

Application for Determination

- Parishes:** Gillingham
- Reference:** BA/2016/0017/FUL **Target date:** 13 April 2016
- Location:** Compartment 25, Left bank of the River Waveney downstream of Beccles (A146) Bridge
- Proposal:** Driving / removal / maintenance of piling along the left bank of river, re-grading the river's edge and original bank, and crest raising and roll back of existing bank with the material gained from new pond to be excavated and the old bank.
- Applicant:** Environment Agency
- Reason for referral:** Major application
- Recommendation:** Approve with conditions

1 Background and Description of Site and Proposal

- 1.1 In April 2010, planning permission was granted for flood defence works in Compartment 25 between Dunburgh (Geldeston) at the western end of the compartment to Hill Farm (Gillingham) at the east. Whilst most works in the compartment were undertaken in 2010 and 2011 following the grant of this consent, works between Beccles Bridge and Hill Farm did not take place due to material sourcing complications.
- 1.2 The new planning application has been submitted to seek to provide flood defence improvements for this eastern end of Compartment 25 which extends from the A146 at Beccles Bridge to Hill Farm at Gillingham. The application includes revised material sourcing proposals (on nearby land in the Gillingham Estate) to provide some of the material for roll back and flood bank strengthening. Appendix 1 is a plan showing the application site.
- 1.3 Flood defences in the eastern end of the compartment comprises of a continuous floodbank of 936 metres in length. The flood defence protect an extensive area of low lying land. Erosion protection is provided by a mix of reeded rond and piling. When the 2010 application was submitted, the timber piling had been estimated by BESL with a residual life of 5 years or less and the steel piling with between 5 and 25 years.
- 1.4 The compartment contains no SSSI but the Stanley and Alder Carr Aldeby SSSI is situated to the east. Opposite the application site is Beccles

Amateur Sailing Club (BASC). At present they use existing piling as temporary mooring during races. In addition the area to the south of the river has significant archaeological interest.

- 1.5 The application identifies the following works in the eastern end of the compartment:

| Proposed Works | Length (m) |
|---|-------------------|
| Strengthen floodbank | 670 |
| Rollback floodbank | 150 |
| Replacement piling (replacing failed piling) | 268 |
| Remove piling and install erosion protection (coir matting) | 566 |
| Retained piling | 186 |

- 1.6 The techniques to be used for bank strengthening and roll back will follow established practice. With regard to pile ‘removal’, this is proposed using the pile driving technique recently adopted in the River Chet, seeking to drive the piles into the river bed (which BESL explain should add stability to the toe of the bank). In addition, BESL propose to install coir matting erosion protection on the sloping bank.

- 1.7 The application initially submitted has now been supplemented by further supporting details. This explains that pile ‘removal’ is proposed concurrent with floodbank strengthening. In terms of sequencing of works, the following is proposed.

- Before the piles are driven, any walings and tie rods are removed
- A wedge of material is excavated from behind the piles;
- A 2.0m long “dolly” attachment is then placed over the exposed steel pile edge so that they can be driven vertically into the river bed (this leaves a new river edge formed of a slope from the river bed to the top of the old floodbank)
- The floodbank will concurrently be improved by strengthening or rollback using material generated during the piling removal as well as material sourced from a new pond proposed to the north on Gillingham Estate land on the hill near to Brick Barn at Hill Farm (an area at present used as set aside)
- The area between the floodbank and river where the piling was removed will be profiled to form a reeded rond

- 1.8 In this case as works involve only floodbank strengthening and very limited roll back of the bank, maintaining its footprint partly on the existing alignment of the current bank, BESL consider the risk of erosion is very limited. The supplementary information submitted includes full details on erosion monitoring including hydrographic / sonar monitoring linked to the proposed pile ‘removal’.

- 1.9 As the proposal does not involve the widening of existing soke dykes

to source material, the change in habitat adjacent to the river will be minimal (only some 0.15ha). On the site at Brick Barn there will be a loss of 0.47 of arable land linked to material sourcing (and the end use as new pond should deliver bio-diversity benefits).

