

The current flood wall follows the route of the trail as shown on the map in Appendix 1, with the footpath referred to being shown as following what was the previous cliff top to the east, and sea wall to the north, now below water, and outside, seaward, of the low water line.

The extent of the erosion that is occurring at the location referred to above, and elsewhere within the Naze Peninsular is well documented, and can be seen by reference to the report prepared on behalf of the Environment Agency; "Coastal Morphology Report Essex (Sub-cell 8 Harwich to Canvey Island) April 2015". Since that report was produced a further significant amount of coast line has been lost as no works have been undertaken to arrest the ongoing process.

The current Essex and Suffolk Shoreline management Plan identifies the policy relating to the formal wall as being Htl+ (Htl + being Hold the Line with + identifying that the policy is to maintain, or upgrade, the current Standard of Protection) for Epoch 1 (Present day to 2025) and Epoch 2 (2025 to 2055). The area of the natural cliffs immediately to the south of the formal wall is identified as having the policy of NAI (No Active Intervention) over the same period, allowing the cliff to realign as part of the natural process. It is understood the reason for

HtI+ being the policy associated with the formal wall is primarily due to the presence of the Anglian Water sewage treatment works (STW) that exists to the south west of the formal wall, and which would be inundated and unable to function should the wall not provide the intended protection in line with the policy. The STW serving Walton on the Naze. A copy of maps contained within the Essex and South Suffolk Shoreline management Plan; *Management Unit B (Hamford Water frontage) Epoch 1 (Present Day to 2025) Policy Map* and *Management Unit C (Tendring Peninsular) Epoch 2 (2025 to 2055) Policy Map* are contained within Appendix B, identifying the policies referred to above.

The eastern end of the sea wall has, and is continuing to be eroded, with the wall being lost and the HtI+ policy not being implemented. The extent of the sea wall lost is evident from the debris on the foreshore at its eastern end, and which are the concrete revetment blocks that were used to face the seaward side of the wall. The failure to maintain the wall has exacerbated the loss of the low level cliffs where they join with the wall at its eastern end.

The area to the south west of the formal wall also consists of Local and National Nature Reserve's and provides important habitat to migratory birds, and the area of the foreshore and saltmarsh is an area where rare flora and fauna, unique to the area under consideration, can be found. This is demonstrated in the Environmental Designations associated with the locality, with the foreshore, mudflats, saltmarsh, tidal ponds and area to the south west of the formal wall being RAMSAR, SSI, Priority habitat, National Nature Reserves etc.

The natural cliffs, those to which the policy of NAI (No Active Intervention) applies, are stated as being eroded at 1.8m per year in the Shoreline management plan and this is clearly visible. Based on a more recent evaluation the rate of erosion it is considered to be 2.5m+/year. This being determined from the fact that in 2016 the junction between the formal sea wall and soft cliffs was 13m further to the east than currently exists. As noted above over recent years the erosion has extended to include loss of the formal wall at its south eastern end, where the erosion of the cliff has exposed the construction of the formal wall to the action of the sea, and in a direction from which it was not intended. The material from which the wall has been constructed, and which is not afforded any protection by the placement of revetment works etc. has therefore been lost. The composition of this material is such that it erodes relatively quickly under the action of water, and particularly the physical action of waves and tidal flow. This effect has been attempted to be slowed down by the placement of additional material to increase the wall width, and by local placement of gabion baskets, to the most exposed south eastern corner. The latter being undertaken by volunteer organisations rather than those who have the responsibility of implementing the policy.

The Short Wall is located some 400m to the west of the above, and at the eastern extent of where the formal flood wall is protected on its seaward side by revetment blocks. Where the wall extends further to the west of the Short Wall's location it is a simple earth embankment.

Immediately to the west of the Short Wall is Hamford Water salt marshes. These marshes are undergoing erosion from the northerly direction of 3.6m / year based on the information as contained in the; "Coastal Morphology Report Essex (Sub-cell 8 Harwich to Canvey Island) April 2015". Again this is considered to be very evident visually. The Short Wall provides some protection against the effects of sea and tide from the south east, and without which the formal flood wall without revetment protection would quickly be exposed.

