

## Summary of consultation responses

<b>Made by</b>	<b>Comment</b>	<b>BESL response</b>
English Nature	<p><u>Response to consultation leaflet, 17<sup>th</sup> February 2004</u></p> <p><b>Compartment 15</b></p> <p>We are concerned that the rollback identified will affect SPA and Ramsar populations of birds that are known to use this part of the site.</p> <p>We seek assurance that the standard of flood defence offered by these works is appropriate to the nature conservation assets it protects. We understand it might be proposed that the flood defence standard is lowered in this area. If such a semi-formal washland (even over part of the site) be proposed, issues such as its effects upon the SPA and Ramsar features, and cSAC ditch communities would need to be examined.</p> <p>Any bunding within the site could affect bird sightlines and hence the use of the site.</p> <p>We are concerned also by the likely loss of grassland, the habitat on which SPA and Ramsar populations depend through the material sourcing requirement and the footprint of the defence.</p>	<p>The design has now been modified to minimise any potential impact.</p> <p>Further details including hydraulic model results have been provided to English Nature. With respect to the 'lowered' section of floodbank you refer, the floodbank will not be physically lowered, but will not be raised to the level of the rest of the floodbank. However, the floodbank will still be above the level set for maintaining the 1995 overtopping regime.</p> <p>There is no need for any internal bunding.</p> <p>Habitat change figures have been provided.</p>

### **Compartment 16**

We would seek evidence that the rollback identified will be minimal and that basically the scheme will entail developing a new rond and almost holding the line. The new soke dyke will be small in dimensions and will be isolated from the internal ditch network using water control structures.

Details provided to English Nature

We seek assurance that the standard of flood defence offered by these works is appropriate to the nature conservation assets it protects.

Details provided to English Nature

If these points are met English Nature are very likely to come to the view that the scheme for Compartment 16 represents works 'necessary for the conservation management of the site'.

Comment noted

Revised comments as of 15<sup>th</sup> March 2004

### **Compartment 15**

We are concerned that the rollback identified will affect SPA and Ramsar populations of birds that are known to use this part of the site. The loss of the soke dyke at this location could have an effect on the use of this land by birds. The narrowing of this marsh between the existing boundary ditch and the encroaching embankment could also affect the bird usage of this area. The loss of 0.2ha of grassland elsewhere within the site needs also to be considered in combination. On the information that is available at present we would advise the planning body that this represent a 'significant effect' and hence should be the subject of an 'appropriate assessment'.

We can confirm that the standard of flood defence offered by these works is appropriate to the nature conservation assets it protects. It will be necessary for the bank height to be monitored at least once a year, and maintenance of the bank will need to be undertaken if found below the design standard.

It will also be necessary to incorporate the isolation of the soke dyke as an integral part of the scheme.

The design has subsequently been modified to avoid material sourcing from the section that would lead to a narrowing of this field.

Monitoring of floodbank height will be undertaken and any necessary topping-up done as a maintenance scheme.

The soke dyke will be isolated from the marsh dykes.

### **Compartment 16**

We can confirm that the standard of defence offered by these works is appropriate to the nature conservation assets it protects. It will be necessary for the bank height to be monitored at least once a year and maintenance of the bank will need to be undertaken if found below the design standard.

If the additional points raised in our previous letter are met, then English Nature will come to the view that the scheme is 'necessary for the conservation management of the site'.

Monitoring of floodbank height will be undertaken and any necessary topping-up done as a maintenance scheme.

Comment noted and welcomed.

Revised comments as of 22<sup>nd</sup> March 2004

**Compartment 15**

We are pleased that the scheme has been further modified to reduce its environmental impact. There remains however a small risk of impact to European wildlife features. However, provided there is a legal commitment to monitor the bird-use of the marshes against the embankment for a period of 5 years, that at the end of this period the data will be evaluated/assessed, and if there is found to be an adverse effect, then mitigation measures implemented to make good any impact upon integrity, then English Nature are likely to come to the view that the scheme does not represent a 'significant effect'. Such an approach is consistent with Lord Nimmo Smith's judgement in the 1998 Cairngorms case. Given the current slight uncertainty that the scheme can deliver the objectives of the European site in the long-term, we are unlikely to come to the view that the scheme is 'necessary for the conservation management of the site'.