- 1.10 The existing floodbank forms part of a continuous public right of way. North of the A146 bridge is a Broads 24 hour mooring area. Angling opportunities exist to fish from the existing floodbanks. Whilst access to use the public right of way will need to be restricted during works and whilst banks/new vegetation establish, BESL have confirmed that access to the Broads 24 hour mooring will be maintained throughout the construction period. As part of the application, BESL have confirmed that whilst the position of the floodbank will be rolled back in part, the extent of roll back is limited and that this will not require a permanent footpath division (and therefore there is no need for such a diversion to be sought under Section 257 of the Town and Country Planning Act).
- 1.11 The area is well use for recreational sailing including linked to BASC. BESL have indicated works would be undertaken outside the main boating season. In addition, they propose to provide mooring facilities (initially suggested in the form of buoys and weights) to be used by BASC for race purposes. However following concerns raised they are reconsidering the most suitable method to make such provision.
- 1.12 A temporary site compound to serve the development is proposed to close to the Hill Farm farmyard complex. The proposed hours of working are 7.00 to 18.00 Monday to Friday and 7.00 to 13.00 on Saturdays (with no Sunday or Bank Holiday working). Following initial site set up, vehicle movements on a daily basis will be limited to vans and 4x4's. The steel piles to be installed will be delivered by water.

2 Planning History

BA/2010/0009/FUL Flood Defence improvements (Compartment 25 – Dunburgh to Hill Farm). Approved April 2010

BA/2006/0139/F Flood Defence improvements (Compartment 24 – Aldeby Long Dam Level). Approved April 2006

3 Consultation

- 3.1 The following comments have been received on the application as originally submitted. Following receipt of the supplementary details (outlined in paragraphs 1.7 and 1.8), re-consultation has taken place. Any comments received from this re-consultation will be updated verbally to Members at the meeting.

- 3.2 Gillingham Parish Council – Awaited

Beccles Town Council - Awaited

Broads Society – Objection. We are concerned that where the piles are driven down instead of being removed, they will be a danger to deep draught vessels when there is a very low tide. In addition, where the piles are removed or driven down, and the bank re-graded, there should be markers with a condition that they are to be maintained until there is a good growth of vegetation. Where there is new or retained piling, there should be a condition that the walings are to be maintained during the life of the piling. There should be a condition that no work is to be carried out on Sundays or Public Holidays.

NCC Highways – No objection.

NCC PROW – Awaited

Environment Agency – No objection. Recommend following informative added to decision

Flood Defence Consent - Under the terms of the Water Resources Act 1991, and the Anglian Land Drainage and Sea Defence Byelaws, our prior written consent is required for any proposed works or structures, in, under, over or within 9 metres of the top of the bank of the River Deben, designated a 'main river'. The flood defence consent will control works in, over, under or adjacent to main rivers (including any culverting). A consent application must demonstrate that:

- There is no increase in flood risk either upstream or downstream
- Access to the main river network and sea/tidal defences for maintenance and improvement is not prejudiced.
- Works are carried out in such a way as to avoid unnecessary environmental damage.
- Mitigation is likely to be required to control off site flood risk.

Natural England – Awaited

SNC: Environmental Health Officer – No objection subject to an hour of working restrictions (Monday – Friday 08-00 to 19-00 and Saturdays 08-00 to 18-00). No working on Sundays and Bank Holidays.

Historic England – No objection in principle. We note from the supporting Environmental Statement that on the southern side of the river is a trackway of Iron Age date and there is evidence elsewhere in the Waveney for archaeological assets of this nature to be found on both sides of the river. The projected alignment of the Beccles trackway would put it within the area of proposed works for this scheme. We therefore recommend that this scheme be subject to an appropriate programme of archaeological mitigation and that the Historic Environment Service be asked to provide advice on the scope of necessary archaeological works and would recommend that the

planning permission is conditioned accordingly.