The proposed works as described below and shown on the accompanying drawings, and referred to in the accompanying Habitat Regulations Assessment are intended to slow down the impact of coastal erosion and in the case of the Short Wall maintain it as currently exists. They are only intended to be a temporary measure while the Shoreline management plan is reviewed, along with other policies relevant to the area. The works being minimalist in nature, easily implemented with minimal disruption / disturbance, and can be adjusted / maintained as necessary over time they are required to function.

Proposals

Overview

As referred to above the current shoreline management plan is Htl+ for the formal wall, the length of wall to which this applies being the current south easterly extent and which has previously been subject to only what may best be described as "emergency " minimalist measures to enforce this policy. The wall currently being eroded at its eastern end minimising any benefit that may have been offered at the time of their implementation.

In implementing both the policy of Htl and NAI it is suggested that it is not always possible to view the limit between their individual extents as a definitive point / location. This is considered particularly relevant to the area to the south east extent of the formal wall. As described above the effects of NIA and allowing natural realignment of the cliffs has, and is, affecting the implementation of the policy to Htl+. This will be further exacerbated by the fact that to the northern end of the length identified for NAI, as noted the length over which part of the works are proposed (Location 3 as referred to and described below), the land behind the cliff face falls away, slopes down, such that it is at the level of the rear toe to the formal wall. The rear face of the formal wall, as described above, and as would normally be expected, has no revetment works, and is simply an exposed, grass covered face. The continued erosion of the cliff over the northern end of

the designated NAI length will result in exposure of this face to the effects of the sea. This will subsequently result in the loss of the formal wall and total failure of the Htl+ policy. Once exposed the unprotected soft rear slope of wall will be lost relatively quickly, and potentially more quickly than has occurred to its south east end where concrete revetment slabs were used to face the wall. The topographical level of the area to the landward side, the south, of the formal wall is below that of Mean High Water Springs (MHWS) and therefore once exposed by loss of the cliff face, will quickly be eroded.

The continued erosion of the foreshore will also subject the formal wall to the effects of the sea, wave and current / tidal action. The toe of the revetment protection, the current foreshore level at the toe of the seaward side of the wall, is, generally, at approximately MHWS, therefore the erosion of the foreshore will result in exposure of the foundation materials with the same consequence as noted above. The tidal pools will be lost before this stage is reached, however, besides the ecological impact of this event, once the seaward slope to the pools have breached it will effectively result in the immediate exposure of the northern face of the formal wall to the actions of the sea.

The loss of the tidal pools and foreshore will also expose what remains of the sea wall to the north eastern side of the pools, the Short Wall, adding to the effects that are the subject of the proposed works. As noted the loss of this wall will in turn have a significantly detrimental impact on the Hamford salt marshes and expose the unprotected face of the formal wall.

The eventuality as described above will obviously have a very significant detrimental effect on the RAMSAR, SSSI, and Habitat designated areas.

To “manage” the occurrence of the above it is proposed the works as described below and shown on the accompanying drawings be implemented. The works, it is intended, be implemented on a phased basis, with those that are considered to have the most beneficial effect being the first to be carried out. Following monitoring of the success of these works in achieving the goal of managing the coastal erosion process, then the remaining works can be implemented, or other works considered.

The loss of the area to the landward side of the formal wall will also significantly impact on the route of the coastal path as identified by Natural England on the map contained within Appendix 1. There would be a requirement to relocate the path significantly to the east of the route shown. Continuing loss of the formal wall, for the reasons identified above reasons, would result in a break in the path.

The STW will also be put at increased risk of inundation, and its functionality impaired. Further erosion of the foreshore may also potentially expose the outfall

to the STW, and the consequences this brings, both on the operation of the STW and environmentally.

The longevity of the proposed works is such that the intended functional life span does not extend to such a period that they may be considered to be permanent works. It is accepted that they may require repair / adaption as time elapses, they are, however, of a nature such that this can be carried out in a “low tech” manner.