Telephone conversation of 27 April 2004

**Compartment 15**

The concern over the potential impact of the proposals on SPA and Ramsar bird interest would best be addressed via an appropriate assessment

A programme of winter bird monitoring has been in place since 2002-2003. This will be adapted, if necessary, to satisfy the requirements of English Nature.

BESL accept this advice and have provided the relevant information in a separate report submitted with the planning application

### **Compartment 16**

The major issues associated with this compartment appear now to be resolved. If the points raised in our previous letters are met, English Nature will come to the view that the scheme for Compartment 16 represents works 'necessary for the conservation management of the site'.

Comment noted and welcomed.

RSPB

We believe that there is a duty on the Environment Agency, which is being delivered through their contract with BESL, to provide flood protection to designated sites. We therefore welcome the fact that BESL has brought forward proposals for Buckenham Marshes as we feel that provision of appropriate levels of flood protection are necessary in order to protect the integrity of the SPA.

Comments noted and welcomed.

## **Compartment 15**

We are concerned that the loss of grazing marsh habitat on Buckenham Marsh, caused by bank realignment, bank reprofiling and material sourcing, may have a significant impact on the SPA interest features for which the site has been designated.

Specifically with regard to material sourcing, we would welcome confirmation that all alternative options have been fully assessed and expect to see this detailed in the planning application documents. We do not necessarily consider it appropriate to source material from within the designated site.

We note from the consultation document that you intend to undertake piling and erosion protection work during the autumn and winter 2004. Buckenham Marshes is designated for its' populations of over-wintering waterfowl and it is important that no works are undertaken which have the potential to disturb these designated interest features.

All bank reconstruction works should not be undertaken during the bird breeding season. RSPB site staff in conjunction with English Nature will be happy to advise on appropriate dates for works to commence based on survey information of the Marshes' breeding waders.

BESL do not believe there will be a significant impact on SPA features. The appropriate assessment will identify whether or not any effects will be significant in terms of the site's conservation objectives.

The proposals for material sourcing have been developed with input from English Nature and RSPB reserve staff. The aim has always been to minimise the impact on key habitats whilst accepting that the majority of material will have to be won locally (a fundamental principle of the whole Flood Alleviation Project).

BESL note the comments regarding potential disturbance of wintering birds. However, only a very small section of erosion protection will be undertaken within Compartment 15 with the majority to be undertaken within Compartment 16 where there is minimal overwintering bird interest.

BESL propose to undertake the compartment 15 works outside the core breeding period of April to June inclusive. In compartment 16 we do not believe that it is critical to delay works until July due to the fact that there are relatively few breeding waders and other birds. The usual precautions of vegetation clearance survey before earthworks start and leaving

As you will be aware, the RSPB has concerns regarding the standard of defence being provided by these proposals, particularly in the section between Fleet Dyke and Buckenham IDB pump. As discussed, RSPB concerns in this area relate not only to the potential increase in over-topping frequency but also to the quality of any such water and the potential impacts this may have on the designated interest features of the SPA and SSSI.

We look forward to seeing a clear explanation in the planning application as to why alternative options, including raising crest height in common with the rest of the bank, have been ruled out for this location.

any nesting birds undisturbed will be implemented.

BESL have discussed this issue with both the RSPB and English Nature at an early stage of the design process. Information has been provided showing the rationale for the design of crest-levels and management of the over-topping. The section that is referred to will have a defence equivalent to a 1 in 20 year probability. English Nature has advised that a return frequency of 1 in 7 is appropriate for this type of habitat and that the proposed crest-levels are therefore appropriate.

It is a BFAP requirement to maintain the pattern of over-topping. This is being achieved in these compartments by leaving a short length of floodbank within Buckenham Marshes lower than the remainder. This will give added protection to the sensitive fen meadow habitat in compartment 16 whilst providing an appropriate level of defence in for the grazing marsh in compartment 15 (see above).



