

Application for Determination

Parishes:	Loddon and Hales -w- Heckingham
Reference:	BA/2013/0381/FUL Target Date: 25 February 2014
Location:	Compartment 22 - Right bank of the River Chet between Pyes Mill and Nogdam End
Proposal:	The driving of existing piling to below river bed level and the reprofiling of the remaining riverbank to create a natural edge and rond (part retrospective)
Applicant:	Environment Agency.
Reason for referral:	Major application
Recommendation:	Approve with conditions

1 Background

- 1.1 The planning application site is on the south side of the River Chet and involves works in a number of sections between Nogdam End and Pyes Mill (see Appendix 1 – Location Plan).
- 1.2 Members will recall that a planning permission for floodbank improvement works on the south bank of the River Chet in Compartment 22 was approved in May 2013 (BA/2013/0061/FUL). The approved scheme included a combination of bank rollback, setback and maintenance works with subsequent pile removal proposed adjacent to rollback and setback lengths (as this piling would no longer be required for erosion protection purposes). As part of the application, BESL proposed rather than removing piles by extraction (a technique they had used elsewhere in the Broads area), they would seek to use an alternative technique to drive the piles below bed level in order to provide a degree of stability to the new lengths of bank.
- 1.3 The planning permission granted in May 2013 contained a number of conditions associated with pile driving / 'removal' which effectively required:
 - A pile driving trial area to be agreed with Broads Officers
 - An initial pile driving trial to be undertaken
 - No removal or driving of any other piling (outside the initial trial area) without a further planning permission
 - All works to accord with a method statement and mitigation strategy
 - Phased programme of works to be agreed

- 1.4 An initial trial area for pile driving was agreed with Broads Officers and the trial was undertaken on a short length of rivers edge (close to Church Farm, Norton Road) on 22 October 2013. Broads officers attended the trial to view the work and the method used. Following this, a report was prepared by Broads officers and supplied to BESL outlining that the trial was successful and the process would be broadly acceptable, subject to a number of safeguards.
- 1.5 Following the successful trial and notwithstanding the planning conditions imposed in May 2013, BESL decided to continue to undertake pile driving (and then seek to regularise as works were undertaken). In their supporting statement, BESL explain this decision was based on the successful trial and
- it is far more sustainable to continue and complete the (pile driving) work this winter based on cost savings (avoid having to remobilise next November); reduced carbon inputs; minimising disruption to landowners and river users; and
 - the works will enable the Broads Authority to undertake dredging unimpeded from November 2014 without having to programme around ongoing BESL work.
- 1.6 Works are currently being undertaken from along a 900 metre length of floodbank (in central section on the River Chet and BESL will complete this by the end of 2013). In the period of between New Year and Easter 2014, the remaining pile driving is proposed to take place involving an additional 1900 metres of piling.
- 1.7 BESL have been informed that the on-going works are unauthorised and have been (and continue to be) undertaken own risk.

2 Description of Site and Proposal

- 2.1 In respect to pile driving, the application details submitted propose the following method / technique (mirroring the technique used for the trial area):
- Before the piles are driven, any walings and tie rods are removed and a wedge of material is excavated from behind the piles;
 - A 2.0m long “dolly” attachment is then placed over the exposed pile edge so that they can be driven vertically into the river bed; this leaves a new river edge formed of a 1 in 1 slope from the river bed to the top of the old floodbank;
 - The second stage (after spring 2014) is to remove the old bank down to mean high water spring level in order to form a reeded rond in front of the new rollback bank;
 - The excavated material from both stages will be used to top up the level of the new bank (if there has been excessive settlement) and/or stored on the rear face of the new bank for future crest raising.

