

Planning Committee

23 June 2023

Agenda item number 7.2

BA/2023/0099/FUL Horstead with Stanninghall - Construction of dredging lagoon

Report by Planning Officer

Proposal

Temporary construction of lagoon structure to hold dredged river sediment for drying

Applicant

Mr Adrian Sewell - Broads Authority

Recommendation

Approval subject to conditions

Reason for referral to committee

Broads Authority application and a major application

Application target date

26 July 2023

Contents

1.	Description of site and proposals	2
2.	Site history	3
3.	Consultations received	3
4.	Representations	4
5.	Policies	4
6.	Assessment	4
7.	Conclusion	6
8.	Recommendation	6
9.	Reason for recommendation	7
	Appendix 1 – Location map	8

1. Description of site and proposals

- 1.1. The subject site comprises part of an agricultural field within the wider Trafford Estate in an area known as Little Switzerland. The site is located approximately 50 metres to the west of the River Bure, roughly 1 kilometre downstream from the village of Belaugh. The site forms the eastern part of a larger agricultural field which is entirely surrounded by woodland. Access to the site is by private farm track only. The site is remote, not accessible to the public or visible from any public vantage point. The surrounding area comprises woodland and agricultural fields.
- 1.2. The proposal is for the construction of a temporary holding lagoon on arable land for the drying of sediment dredged from the nearby river. The lagoon is a semi-circle with a maximum length of 170 metres running north to south, and a maximum width of 120 metres running west to east. The total capacity of the lagoon will be approximately 20,000m³ of wet sediment.
- 1.3. The lagoon structure will be formed by constructing earth bunds using the topsoil from the field. A 300mm layer of topsoil will be stripped from the internal areas of the lagoon and shaped to form the bunds. The earth bunds will be levelled relative to the existing ground levels to a crest height of 1.5m on all sides. The lagoon will have an area footprint of 20,000m² and a fill level of 1.0m with a freeboard height of 0.5m on the crest of the earth bunds.
- 1.4. The Broads Authority (BA) undertakes maintenance dredging, removing approximately 40,000m³ of accumulated sediment each year from the Broads' navigation channel areas. The BA seeks to re-use the sediment dredged in a beneficial way wherever possible and in this case proposes to use it for agricultural benefit to improve soil structure and organic content.
- 1.5. The Upper Bure has been identified as a priority for dredging owing to levels of accumulated sediment that have resulted in the navigable envelope no longer meeting waterways specifications. The area for dredging is a 9.5km length of the River Bure between Coltishall and Wroxham.
- 1.6. The sediment would be dredged from the river, carried by wherries to a point on the river close to the subject site, and pumped to the proposed lagoon through a 150mm diameter pipeline laid on the surface of the riverbank and through the wet woodland between the river and the lagoon area. The holding lagoon is divided into four cells to allow a uniform filling process and additional integrity.
- 1.7. Once 20,000m³ of wet sediment has been pumped into the lagoon, the dredging work will cease. The lagoon will then be left for approximately 12 months to allow the sediment to consolidate and dry to a workable consistency in line with the natural state of the field. Following the drying period, the dried sediment will be spread on surrounding fields over an area of 23.8ha and ploughed in. The lagoon earth bunds will be scraped back over the lagoon area.

1.8. The sediment volume to be removed after dewatering will be approximately 12,000m³, therefore the sediment once settled will occupy less than 60% of the lagoon capacity.

1.9. The works are proposed to take place over a two year period. The sequence of works will be as follows:

Year 1 (September 2023) – Lagoon construction

(Nov 2023- Oct 2024) - Dredging

Year 2 (Mar 2024 – Mar 2025) – Dewatering/Consolidation

Year 3 (April 2025) – Restoration Land spreading

2. Site history

2.1. None.

3. Consultations received

Environment Agency

3.1. No objection subject to informative advice in relation to environmental permitting.

Norfolk County Council (NCC) Highways

3.2. No objection following re-routing of the access to the site.

Natural England

3.3. Natural England considers that the proposed development will not have significant adverse impacts on statutorily protected nature conservation sites.

The Broads Society

3.4. The Broads Society Supports this application for a temporary lagoon and is encouraged to see the extensive dredging works proposed that necessitate this application.

BA Landscape

3.5. The construction of the lagoon is unlikely to harm any landscape features of value.

There are no Public Rights of Way (PRoW) in the area from which the site could be visible.

Dredging operations would be more noticeable from publicly accessible riverside areas near Wroxham and Coltishall for short periods.

Pumping of material and use of machinery during the dredging operations would generate noise.

Any effects on landscape and tranquillity would be temporary, and none of these impacts are particularly significant.

No objection subject to consideration of mitigation.

BA Ecologist

- 3.6. Any ecological impacts are likely to be temporary and limited. However, mitigation measures should be put in place and the site and works should be monitored by the responsible ecologist to ensure there are no undue impacts to habitats and species.

4. Representations

- 4.1. One response was received regarding the access along a public right of way. The access has since been re-routed and no longer uses the public right of way.