## Compartment 16

We understand that the latest proposals for Strumpshaw Common consist of bank strengthening or maintenance and erosion protection and that any bank realignment works initially considered have been withdrawn. We believe that these latest options are entirely appropriate given the increased protection that will be afforded to the designated fen meadow habitats.

We believe that it is entirely appropriate to bring forward flood defence options for this compartment which have minimal land take from the designated site. We seek assurances that all options will be properly considered for material sourcing, including importing from outwith the designated sites. Only if it is deemed appropriate and feasible to source material locally should this option be considered. If material is sourced from the creation of a new soke dyke, we would seek assurances that the new soke dyke will be designed so that it is isolated from the freshwater ditch system.

The consultation document identifies that works will be undertaken in two stages, with erosion protection works occurring during winter 2004 and floodbank strengthening or rollback starting in April 2005. As you will be aware, the SPA is important both for its wintering waterfowl and breeding birds. RSPB site based staff would be happy to advise on how to minimise disturbance to birds caused during the construction phases.

Comments noted and welcomed.

The proposals for material sourcing have been developed with input from English Nature and RSPB reserve staff. The aim has always been to minimise the impact on key habitats whilst accepting that the majority of material will have to be won locally (a fundamental principle of the whole Flood Alleviation Project). The new soke dykes will be isolated from the marsh dykes (as will the existing ones in compartment 15).

Comment noted.

As you are aware, the crosswall is the route of the footpath around Strumpshaw Fen. Discussions are already underway between BESL and RSPB regarding the appropriate surface for the crosswall and issues regarding temporary closure of the footpath. We look forward to continue discussions with BESL on this matter to achieve a satisfactory agreement.

The works will be completed over an eight-week period from October to November with the works split into two phases. The first phase will involve the section of the crosswall from the fen hide down to the river. This will enable access to fen hide to be maintained as long as possible. All materials required for this section will be imported by water with a temporary mooring point constructed. The section from the fen hide up to the visitor centre will be constructed on completion of the first phase.

Discussions are already underway between BESL and RSPB regarding how to proceed in this area. We welcome the decision to apply for planning permission on the preferred option for this area at the same time as seeking planning permission for the remainder of this compartment but with the intention to defer the works until satisfactory agreement has been reached with the landowner on the safety issues surrounding the mill.

Comment noted

Broads Authority

Strengthening of crosswall at Strumpshaw.

The BA support the strengthening of the crosswall to offer added protection to the internationally important fen meadow and ditch communities on the reserve.

BA accepts the minimal loss of scrub and trees along the length of the Strumpshaw crosswall in order to carry out the works.

It is proposed that this would be achieved through installing edging boards and back filling. The BA respect that negotiation between the RSPB and BESL have been undertaken pre scheme design but feel that it would be preferable, in visual amenity terms, to have the work completed to a full width of the bank but only have approximately 1.2m retained as an actual footpath. The remainder could then be soiled and seeded. The sub-base should be top dressed with a surface material which will help to promote disabled access.

The BA welcomes the improvements proposed to the crosswall footpath and the timing of the works in October – November, which will ensure reduced disturbance to the visiting public.

Rollback floodbank and erosion protection

BA would like further information about treatment of the soke dyke post-construction works i.e. will the dyke vegetate naturally or is minimal/wholesale planting of appropriate species proposed?

BA would welcome further detail about seeding mix for new floodbanks.

The BA support the re-creation of ronds in this area.

Comment noted and welcomed.

To be agreed with English Nature and the RSPB.

Details have already been provided to the Broads Authority with respect to the standard mixes used for maintenance and improvement schemes. Where requested, more site specific mixes can be used as for Compartment 18.

The BA would like examples of where reed has effectively colonised and grown through the gabion mattresses that are being proposed as an alternative material to use.

The BA appreciate and support the principle behind sourcing material from the creation/widening of existing soke dykes but would find it useful to have additional information of approximate widths of soke dykes for further consideration of the overall landscape effects of the scheme.

Information about the timing of removal of scrub bushes and trees for roll back and piling should be included in the scheme proposals to re-assure that minimal disturbance to breeding birds will occur as a result of the works.

The BA would encourage the incorporation of details within the design of the scheme to facilitate the reuse of the Beauchamp Ferry i.e. installing infrastructure that may be used in the future.