With regard to the phasing as mentioned above, the severity of the erosion to the soft cliffs has resulted in the Naze Protection Society (NPS) championing fund raising activities to allow initial works to be implemented by the installing of a length of the lower level of gabions to the toe of the soft cliffs, and works to the Short Wall, in line with the attached proposals at the earliest opportunity. Such is the concern over the current position.

Brief Description

For ease of recognition the works have been subdivided into their location. The description should be read in conjunction with the drawings for each location.

Location 1; This is the Short Wall. It is proposed to simply reinstate the profile of the wall by infilling the erosion that has occurred to its core and to reinstate the external slopes such that they are a continuation of the profile from top of bank down to where erosion has cause a scarp. It is not proposed to extend the wall, simply restore its integrity.

Works to restore the core of the wall were undertaken by volunteers some 12 months ago. These works have effectively been “undone” by the action of sea. Therefore the current works include the incorporation of protection using a stone filled mattress placed over the reinstated slope.

Location 2; This is the foreshore to the north of the eastern end of the formal wall, where the eastern extent of the Htl+ and commencement of the NAI policies exist. The foreshore having a receding wave cut scarp, the distance between tidal pool and scarp reducing, and where the “emergency” gabions have been installed.

It is proposed to install groynes using Soiltain bags, with the method proposed resulting in minimal and unobtrusive disturbance to the foreshore. The intention being to stabilise the rate at which the distance between the scarp and tidal pool reduces, and providing protection against erosion, longshore drift, that influences the erosion of the adjacent cliff face, and where the extent of the formal wall, has already been diminished.

Initially the number of groynes would be limited to those at the northern part of the area, along with protection to the wave cut scarp ,and would not include any stone (gabion mattress) protection works. The further groynes being implemented only if necessary, and depending upon the effectiveness of the initial works. The effectiveness being monitored over time. The installation of the stone protection being a last resort and only if the Soiltain bags are damaged / displaced by wave action. It should be noted that this is not envisaged given the success of the Soiltain bags elsewhere in similar environments. Information relating to the Soiltain bags is provided.

Location 3; This is the northern extent of the cliff subject to the NAI policy and extends only for the length of cliff where the land behind falls away such that the loss of the cliff will expose the rear of the formal wall.

The proposed works involve the installation of gabion baskets to a level of approximately 2m above beach, foreshore level. The gabion baskets following the line of the toe of the cliff, the projections / irregularities formed by the erosion that has taken place thus far remaining. It is also proposed that the concrete revetment, collapsed path, resulting from the loss of the formal wall thus far be broken up and placed behind the gabion baskets, thus removing the debris from the foreshore and providing some robustness to the gabions against wave action.

The proposed works as described above and shown on the drawings, as noted, are intended to be of limited longevity as referred to above. Their form also requires the minimum of "high tech" construction works / methods thereby limiting the disturbance to environmentally sensitive areas. Maintenance of the works can also be carried out using methods that cause minimal disruption, again as noted above. Noise levels will also be an absolute minimum as the installation process relies principally on the use of labour rather than plant.

Reference has been made to phasing of the proposals, and it is intended that, as noted above, a limited length of the lower gabion be installed to the toe of the soft cliff face giving the urgency of those works at the earliest possible time. This will be followed by those initial works at location 2, again as described above along with the remaining works at location 3-3 be undertaken. The further works at location 2 only being implemented if necessary after the effectiveness of the initial works have been evaluated.

Information has also been provided for a fourth location, Location 4, this is not a location at which it is proposed coastal protection works be carried out but is the proposed means of gaining access to the foreshore to implement the works. It is intended access be gained to the Naze using Old Hall Lane, which is the route used by Anglian Water to serve the STW. Old Hall Lane extends beyond the access to the STW in the form of a hard paved road up to the toe of the formal wall. At this location the wall also has a reduced gradient on the landward side

where an access has been formed to allow access to be gained to the foreshore has been gained in the past. From the seaward side of the crest to the wall there is also a continuing formal access to the foreshore which is intended be used, minimising any environmental impact. This access route is that proposed to be used for the works post installation of the initial gabions to the toe of the soft cliff by the NPS, to the location of the groynes and the Short Wall. The route involves crossing the public footpath which passes along the formal sea wall, (footpath number 39), however, the crossing of the footpath will be very infrequent and will be undertaken in the company of a banks man, with all crossings giving priority to the use of any members of the public. The NPS using a route to the rear of the sea wall, and crossing arable farm land that is will not be in crop at the time its envisaged they will be able to be implemented.