5. Policies

- 5.1. The adopted development plan policies for the area are set out in the [Local Plan for the Broads](#) (adopted 2019).

- 5.2. The following policies were used in the determination of the application:

- DM5 - Development and Flood Risk
- DM13 - Natural Environment
- DM16 - Development and Landscape
- DM17 - Land Raising
- DM18 - Excavated material
- DM21 - Amenity
- DM23 - Transport, highways and access
- SP13 - Navigable Water Space

- 5.3. Other material considerations

- National Planning Policy Framework (NPPF)
- Planning Practice Guidance (PPG)
- BA Landscape Character Assessment 22: Bure Valley - upstream of Wroxham Railway Bridge

6. Assessment

- 6.1. The application is for the construction of a temporary sediment lagoon for the drying of material dredged from the River Bure between Coltishall and Wroxham. The main considerations in the determination of this application are the principle of development, landscape, amenity, ecology, flood risk, and navigation.

Principle of development

- 6.2. The proposed development is considered acceptable insofar as the dredging of a 9.5km stretch of the River Bure would provide a navigation benefit in meeting waterways

specifications for river depth, and the drying out of the dredged sediment and spreading over arable fields would improve soil structure and organic content. The proposal therefore accords with Policy SP13 of the Local Plan for the Broads.

Impact upon the landscape

- 6.3. The site is part of an arable field. The wider field of which the site forms a part is surrounded by woodland. There is no land based public access to any point close to the site or with a view of the site. To the east of the site is the River Bure, but the area of woodland between the site and the river is approximately 50 metres wide which provides a good level of screening. Given the remoteness of the site, the absence of public access, the surrounding woodland, and taking into account the temporary nature of the works and the proposed restoration of the site to its existing condition, it is considered that there would be no unacceptable impacts on the wider landscape character and appearance. Whilst it is noted that the BA Landscape Architect has raised some questions regarding the scheme it is considered that these have been addressed through other consultation responses. The proposal is therefore considered acceptable with regard to Policy DM16 of the Local Plan for the Broads.

Amenity of residential properties

- 6.4. The site is remote, with only one residential property within a 0.5km radius of the site, this being a farm approximately 300m to the east of the site, and separated by continuous woodland, aside from the River Bure. The Broads Authority has extensive experience of dredging and the use of areas to dry sediment, and has reported very little evidence of odour from river sediment. However, an odour management plan has been submitted with the application which outlines measures to monitor odour and, if necessary, mitigate for any odour related issues that arise. The proposal is therefore considered acceptable with regard to Policy DM21 of the Local Plan for the Broads.

Ecology

- 6.5. The site is part of an arable field of which the proposed lagoon would cover 20,000m². The BA ecologist has assessed the application and advised that any ecological impacts are likely to be temporary and limited. They have advised that mitigation measures should be put in place and the site and works should be monitored by an ecologist to ensure there are no undue impacts to habitats and species. In addition, they have requested that restoration of the site should take place within the specified timescales and should seek to sensitively return habitats to their previous condition. Subject to conditions to ensure adherence to mitigation and restoration, the proposal is considered acceptable with regard to Policy DM13 of the Local Plan for the Broads.

Highways and public rights of way

- 6.6. The original access route to the site made part use of a public right of way. The condition of the public right of way did not appear suitable for access to the site with the required work equipment to form the earth bunds to the lagoon. Following discussion with the applicant, a revised route utilising a private farm track was submitted. NCC Highways have raised no objection to this revised route. The heavy

equipment for the formation of the earth bunds would remain at the site for the duration of the works, this being both to form the earth bunds, and to remove the bunds and spread the dried sediment. Daily access to the site by staff would be by car or van, with parking being provided to the immediate north of the lagoon area. The proposal is therefore considered acceptable with regard to Policy DM23 of the Local Plan for the Broads.

Other issues

- 6.7. The site and access route are outside of flood zones 2 and 3 and the Environment Agency have responded raising no objection.
- 6.8. The works to dredge the river and pump the sediment to the proposed lagoon would have a temporary and minor impact on navigation by virtue of the vessels using the river to carry out such works. These are routine works carried out every year by the BA and contribute to the maintenance of the navigable waterways. Any impacts on navigation (which would be minor and acceptable) are also considered to be outweighed by the wider benefits that the dredging works provide. The proposal is therefore considered acceptable with regard to Policy SP13 of the Local Plan.

7. Conclusion

- 7.1. The proposal is for the construction of a lagoon structure in an arable field to hold dredged river sediment from a 9.5km stretch of the River Bure. The lagoon would comprise earth bunds formed from top soil from the field in which it is sited. The river sediment would be held in the lagoon to dewater for approximately 12 months, following which it will be spread on nearby arable fields and ploughed in, and the earth bunds scraped back over the arable field area. The site is in a remote location and not visible from any public vantage point. The lagoon would be in place for 19 months but following this the field would be restored to its current condition. There would not be an unacceptable impact on landscape character or appearance. The site is remote and well separated from any residential dwelling, an odour management plan has been submitted to ensure that any impacts are monitored. Any ecological impacts are likely to be temporary and limited, subject to mitigation and monitoring. Works to dredge the rivers are carried out annually by the BA, any impact on river users would be minor and temporary. The proposed works would provide benefits in terms of navigation in meeting waterways specifications for river depth, and the drying out of the dredged sediment and spreading over arable fields would improve soil structure and organic content. The proposed development is therefore considered to be supportable with regard to Policies DM11, DM13, DM16, DM21, DM23, and SP13 of the Local Plan.