The BA is concerned about the level the gabion boxes would be installed to provide erosion protection. The corners or edges of the boxes should not be inundated at any time. The BA would prefer to see erosion protection installed at a higher level. Water could still flow through the flint in the boxes and inundate the lower level ronds behind and encourage growth of vegetation.

Whilst not specifically gabions, reed have successfully colonised the rip-rap placed along Compartment 16 and 26.

Tree and scrub clearance will be undertaken outside the bird-breeding season. Exact timing to be agreed with RSPB.

BESL's works will not compromise any future work in this area.

Comments noted.

Anglers use the area adjacent to the road at Buckenham. In line with the EA's Broads Fisheries Action Plan the BA would support any scope in the ground works to create access via a ramp up to the fishing area and better parking provision.

Comment noted. Further discussions to be undertaken at the detailed design stage. However, access to the riverbank will be safer on completion of the works with a gentler bank profile and a wider road reducing the risk of anglers falling into the river and allowing for anglers to pull fishing trolleys up the bank. If requested, BESL can incorporate steps into the floodbank at an agreed location making access even safer.

#### Proposals for Strumpshaw drainage pump

The BA would like to be kept informed on the situation regarding the Strumpshaw pump. The BA are aware that negotiations are continuing with the current landowner and the RSPB. We accept that whilst the flood alleviation scheme commences a 50m exclusion zone will be created around the buildings and only light plant on boards will be used to reduce potential disturbance to the structure caused by vibrations.

#### Proposals for Buckenham IDB drainage pump

It is felt that whilst this will obviously protect the building from flooding an opportunity exists for the setting to be improved and enhanced. The BA would like more details of the sheet piling, how it is to be capped etc. The structure is in a fairly derelict state and has subsided slightly. There is concern that engineering works may make this structure unstable. It may be necessary to carry out consolidation works to the pump prior to the piling being carried out, or to opt for a less engineered solution with the minimum of vibration, machinery movements etc.

Anglers  
Consultative  
Association for  
Norfolk and Suffolk

**Compartment 15.**

The Buckenham Bank from where the road almost meets the River Yare and downstream to the first short section of bank strengthening is popular for fishing from and has been for many decades. Reed growth along the lower section below this area now prevents access for angling. There should be evidence of where the bank is worn as to the areas (swims) in the bank strengthening and rollback that are used.

BESL are aware of the valuable fishing in this section of the River Yare and will look to minimise disruption to this fishery by completing the proposed works in one season. Alternative fishing opportunities exist on the right bank of the River Yare, though BESL acknowledge that the fishing on the left bank is free.

Access for fishing this section was once under National Rivers Authority control so was free to NRA fishing licence holders. The old sign is still visible. Parking is allowed by the side of the road at the NW end of the green section and is encouraged to be here in order that vehicles do not block the road preventing access for farm vehicles. There is the option of putting up a new sign to this effect (and include that it politely asks anglers to take away rubbish and litter) once the work is done.

Anglers cut the grass/weed growth to make accessible swims along the rollback section. If there is any topping up of soils behind the piling then it could be considered to place erosion protection material and/or gravel to create some swims along here. This bank tends to keep dry except with an exceptionally high tide as the piling appears to be of a good height along this section. Rollback should still allow access over the bank for anglers.

Any work along the bank strengthening and rollback sections should be considerate towards this excellent angling facility.

Comment noted, however, such signage is the responsibility of the landowner/tenant. For the duration of the works, BESL will ensure all appropriate signage regarding health and safety and areas of public access is clearly displayed. Access to the riverbank will be closed for the duration of the improvement works and car parking will not be possible due to the siting of the main site compound at the end of the access track.

Comment noted. Further liaison required with the Broads Authority. However, access to the river frontage will be maintained on completion of the works. Access will be safer with a gentler bank profile with a wider road reducing the risk of anglers falling into the river. If requested, BESL can cut steps into the floodbank making access even safer.

On completion of works, all access to the riverbank will be fully reinstated.