- 2.2 BESL have confirmed following the trial that piles will be driven to - 1.80mAOD apart from in any areas where existing bed level is below - 1.55mAOD, in which case the aim will be to drive the piles 250mmm below the actual bed level. If there are any problems with driving individual piles or lengths of piles then these will be extracted and removed from site.
- 2.3 BESL have highlighted that the sequence of works associated with this pile 'driving' differs from where piles are 'extracted'. In this case, the two phase approach seeks to drive the piles into the bed in advance of the removal the old bank down to mean high water spring level (whereas where pile extraction takes place, the new bank is normally lowered in advance or concurrently with the pile removal). The technique of retaining the old bank in the short term has been proposed by BESL to enable the new roll back or set back bank to be protected over the winter months and until such time that the new banks vegetate. This approach aims to minimise risk of erosion from the newly established bank.
- 2.4 BESL proposes not to install channel markers after completion of the first phase of pile driving and bank re-profiling as they consider that resultant 1 in 1 slope rises to the height of the floodbank crest which would not to represent a navigation hazard. They recognise the need for channel markers should be reviewed with Broads Authority officers following the second phase of works to re-profile the old bank to form a rond at MHWS. However, BESL anticipate that vegetation will establish quickly to provide a satisfactory visual marker to the edge of the channel.
- 2.5 As with areas for pile removal, BESL recognise that some erosion may take place at the river edge following the driving of piles into the river bed. Whilst previous experience of pile 'removal' has suggested that this has been limited, as it is not possible to predict accurately what erosion may take place associated with pile driving, BESL propose monitoring techniques to measure the extent of erosion. The monitoring is linked to trigger points which identify when mitigation action will need to be taken due to significant erosion (based on the established 'protocol' which has been agreed as suitable to monitor erosion associated with earlier pile removal consents).

Time (after removal)	Photographic	Vegetation	Hydrographic
Year 1	Months 0, 3, 6, 9, 12	Annually	Months 0, 3, 6, 9, 12
Year 2	Months 6, 12	Annually	Annually
Year 3	Months 6, 12	Annually	Annually
Year 4 on	Annually*	-	Annually

** as part of the annual condition surveys*

- 2.6 The application site is opposite the Hardley Flood SSSI. There is no footpath / public right of way along the floodbank in compartment 22 and fishing opportunities are limited on the south side of the River Chet. Only very limited archaeological interest has been identified close to the site. There is no public mooring in the areas where pile 'removal' is to take place (with the nearest public mooring at Pyes Mill).
- 2.7 As outlined in paragraph 1.5, the pile driving works have already commenced. Subject to planning permission, the pile driving is proposed to continue and be completed by Easter 2014 (outside any main boating season).

3 Planning History

- 3.1 The following applications are particularly relevant.

BA2012/0139/ FUL – Retrospective flood defence works including piling removal works and construction of new rollback floodbank (short section close to Nogdam End). Approved August 2012.

BA2013/0061/FUL – Flood defence works consisting of floodbank strengthening, setback and rollback and associated works (most of compartment 22). Approved May 2013.

BA/2013/0264/FUL – Set back floodbank and associated material sourcing (short section close to Pyes Mill). Approved September 2013.

4 Consultations

- 4.1 Loddon Parish Council – Awaited.

Hales -w- Heckingham Parish Council – Awaited.

Norton Subcourse Parish Council – Awaited.

Chedgrave Parish Council – No comment.

Langley -w- Hardley Parish Council – Awaited.

Broads Society – Awaited.

NCC Highways – Awaited.

Environment Agency – Awaited.

Natural England – Awaited.

NCC Historic Environment Service – Awaited.

RSPB – Awaited.

NCC Historic Environment Service – Awaited.

South Norfolk DC Environment Health Officer – Awaited.

NSBA – Awaited.

5 Representations

5.1 None received up to 12 December 2013.

5.2 The Navigation Committee considered the application proposal at their meeting on 12 December 2013. Whilst members will be updated verbally of the views of Navigation Committee members, the officer report presented to this meeting highlighted the following comment on the trial:

Officers consider that the pile driving methodology used by BESL in the trial is successful. There were no problems with the piles being driven to the depth suggested by officers and all capping, waling, tie rods and anchor piles were removed successfully during the operation. However, should planning permission be granted for the removal of the rest of the piling in the compartment (piling not subject to the trial) officers would suggest that a number of conditions be attached to the permission in order to prevent navigation hazards occurring and enable future dredging operations to be carried out by the Broads Authority, as Navigation Authority, across the full width of the River Chet.