8. Recommendation

- 8.1. That planning permission be granted subject to the following conditions:
 - i. Time limit

- ii. In accordance with approved plans and supporting documents
- iii. Lagoon construction and filling with dredging material must be undertaken outside of breeding bird season
- iv. Works to be monitored by suitably qualified ecologist
- v. Long grass/reed habitat to be kept short and visual checks for nesting birds
- vi. No external lighting

9. Reason for recommendation

- 9.1. The proposal is considered to be in accordance with Policies DM11, DM13, DM16, DM21, DM23, and SP13 of the Local Plan for the Broads, along with the National Planning Policy Framework which is a material consideration in the determination of this application.

Author: Nigel Catherall

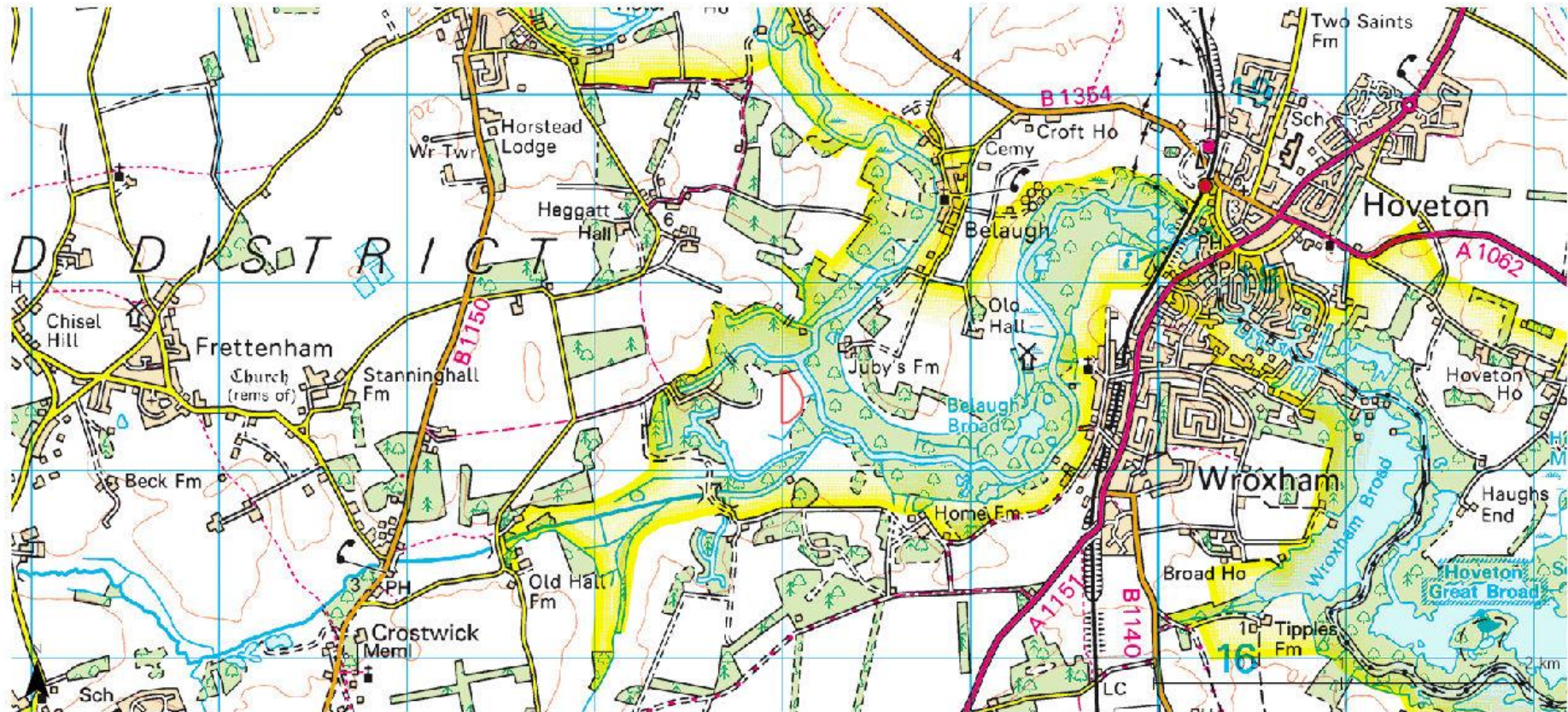
Date of report: 12 June 2023

Background papers: BA/2023/0099/FUL

Appendix 1 – Location map

Appendix 1 – Location map

BA/2023/0099/FUL - The Marl, Horstead With Stanninghall, Coltishall



© Crown copyright and database rights 2020 Ordnance Survey 100021573. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.