### **Compartment 16.**

The sections above and below the Strumpshaw Mill Pump (downstream to just below Langley Dyke opposite) have been used in the past by generous consent of the landowners for the River Yare Championships. The Brundall Angling Club used the section below the Mill for fishing matches and I believe there may still be an agreement with the landowner for this. Perhaps appropriate contact with them can be made for their opinion of the proposed work.

British Dragonfly Society

The BDS considers the proposals for this area to be acceptable. There is an obvious need for defence work to be done in these compartments, however we agree that any setback option would result in unacceptable habitat loss. The current proposals represent a sensible way forward.

The protected dragonfly species Norfolk Hawker *Aeshna isosceles* breeds at both Strumpshaw and Buckenham. The only major population within the county of the nationally vulnerable Scarce Chaser *Libellula fulva* is also at Buckenham. In addition another key species, Hairy Dragonfly *Brachytron pratense*, breeds at both sites. Any works carried out in this area must take these species into account (*A. isosceles* is protected under the Wildlife & Countryside Act 1981) and disturbance to the existing dyke systems must be kept to a minimum.

The RSPB confirmed that the Brundall Angling Club has up to about 5 years ago rented a section of the riverbank for 1 day a year to hold the River Yare championships. However, no agreement has been applied for during 2004.

Comment noted and welcomed.

No adverse impacts on these species are envisaged. The bunding of any soke dykes that are being de-watered will avoid impact on the rest of the marsh dyke system.

New and widened lengths of soke dyke will be separated from the marsh dyke system (they are currently connected). This will provide additional protection against seepage and/or over-topping of river water into the marsh dykes represents a positive impact



Although the proposals will result in an increase in rond, this will be on the riverside of the floodbank where water quality is poorer than within the marshes. Any increase in water area within the marshes will have a more beneficial result, provided that water depths are shallow enough to promote vegetation growth and to warm sufficiently quickly.

Broads Angling  
Strategy Group

This is one of some interest to the more adventurous of anglers and produces excellent fishing in the summer and autumn months. Access could be improved by BESL's work so that longer stretches of bank would give access to the water – currently difficult in many places.

Defra – Rural  
Development  
Service East

Areas behind the proposed flood defence proposals contain Environmentally Sensitive Areas (ESA) agreements amongst the higher/highest tiers of the scheme. These proposed works will impinge on some existing ESA agreement holders in the area of operations and it will be important that we ensure a consistent and practical approach to agreement holders when their land is entered to carry out these works.

We welcome the adoption of the 'floodbank rollback' concept in reducing the amount of grazing land lost in comparison with 'setback' options especially in these higher tier ESA areas. It is to be hoped that such an engineering option can be adopted in other appropriate areas as the BFAP work progresses.

The extension of existing soke dykes and excavation of new ones will be a benefit as most of the current soke dykes are overgrown and sub-optimal for dragonflies.

On completion of the works, access will be safer with a gentler bank profile with a wider rond reducing the risk of anglers falling into the river. If requested, BESL can cut steps into the floodbank making access even safer.

Some of the land involved with this work forms part of an agreement where breeding wader habitats have been created. To reduce disturbance to a minimum, the timing of the proposed operations will be critical.

Some ESA agreement boundaries may have to be adjusted where, as a result of the BFAP works, it has become impossible for ESA management to be undertaken. We would greatly appreciate the provision of GIS-based information on the realigned sections as soon as this becomes available.

Norfolk and Suffolk  
Boating  
Association

The proposals appear to be acceptable from a navigation point of view, which is NSBA's interest in the BFAP.

We do not find the information provided to be very clear in relation to the works proposals. The typical sections on page three of the leaflet do not cover all the permutations of piling/rollback/strengthening and have not been applied to the plans on page 5 of the leaflet. This is disappointing. When will proper plans be prepared and do you plan to consult stakeholders on them and could more care be taken over the leaflets in future?

Works will have to start in April in order to complete the scheme in one season. The impact on breeding waders is assessed in Chapter 7 of the Environmental Statement.

BESL will provide this information.

We note that NBSA think the proposals appear acceptable on navigation grounds and that this is NSBA's interest in BFAP.