Norfolk Historic Environment Service – The proposed works are located in an area of high archaeological potential. The Broads are undesignated heritage assets of national or international importance. Peat deposits are a finite and threatened resource and have the potential to contain information relating to past human interaction with the environment. Elements of the works lie within the flood plain of the River Waveney in an area which has high potential for the presence of waterlogged deposits and palaeo-environmental evidence. In particular, (as noted by Historic England in their response) previous work on the opposite bank has revealed a preserved Iron Age wooden trackway which may continue into the proposed area of works.

Consequently there is potential that significant buried archaeological remains will be present in the area of the proposed development and their significance may be affected by the proposed works.

In view of this a programme of archaeological work will be required for this scheme. For the works immediately adjacent to the river the effects on the historic environment can be mitigated through a condition on any permission granted.

Following further consultation on this proposal we are happy that the trial trenching on the site of the proposed extraction pit/pond can be included within the scope of a set of planning conditions. If planning permission is granted, we therefore ask that this be subject to a programme of archaeological mitigatory work in accordance with National Planning Policy Framework (para. 141).

In this case the programme of archaeological mitigatory work will commence with informative trial trenching at the site of the proposed pond to determine the scope and extent of any further mitigatory work that may be required at that location (e.g. an archaeological excavation or monitoring of groundworks during construction), and also monitoring of groundworks immediately adjacent to the river.

Norfolk and Suffolk Boating Association - No objections to the proposed development provided that the following conditions are attached to any planning permission:

- Craft from the Beccles Amateur Sailing Club have traditionally used the piling incidentally to their racing. There should be a condition that suitable alternative mooring arrangements be made for the Club, the nature and design of which are to be agreed with the Club
- To minimise the impact on those navigating the area, there should be a condition that the work should not be done on weekends, Public Holidays or during the Beccles Regatta in August
- There should be a condition for adequate signage of the work

4 Representations

4.1 The Navigation Committee considered this application at their meeting on 25 February 2016. The draft minute identifies

Members acknowledged the need for the flood defence work and agreed that the hazardous piling would need to be removed. They commented that this reach of the river was very tidal and, due to activities of the Beccles Amateur Sailing Club (BASC), could be very busy.

The use of buoys for mooring by the BASC was not supported by the Committee because of the added risk of motor boats getting fouled on the buoys and lines; and that boats mooring to the buoys would restrict the available width for navigation. Instead Members felt permanent timber posts that remained visible at all states of the tide would provide a more appropriate means of allowing members of the BASC to moor temporarily in order to raise and lower sails, and wait for race start times. A Member suggested that posts should be provided beyond the sailing club area to allow canoes, in particular, to get out of the way of boat traffic at busy times.

Members agreed that if coir matting was used as erosion protection on the re-profiled river bank there was a risk it would be damaged by boat impact. It was easy for matting to get caught in boat propellers, which would be damaging to the boat and the bank. It was pointed out that coir matting would provide erosion protection while encouraging vegetation growth, but Members preferred that an alternative be considered, e.g. natural reed growth or plug planting, without coir matting being installed.

Members agreed that conditions should be attached to any planning permission granted for the works covering timing of works, installation and removal of temporary channel marking, erosion monitoring in accordance with the agreed erosion monitoring protocol including sonar and hydrographic surveying, and remedial works to deal with damage to any erosion protection installed.

4.2 In addition, The Vice Commodore on behalf of BASC has commented

Whilst the Beccles Amateur Sailing Club has been in consultation with BESL and agreed in principal the potential solutions to the hoisting and lowering of sails when the wind is in the west, we have not agreed to the final details of the proposals.

We also note that temporary channel markers will be installed along the sections of the erosion protection and remain until a reeded rond has developed; we would wish to be involved in the discussions to ensure they create no problems for the Club.

5 Planning Policy

- 5.1 The following policies have been assessed for consistency with the National Planning Policy Framework (NPPF) and have been found to be consistent and can therefore be afforded full weight in the consideration and determination of this application.