Site accommodation for the contractor and the limited storage required being provided off Old Hall Lane. A similar location approximately 200m to the south was used during the construction of the flood bank in 2018, and when there were significantly more traffic movement associated with those works.

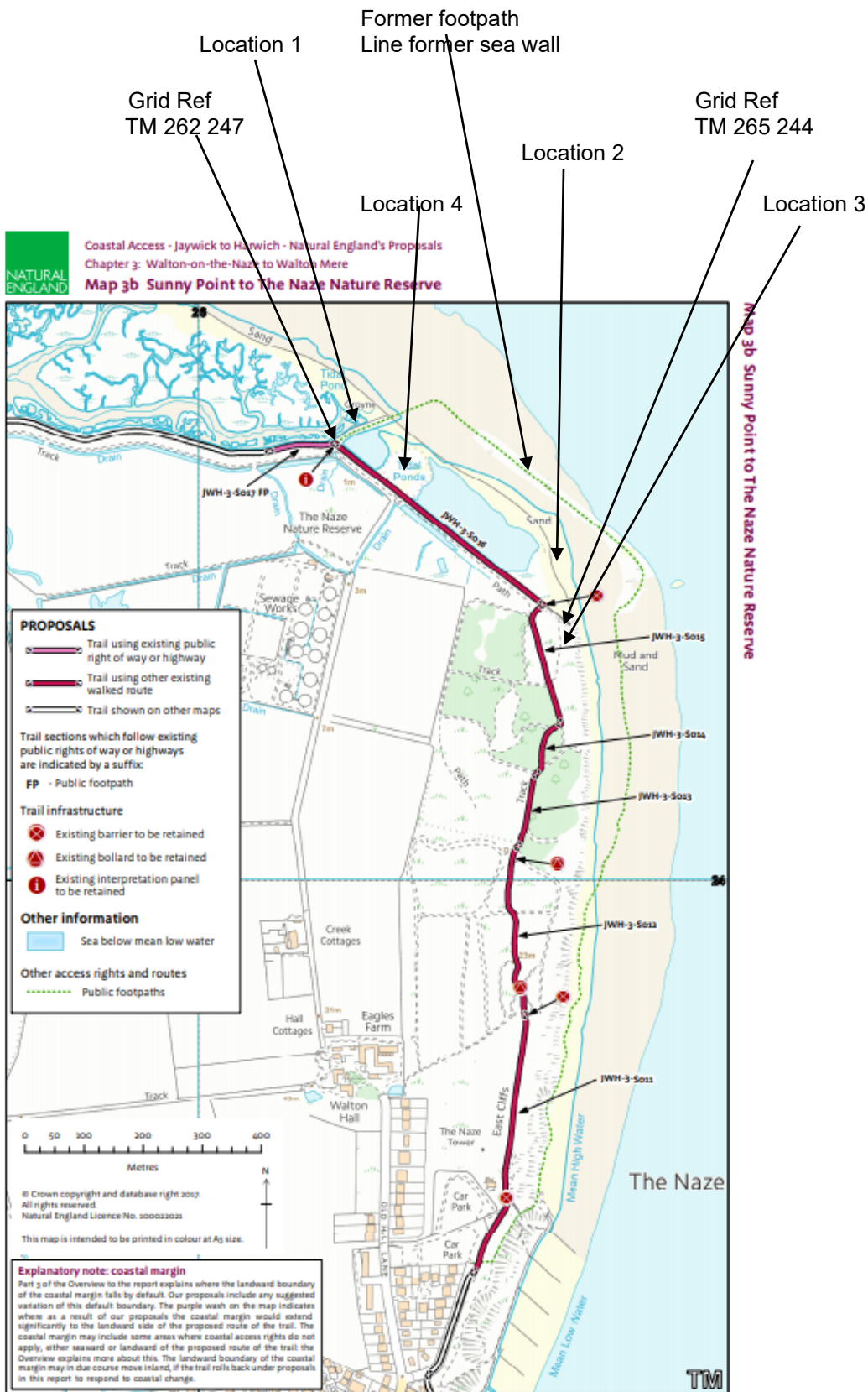
An ecological assessment, Habitat Regulations Assessment, Stage 1 Screening Assessment, has also been undertaken by an Ecologist, Ecology Link, of the proposals, including Location 4, with it being determined there will minimal, and acceptable, environmental impact.