The report then concluded

Provided that the conditions recommended in this (Navigation Committee) report are attached to any planning permission granted for the works, officers intend to support the proposed works in the planning application

6 Planning Policy

6.1 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 \(Adopted Sept 2007\).pdf](#)

Policy CS1 – Landscape protection and enhancement

Policy CS3 – Navigation

Policy CS4 – Creation of new resources

Policy CS15 – Water space management

Development Management Plan DPD (DMP) (2011)

[DMP DPD - Adoption version.pdf](#)

Policy DP1 – Natural environment

- 6.2 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

- 6.3 Material Planning Consideration

National Planning Policy Framework (NPPF) (2012)

[NPPF](#)

7 Assessment

- 7.1 Planning permission was only granted in May 2013 for flood defence improvements on the south side of the River Chet. This granted consent for much needed sustainable flood defences and recognised the need for pile removal and the potential to adopt an innovative approach for 'removal' through pile driving into the river bed, rather than extraction (used elsewhere in parts of the Broads). Following initial flood defence works a short trial section to test the technique for driving both wooden and steel piles was agreed and the technique was tested and raised no fundamental problems, suggesting the approach should be acceptable provided it is delivered in an agreed phased manner and linked to other suggested safeguards (as identified following the trial and required by outline planning condition).
- 7.2 It is regrettable that BESL have chosen, only six months following the grant of consent (and imposition of the outline planning permission conditions), to undertake works in advance of the grant of the necessary planning permission.
- 7.3 Whilst the nature of this application is therefore part retrospective, it is important to ensure that the application is determined in accordance with development plan policy unless material consideration otherwise dictate, and not influenced by the part retrospective nature of the application.
- 7.4 Based on scheme design, site context and planning policy, it is considered that there are a number of important considerations.

Navigation and Recreation

- 7.5 In relation to pile removal (in this case pile driving), the May 2013 permission

followed established practice by imposing a planning condition to retain control of works that could otherwise be detrimental to

- navigation interests (especially as a result of erosion)
- the character and appearance of the Broads.

- 7.6 In this case, it is recognised that much of the existing piling is no longer required for erosion protection purposes and its removal (subject to safeguards) would deliver flood defences in a more sustainable manner. Existing piling is deteriorating so subject to the river edge being properly delineated, removal will be a navigation benefit. BESL have suggested that navigation markers may not be necessary however Navigation Officers have suggested early proper marking is essential. This can be secured by planning condition.
- 7.7 It is recognised that early pile removal may increase risk of erosion and siltation (especially should new banks not be properly established and stabilised). Whilst the two stage approach to pile removal and removal of the old bank (outlined in paragraph 2.3) should limit risk of erosion of new banks, as pile 'removal' is soon after new banks being constructed and pile driving is a new technique, it is considered that robust monitoring techniques are used to assess the impact of the works. In this case, this includes not only the monitoring detailed in paragraph 2.5 (baseline information and subsequent findings being provided to the Authority) but also the need for sonar monitoring (as recommended by Navigation Committee) to ensure that piling driven into the bed does not prove a navigation hazard (especially based on the narrow nature of the River Chet). Whilst the trial showed that piling driving was successful, there is a risk in a large area that there may be occasions where piling cannot be successfully driven into the bed. Therefore details of the technique for removal of (part driven) piles will need to be submitted and agreed. It is considered in this case that planning conditions to secure the above monitoring and mitigation are justified (and would provide the key monitoring and mitigation safeguard highlighted as important to Navigation Committee) and enable the proposal to meet the aims of development plan policies CS3, CS15 and DP13.
- 7.8 It is considered that impact on other recreation and leisure can be satisfactorily safeguarded. In relation to boat use, works are proposed in the winter. In addition the piling used as Broads 24 hour mooring (at Pyes Mill) will remain in place. In relation to walking and access, there are no public rights of way and angling in the compartment does not take place from the piled edges to be removed.

Flood risk

- 7.9 The permission granted in May 2013 provided a sustainable form of flood defence that would not increase flood risk. The proposed pile driving will not alter the proposed flood risk. However as outlined above, it is recognised that pile removal so soon after new floodbanks have established may increase the risk of erosion.

- 7.10 Whilst the views of the Environment Agency are awaited, it is considered that even if erosion rates are more significant than in areas where pile extraction has taken place, there are safeguards in place to ensure that action (in the form of dredging) will take place should monitoring show erosion / siltation exceeds an agreed level. In addition, the recently created areas between the existing bank and roll back and set back banks will provide a significant area for dredging disposal which will reduce material in the River Chet and will not adversely impact on flood risk. Based on these factors, there is no conflict with development plan policies CS4 and DP29 or the thrust of NPPF advice.

Ecology

- 7.11 The proposal will have a very limited impact on ecological interests and is outside the Hardley Flood SSSI (on the north side of the River Chet). In the earlier planning application (approved in May 2013), Natural England was satisfied that the proposed development would not damage or destroy the interest features and it is considered that their views are unlikely to have changed (although their view will be reported at the meeting).
- 7.12 Based on this, it is considered that the proposal will not conflict with development plan policies CS1, CS4 and DP1.