With a pre-application consultation leaflet the amount and type of information we can provide is constrained by available space and how far the design has progressed. We believe the leaflets provide sufficient information for consultees to comment on the nature of the proposed scheme whilst also giving them the opportunity to raise other issues. Where further information is required (e.g. level of defence with RSPB and English Nature in this case) then BESL will provide information, meet consultees and consider whether we can respond positively by adapting scheme designs as appropriate. There remains an opportunity for all consultees to make formal representations on the submitted planning application, which will include the Environmental Statement and detailed drawings.

In addition, we cannot comment on the engineering design parameters and basis of the flood defence because we have had no opportunity, despite requests for contact with BESL engineers.

The navigable river, upon completion of the works, appears to remain essentially unaltered, with the existing piling either retained or replaced on the same line. Can you confirm that this is the case when the details are settled?

During the works, impact on navigation due to work barges and floating plant should be carefully controlled and duration minimised in close consultation with the navigation officer and committee of the Broads Authority. We commented on this in our formal response to the draft SEA. Has the SEA now been settled, and what does it state on this aspect?

Within Compartment 15, please clarify the actual width of the proposed works – is it about 30 metres?

The basis for flood defence and the options available to BESL are clearly set out in the Broadland Flood Alleviation Strategy (EA 1995) and referred to in both the SEA and individual scheme Environmental Statements. In terms of engineering parameters we are unclear why this is of relevance to NSBA - as you point out the organisation is interested in potential navigation impacts. We already invest significant time in providing such information to the Broads Authority and others with a direct interest in the detail. The BA in particular strives to make sure that it represents stakeholder's concerns and they make their own efforts to ensure that such aspects are adequately scrutinised.

Navigable width remains effectively the same on completion of works. BESL are proposing to use asphalt matting and reed to establish a 'soft' and visible edge along those sections of bank that require some erosion protection. A small floating pontoon will be used to place the matting. Elsewhere any replacement piling by Strumpshaw Mill (if undertaken - there is an issue of stability of the chimney) and Buckenham Mill will be done from the water but outside the main boating season. Given the limited duration of these works plus the fact that the river is over 50m wide in this part of the valley we do not envisage any disruption to navigation.

The working corridor will extend approx. 20m beyond the existing soke dyke

	<p>Within Compartment 16, is there an existing soke dyke?</p>	<p>There is no soke dyke from the "sandy wall" at the upstream end to a point at TG34170521 on Strumpshaw Common. We propose to excavate a small (&lt;6m) soke dyke along this length.</p>
<p>Coldham Hall Sailing Club</p>	<p>We agree with all the proposals. We presume that all existing vegetation, trees and shrubs will be removed during improvement works.</p>	<p>Where trees and shrubs are growing on the floodbank and the folding, these will have to be removed prior to the works starting to allow access to the floodbank. General vegetation clearance of the soke dyke, folding and floodbank will be undertaken well in advance of the works starting to prevent birds from nesting and to encourage mammals such as water voles to move out of the affected area.</p>
	<p>Are similar proposals being considered for the right bank of the River Yare?</p>	<p>Proposals for the right bank have been submitted to South Norfolk District Council for planning approval. These works cover the Rockland and Claxton Marshes from Rockland Staithe round to the Beauchamp Arms public house. With respect to the right bank of the River Yare upstream of Rockland Broad, this area is outside of the project area and therefore, will not have improvement works undertaken of the nature proposed for Compartments 15, 16 and 18. However, existing defences will be maintained as part of the annual maintenance programme.</p>
<p>Yare Valley Sailing Club</p>	<p>The proposals are acceptable with no problems foreseen for navigation other than those of a transient nature, which can be overcome by appropriate notices, signs etc.</p>	

Where existing piling is to be retained, a potential long-term problem remains. During the lifespan of the existing piling, however, there are likely to be episodes of accelerated decay leading, possibly to bank collapses into the navigable channel. We trust that such incidents will be rectified as part of the annual maintenance programme to prevent shallowing and/or the creation of underwater hazards.

Norfolk County  
Council – Planning  
& Transportation

We include our usual caveat regarding the satisfactory restoration of paths on banktops and formal completion of any necessary TCPA Diversion Orders.