Core Strategy (CS) (2007)

[Core Strategy Adopted September 2007 pdf](#)

Policy CS1 – Landscape protection and enhancement

Policy CS3 - Navigation

Policy CS4 – Creation of new resources

Policy CS6 – Historic and cultural environment

Policy CS15 – Water space management

Development Management Plan DPD (DMP) (2011)

[DEVELOPMENTPLANDOCUMENT](#)

Policy DP1 – Natural environment

Policy DP2 – Landscape and trees

Policy DP11 – Access to land

Policy DP28 - Amenity

The policy below has also been assessed for consistency with the NPPF and has been found not to be reflected in the NPPF; so full weight cannot be given in the consideration and determination of this application.

Development Management Plan DPD (DMP) (2011)

Policy DP13 – Bank protection

Material Planning Consideration

National Planning Policy Framework (NPPF) (2012)

[NPPF](#)

6 Assessment

- 6.1 Compartment 25 has previously received planning permission for flood defence improvements and the approved works have been undertaken in the majority of the compartment. However due to material sourcing complications, the eastern part of the works has been reviewed and a revised scheme for this area is submitted. Whilst this has some similarities to the scheme approved in 2010, in view of the site specific considerations, planning policy and comments raised in relation to the proposal, it is important to consider carefully the following issues in relation to the current proposals:

- (a) Impact on recreation and navigation
- (b) Habitat and ecology
- (c) Hydrology and risk of flooding
- (d) Archaeological considerations
- (e) Landscape / residential amenity / highway access

(a) Recreation and Navigation

- 6.2 The application site contains Broads 24 hour mooring at its western end. No change is proposed to this area and this is welcomed. However significant lengths of existing piling in the compartment are in a poor condition and continue to deteriorate and are becoming a greater hazard; so therefore their removal and replacement with a more sustainable form of flood defence, or with the installation of replacement piling, would be a navigation benefit.
- 6.3 The application proposes a sequencing of works which will involve the removal of piling at the same time as the strengthening and roll back of areas of floodbank (rather than seeking to remove piling following the establishment of new floodbanks). In this case it is considered that this approach can be justified as firstly strengthening involves rear face widening which should limit stresses on the existing bank and secondly the rollback banks proposed only involved very limited realignment of the bank (with the crest set back only some two to three metres) which means part of the existing established bank will form the front of the rolled back bank (again effectively limiting stress and risk of erosion compared to the establishment of a whole new bank). Notwithstanding this, it is very important to monitor erosion rates once piling is removed (and this issue is explored further in paragraph 6.6 and 6.8).
- 6.4 As with recent proposals in the River Chet and Upton Dyke, parts of the existing piling is no longer required for erosion protection purposes (so the Environment Agency no longer need to retain this for a flood defence purpose) and its removal (subject to safeguards) would deliver flood defences in a more sustainable manner (consistent with an aspiration of development plan policy CS4).
- 6.5 Whilst the pile driving technique worked successfully in the River Chet, there is a risk in another location that piles may not be successfully driven into the bed. BESL have confirmed that should any pile not successfully drive sufficiently into the river bed (to a depth of a minimum of 0.25 metres below the existing bed level), the piles will be extracted (with details of the technique for removal of part driven piles to be addressed by planning condition). It is considered that this depth should be sufficient to avoid risk to boats and not prejudice future dredging required in this area.
- 6.6 It is recognised that pile removal may increase risk of erosion and siltation and the risk may increase close to newly established banks.

To limit risk and help new reed growth establish, BESL propose using coir matting. Concern has been expressed regarding the use of coir matting (mirroring a concern expressed in the recent application in Upton Dyke). The River Waveney in this location differs in character and width from Upton Dyke. Whilst the concerns raised regarding the potential fouling of propellers is appreciated, it is considered that the use of navigation markers to identify the new edge whilst reed establishes coupled with the greater width of the River Waveney in this location, means that the use of coir matting should not pose an unacceptable risk to boat users. Furthermore the use of coir matting should help deliver a more stable edge with less risk of erosion whilst also allowing early establishment of reed (in a manner that has been successfully used by BESL elsewhere in the Broads).