Phasing

- 7.13 The works are being undertaken to enable pile driving to be completed this winter to minimise disruption to river users and landowners and to then enable the Broads Authority to undertake dredging unimpeded from November 2014 without having to programme around ongoing BESL work. The approach to minimise disturbance to both river users and dredging is welcomed.

8 Conclusion

- 8.1 Whilst it is regrettable that some works have been undertaken in advance of the grant of a further planning permission (based on the condition imposed on the flood defence works in May 2013), it is considered that following the pile driving trial that the continuing pile driving following the construction of set back and roll back floodbanks is acceptable (as piling to be removed is no longer required for flood defence purposes). It is considered that with the imposition of planning conditions; navigation and other interests can be protected and the proposal would meet the key tests of development plan policy and would be consistent with NPPF advice.

9 Recommendation

- 9.1 Subject to no substantive representation/comment being raised from the outstanding consultees, this planning application be approved subject to the following conditions:

- (i) Approved list of plans
- (ii) Erosion protection monitoring
- (iii) Sonar monitoring
- (iv) Navigation hazard markers
- (v) Minimum depth for pile driving
- (vi) Remedial actions / mitigation where pile driving unsuccessful / fails

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

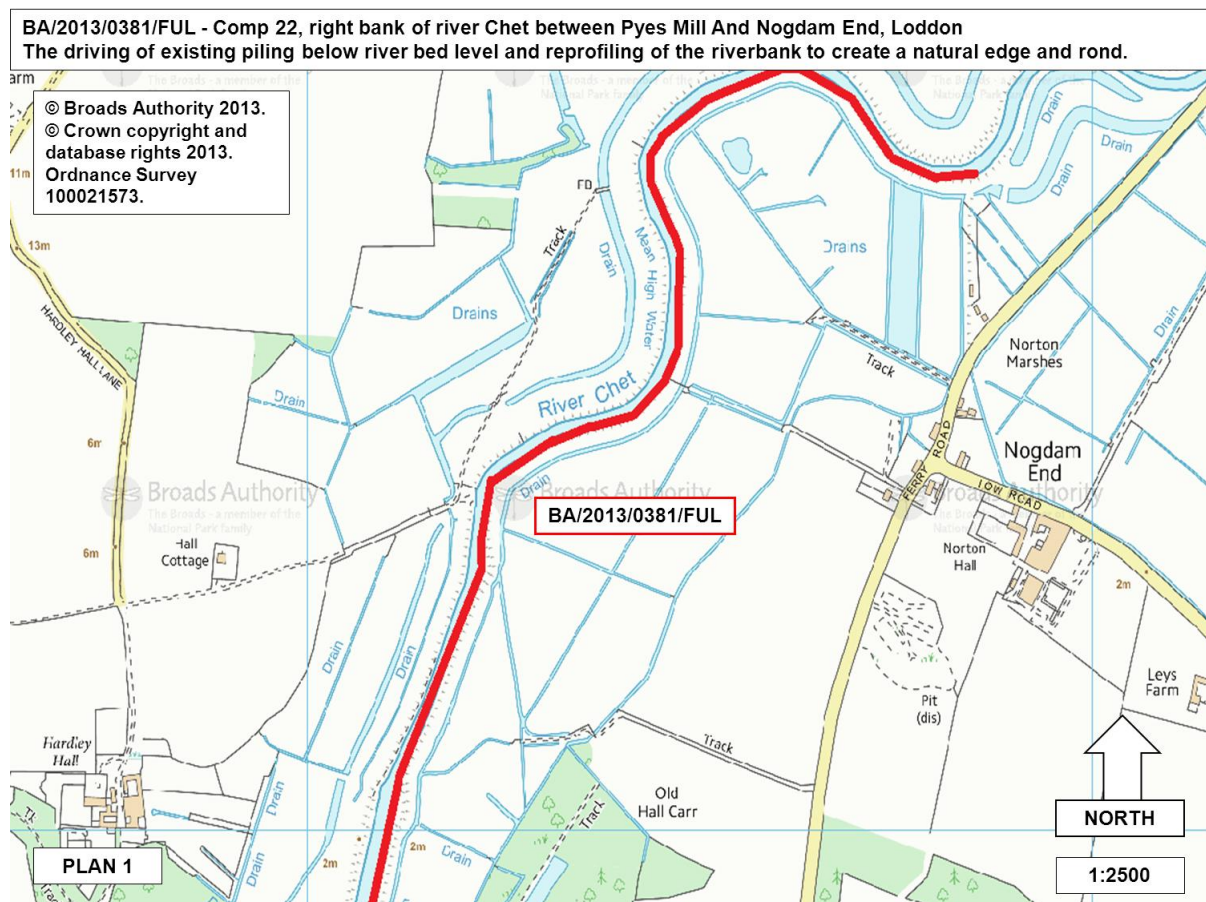
- The permission shall be granted in the context of the Memorandum of Understanding between the Broads Authority and the Environment Agency on 25 April 2003.