An opportunity exists on Buckenham Marshes and Strumpshaw Common to create a new public right of way. At present footpath No 18 runs east to west up to opposite the Beauchamp Arms and then stops. We would encourage BESL to investigate the possibility of creating a permissive path from this point to link with existing paths further west.

We would like to remind BESL of the development of a new long distance path by Norfolk County Council in partnership with the Broads Authority and others, to be known as the Wherryman's Way. This path will use all of the section indicated on the enclosed map and includes upgrading of the path by Chedgrave Common.

Any decision to extend or create a permissive right of way to link with existing paths would have to be undertaken in partnership with the landowner. The RSPB currently provide informal access along the sections of floodbank within Compartment 16 with a nature trail provided down to the Strumpshaw drainage pump

Ramblers  
Association

The existing section from the end of the access track to a point opposite the Beauchamp Arms public house needs to be maintained to the present standard.

The footpath will be re-instated to at least its existing condition.

There is an opportunity to improve the section of public footpath down to the drainage pump by separating the track from the public footpath.

The public footpath should be maintained.

Broads Society

Walings fabricated from recycled plastic should be employed on all new sections of piling, however short, and also on those sections of the existing piling where the walings are missing. As we have pointed out on previous occasions, such walings will be far more durable than those made of timber, and they are also less likely to become detached. If despite this, it is decided to use timber walings, these should be fixed in place with bolts with large heads or large washers to reduce the risk of pulling out.

To prevent reeds growing at the water's-edge from being shaded out, to the detriment of the region's landscape and ecology, trees and bushes should be removed and precautions taken to ensure that seeding by woody vegetation does not take place, particularly when the banks have not yet had time to grass over.

Where erosion is required, this may have to be marked in places to prevent it becoming a hazard to navigation.

The use of plastic walings, this is not possible as the waling is needed for structural support of the piles. Although more durable, plastic is too flexible spread the load and provide the structural support needed. The use of plastic for rubbing strips and capping where not structural will be investigated.

We feel very strongly that alder piling, is a thoroughly unsatisfactory method of protecting the riverbanks. It has a short life, and the gaps between the piles allow the waves generated by wind and passing motor vessels to penetrate, thus increasing, rather than reducing, the rate of erosion. In the circumstances, we would urge BESL to employ other methods of erosion protection, and not use alder piling anywhere in the region.

Attempts should be made to secure a public right of way along that section of the flood bank between Strumpshaw Mill, and the end of the track leading south from Buckenham station. The RSPB do not prevent persons walking along the river bank between Strumpshaw Mill and the end of Sandy Wall; indeed, this forms part of one of the recognised paths within their Strumpshaw Fen nature reserve

We are not confident that BESL will accept our plea that they employ walings of recycled plastic, rather than timber. We have made this request on a previous occasion, but have received the following response. "Recycled plastic walings are very difficult to obtain and prohibitively expensive when compared with timber. Timber can be obtained from a sustainable source. Recycled plastic is difficult to work with, i.e. adjust the lengths etc.". We do not consider these arguments as valid, and would point out plastic walings have been used by the EA on the R. Thames, and that the Agency has demonstrated that the extra cost is justified by the additional durability. If this is the case on the Thames,

why not in the Broads? We would add that in view of the very large number of walings which will be required in the region over the next few years, we would expect BESL to be able to order the plastic version in bulk, and thereby obtain very favourable terms from a supplier.

Holmes Estate

Virtually the whole of the Compartment 16 works is on the Strumpshaw Estate – The Trustees of Mrs E. M. F. Key's Marriage Settlement. There is one immediate and important issue relating to the proposals to re-pile the sheet piling at Strumpshaw Mill. The chimney at the Mill has deviated out of its vertical alignment and any piling close to it needs to be very carefully considered because of that.

As you know, the Trustees' land in Compartment 16 is let to the RSPB and I am sure you are consulting with Stephen Hare regarding their interest. They did have a structural survey and engineering report carried out in respect of this building which I would expect they would be happy to share with you.

Broadland DC

In principle the proposal and options for defence solutions appears to be well conceived. Please keep us informed of the outcomes from the consultation process.