- 6.7 It is considered in this case that temporary navigation markers will be required and these may need to be retained for longer than often required to identify the edge and coir matting until reed fully establishes and the coir matting decomposes. It is considered reasonable to limit risk of any boat damage to the edge and to require the exact design / nature and duration for the retention of navigation / channel markers to be controlled by planning condition (to be agreed by Broads Officer). In addition, a further planning condition would be reasonable to impose to require details of how any damage to the new edge will be repaired in advance of the new reed edge fully establishing.
- 6.8 BESL have now provided further information regarding how erosion will be monitored as detailed in paragraph 1.8 (with baseline information and subsequent findings being provided to the Broads Authority). This extends to hydrographic / sonar monitoring to ensure that piling driven into the bed does not prove a navigation hazard. Should significant erosion take place, the established erosion monitoring protocol requires for dredging to remove silt / eroded material.
- 6.9 Concern has been expressed regarding the manner in which boats can moor on a temporary basis linked to BASC activities and race events. The initial proposal for temporary buoys has raised concern and Navigation Committee has suggested provision of posts would be more appropriate. In response BESL have been in further discussion with BASC regarding the use of timber posts (but with a height that would limit risk that booms or mainsheets could be trapped by such posts). It is considered that this would be appropriate to address the nature, height and location of such posts by planning condition.
- 6.10 Whilst the navigation concerns expressed are appreciated, on balance, it is considered that provided planning conditions are imposed to secure temporary channel marking, measures for mooring linked to race events for BASC plus erosion monitoring and mitigation measures and safeguards, the proposal would meet the main aims of development plan policies CS3, CS15 and DP13.

- 6.11 The existing floodbank forms part of a continuous public right of way and abuts a length of river used for private long term mooring, plus the Broads 24 hour mooring close to the A146 bridge. The floodbank also offers an opportunity to fish in the area (and other angling opportunities exist to the west of Beccles Bridge in the compartment plus on the south side of the river).
- 6.12 The proposed floodbank defence works will have a short term impact on walking and fishing interest as a temporary closure of the floodbank to the general public will be required whilst works are undertaken and improved floodbanks establish and re-vegetate. The works, once complete, will provide benefits by the provision of enhanced crest width and level surface, improving the public right of way for walkers. As part of the works, the new roll back floodbank, north of the A146 bridge, will be provided with erosion protection in the form of reeded rond.
- 6.13 Based on all these factors, it is considered that the proposal satisfactorily balances recreation and navigation interests against the benefit of delivering sustainable flood defence measures and addresses the key aims of development plan policies.

(b) Habitat/Ecology

- 6.14 Compartment 25 defences protect areas of grassland/grazing marsh east of Beccles Bridge. At the eastern end, just outside the compartment, is a SSSI's. The proposed flood defences will enhance the protection of the area. The loss of grazing marsh resulting from the proposed work is very limited (as no new sokedykes need to be excavated) and the enhanced protection of grassland will significantly outweigh the very limited loss.
- 6.15 The application proposes sourcing material from a site set back some 400 metres from the river, This currently is a set aside area (arable land). Whilst during excavation there will be no ecological or bio-diversity benefit, following completion it is considered that the habitat that will be created will deliver bio-diversity benefits.
- 6.16 Whilst the views of Natural England are awaited, the previous application was supported by Natural England in view of its conservation management benefits. There is no indication that this scheme will not deliver similar benefit and should have no adverse impact on the nearby SSSI. Therefore based on these factors, the proposal is considered to meet the tests of development plan policies CS1, CS2 and DP1.

(c) Hydrology and Flood Risk

- 6.17 The application has been the subject to hydraulic modelling to assess the impact of the proposed defences on water levels in the area (and up and downstream). As with the 2010 application, this has shown that

the proposed works will only lead to a negligible change in water levels in the compartment (and upstream and downstream). Therefore it is considered that the proposal will not materially increase risk of flooding, and accords with the aims of development plan policy CS4.