The works would also be carried out at a time to minimise any impact on the ecology and environment as set out in the ecological advice.

An outline Construction Management Plan (CMP) providing outline method statements is included, along with an outline Construction Environmental Management Plan (CEMP) and Transport Statement giving details of likely traffic movements, details of deliveries to site, movement of materials around site etc.

Appendix 1

Coastal Access-Jaywick to Harwich- Natural England proposals; Chapter 3:
Walton-on-the-Naze to Walton Mere; Map 3b Sunny Point to The Naze Nature
Reserve



Appendix 2

Essex and South Suffolk SMP; Management Unit B (Hamford Water frontage)
Epoch 1 (Present Day to 2025) Policy Map and Management Unit C (Tendring
Peninsular) Epoch 2 (2025 to 2055) Policy Map

Figure 4-6 Management Unit B, epoch 1

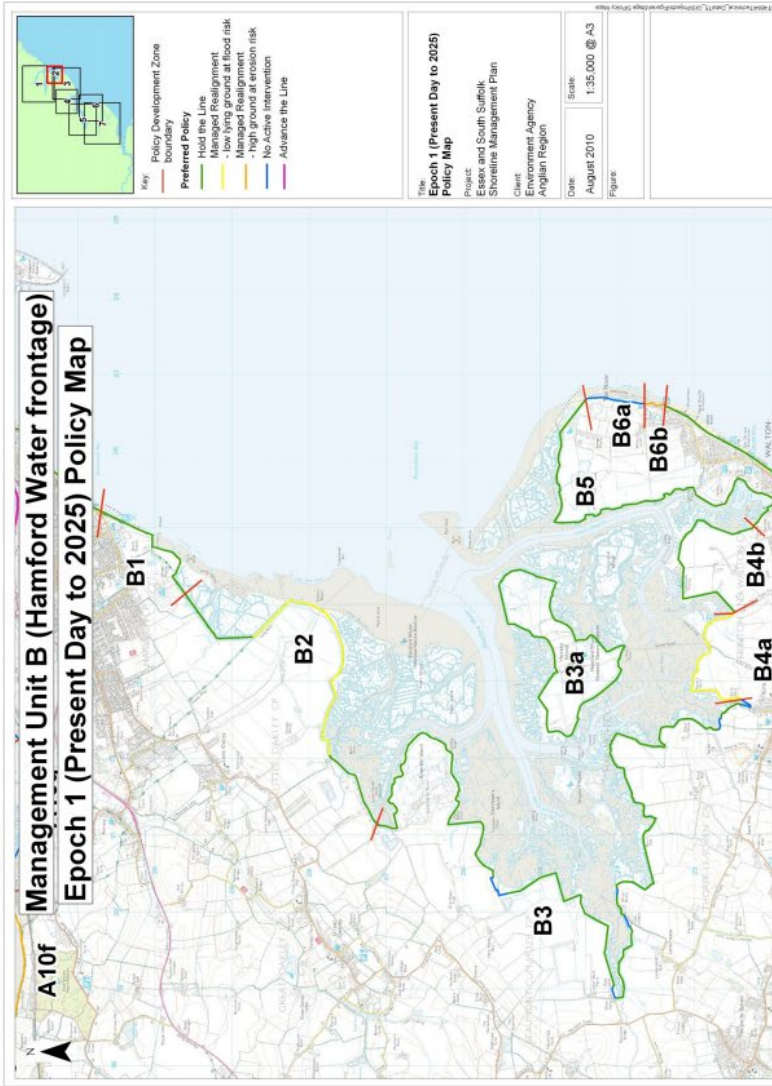


Figure 4-11 Management Unit C, epoch 2