Background Papers: Application File BA/2013/0381/FUL

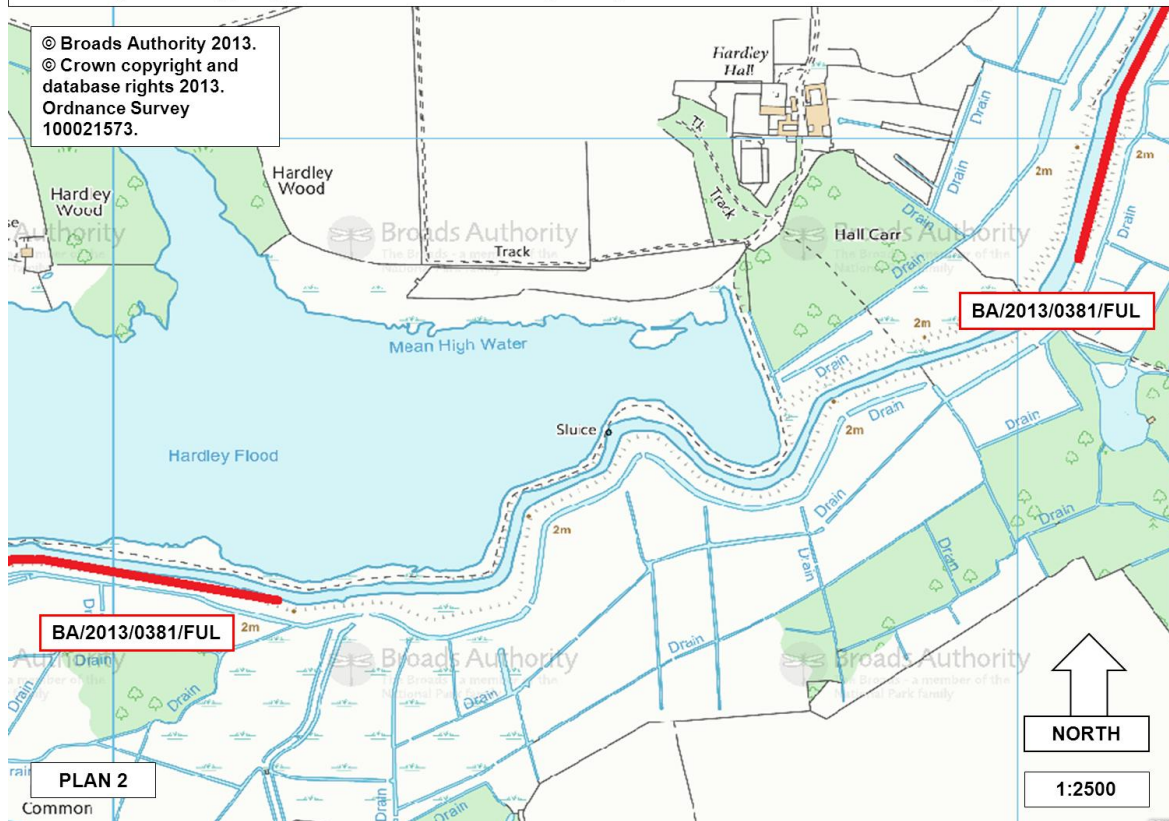
Author: Andy Scales
Date of report: 11 December 2013

Appendices: APPENDIX 1 - Location Plan

APPENDIX 1



BA/2013/0381/FUL - Comp 22, right bank of river Chet between Pyes Mill And Nogdam End, Loddon
The driving of existing piling below river bed level and reprofiling of the riverbank to create a natural edge and rond.



BA/2013/0381/FUL - Comp 22, right bank of river Chet between Pyes Mill And Nogdam End, Loddon
The driving of existing piling below river bed level and reprofiling of the riverbank to create a natural edge and rond.