(d) Archaeological Considerations

- 6.18 As part of the works on southern side of the River Waveney on the opposite bank, important archaeological find were unearthed, notably finding an Iron Age causeway. Potential has been identified for the causeway or other archaeological interest to extend onto the Compartment 25 side of the river. In addition, new excavation is needed for the pond area close to Brick Barn. Initially NCC – HES indicated that trial trenching should take place (based on a brief for this area) prior to application determination. However following further discussions, NCC – HES has now concluded that this matter can be satisfactorily addressed by planning condition (without the need for trial trenching prior to application determination). It is now considered that this matter can be addressed by planning condition requiring archaeological interest to be identified and recorded and this approach will meet aims of development plan policy CS6.

(e) Landscape / Residential Amenity / Transport

- 6.19 In landscape terms, the proposal differs from many BESL schemes as impact will occur both close to the river but also on the valley side with the creating of a new pond. In respect on both works, based on the experience of BESL in securing early vegetation associated with both new floodbank and also where materials are sourced (normally in widened or new sokedykes), it is considered that any landscape impact will be short term and in the longer term the proposed vegetation will introduce a natural appearance in the valley side and will have no unacceptable impact on the valley side landscape. Therefore it is considered that the proposal is consistent with the aims of development plan policy DP2.
- 6.20 Works are generally proposed to floodbanks distant from residential properties. However works are proposed close to a small number of dwellings at the eastern end of the compartment. To limit impact on residential amenity in this area, BESL proposes to limit working hours to 8.00 to 18.00 Monday to Friday and 7.00 to 13.00 on Saturdays. No working is proposed outside these hours or on Sundays or public holidays. It is considered that this would be reasonable to impose by planning condition. This approach should ensure that the proposal is consistent with the aims of development plan policy DP28
- 6.21 Access to the works corridor is specified from the site compound (at Hill Farm) using a limited number of routes. It is considered that provided construction traffic is limited to these routes, the scheme would be acceptable. Norfolk County Council as Highway Authority

have raised no objection. Therefore it is considered that the proposal is consistent with the aims of development plan policy DP11.

7 Conclusion

7.1 The application as now submitted will provide enhanced flood defence whilst protecting agricultural and nature conservation management interest, preserving recreational opportunities and safeguarding archaeological interest. It is considered that subject to the conditions outlined below, the scheme is acceptable and meets the key tests of development plan policies.

8 Recommendation

8.1 Subject to no substantive representation/comment being raised from any outstanding consultees, this planning application be approved subject to the following conditions.

- (i) Standard time limit condition
- (ii) Approved and amended plans
- (iii) Landscape/planting
- (iv) Archaeological investigation
- (v) Temporary footpath closure/signage
- (vi) Site access/delivery route
- (vii) Navigation hazard markers
- (viii) Provision of posts
- (ix) Hours of working
- (x) Timing of works
- (xi) Erosion monitoring (inc sonar) and mitigation
- (xii) Remedial action / mitigation where pile driving unsuccessful / fails
- (xiii) Minimum depth for pile driving
- (xiv) Remedial works – damaged banks until reed established

8.2 The following informative be specified on the decision notice of the planning application:

- The permission shall be granted in the context of the Memorandum of Understanding between the Broads Authority and the Environment Agency on 25 April 2003;
- Flood Defence Consent - Under the terms of the Water Resources Act 1991, and the Anglian Land Drainage and Sea Defence Byelaws, our prior written consent is required for any proposed works or structures, in, under, over or within 9 metres of the top of the bank of the River Deben, designated a 'main river'. The flood defence consent will control works in, over, under or adjacent to main rivers (including any culverting). A consent application must demonstrate that:
 - There is no increase in flood risk either upstream or downstream
 - Access to the main river network and sea/tidal defences for

- maintenance and improvement is not prejudiced.
- Works are carried out in such a way as to avoid unnecessary environmental damage
- Mitigation is likely to be required to control off site flood risk

Background Papers: Application File BA/2016/0017/FUL

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Date: 17 March 2016

Appendices: APPENDIX 1 - Site Location Plan

APPENDIX 1

