Planning Committee

Agenda 10 January 2020

10.00am

Yare House, Thorpe Road, Norwich, NR1 1RY

Introduction

1. To receive apologies for absence
2. To receive declarations of interest
3. **To receive and confirm the minutes of the Planning Committee meeting held on 6 December 2019** (Pages 3 - 14)
4. Points of information arising from the minutes
5. To note whether any items have been proposed as matters of urgent business

Matters for decision

6. Chairman's announcements and introduction to public speaking
   Please note that public speaking is in operation in accordance with the Authority's Code of Conduct for Planning Committee. Those who wish to speak are requested to come up to the public speaking desk at the beginning of the presentation of the relevant application
7. Request to defer applications included in this agenda and/or to vary the order of the agenda
8. **To consider applications for planning permission including matters for consideration of enforcement of planning control:**

   (i) BA/2018/0514/FUL Water basin at Ludham Field Base, Horsefen Road, Ludham
   Report by Planning Officer (Pages 15 - 28)

Enforcement

9. **Enforcement update** (Pages 29 - 31)
   Report by Head of Planning

Policy

10. **Flood Risk Supplementary Planning Document (SPD) consultation responses and next steps** (Pages 32 – 117)
    Report by Planning Policy Officer

11. **Climate Change - Planning** (Pages 118 – 123)
    Report by Planning Policy Officer

12. **Suffolk Design Briefing** (Pages 124 – 125)
    Report by Planning Policy Officer

Matters for information

13. **Heritage Asset Review Group – Notes from meeting on 6 December 2019** (Pages 126 – 135)
    Notes by Administrative Officer

14. **Appeals to the Secretary of State update** (Pages 136 – 137)
    Report by Senior Planning Officer

15. **Decisions made by Officers under delegated powers** (Pages 138 – 142)
    Report by Senior Planning Officer

16. **To note the date of the next meeting – 7 February 2020 at 10.00am at Yare House, 62/64 Thorpe Road, Norwich**

Planning Committee

Minutes of the meeting held on 06 December 2019

Contents

Present

Melanie Vigo di Gallidoro – in the Chair, Harry Blathwayt, Julie Brociek-Coulton, Jacquie Burgess, Bill Dickson, Andree Gee, Lana Hempsall, Tim Jickells, Bruce Keith, James Knight, Leslie Mogford, Vic Thomson, Fran Whymark.

In attendance

Sandra Beckett – Administrative Officer (Governance), Natalie Beal – Planning Policy Officer, Jack Ibbotson – Planning Officer, Kayleigh Judson – Heritage Planning Officer, Cheryl Peel – Senior Planning Officer, Cally Smith – Head of Planning, Marie-Pierre Tighe – Director of Strategic Services (After Minute 8).

Members of the public in attendance who spoke

Application BA/2018/0359/FUL Sandersons Marine Craft Ltd, Riverside, Reedham

Mr Chris Day – Objector
Mr Mike Barnes – on behalf of applicant Broadland Pension Fund Ltd.
William Glover– Agent for the applicant.

1. Apologies and welcome

The Chairman welcomed everyone to the meeting.

No apologies were received.

Openness of Local Government Bodies Regulations 2014

The Chair gave notice that the Authority would be recording the meeting in accordance with the Code of Conduct, with the Authority retaining the copyright. No other member of the public indicated that they would be recording the meeting.

2. Declarations of interest and introductions

Members and staff introduced themselves. Members provided their declarations of interest as set out in Appendix 1 to these minutes in addition to those already registered. All members declared that they had been lobbied by the objectors with regard to the planning application BA/2018/0359/FUL.

3. Minutes of Planning Committee meeting held on 8 November 2019

The minutes of the meeting held on 8 November 2019 were approved as a correct record and signed by the Chairman.

4. Points of information arising from the minutes

There were no points of information arising from the minutes to report.

5. To note whether any items have been proposed as matters of urgent business

The Chairman reported that she had been informed of an item of urgent business concerning a building in Wroxham. It was proposed to take this after agenda Item 13.

6. Chairman's announcements and introduction to public speaking

Public Speaking: The Chair stated that public speaking was in operation in accordance with the Authority's Code of Conduct for Planning Committee. Those who wished to speak were invited to come to the Public Speaking desk when the application on which they wished to comment was being presented

7. Requests to defer applications and/or vary the order of the agenda

No requests to defer or vary the order of the agenda had been received.

8. Applications for planning permission

The Committee considered the following application submitted under the Town and Country Planning Act 1990 (also having regard to Human Rights), and reached the decision set out below. Acting under its delegated powers the Committee authorised the immediate implementation of the decision.

The following minutes relate to further matters of information, or detailed matters of policy not already covered in the officer's report, and which were given additional attention.

(1) BA/2018/0359/FUL Sandersons Marine Craft Ltd, Riverside, Reedham

Site description: Demolition of shed, erect timber clad boat workshop, 3 residential dwellings, flood defence wall and landscaping. Applicant: Sandersons Marine Craft Ltd

The Chairman commented that, as members had been made aware, the Parish Council and the objector were recommending that the Committee have a site visit so as they could consider all the issues relating to the application before it was considered in detail at Committee. The Chairman offered members the option of whether to receive the presentation with a view to determining the application at this meeting or deferring consideration for a site visit before the next meeting.

The Head of Planning set out the guidelines and criteria for having a site visit as detailed in the Code of Conduct for Planning Committee. She explained that officers had reviewed the application thoroughly and, given all the information received and the details to be provided within the presentation, which took account of the representations, they did not consider a site visit was warranted. They had not recommended a site visit, but of course it was open to members to consider.

Some members considered that on the basis of the report there should be sufficient information provided to determine the application. Other members considered that in view of the objections, the public interest and the balance, a site visit would be helpful.

Bill Dickson proposed, seconded by Fran Whymark and by 7 votes to 4.

It was resolved to proceed with the presentation with a view to determination.

The Planning Officer gave a detailed presentation and assessment of the application for redevelopment of the Sanderson's Marine Craft site and the adjacent Halls Old Yard site at Riverside Reedham to accommodate a replacement timber clad dilapidated boat workshop on the former site and erection of 3 residential dwellings on the Halls Old Yard site plus associated parking and landscaping across the whole site together with the replacement/improvement of the flood defences. The proposal was to enable the existing Sanderson's Marine hire boat business to continue as a hire boatyard and provide long term viability. There had been a number of amendments to the original application following consultation. The amendments involved redesign and repositioning of the boatshed, reduction in the number of dwellings and reduction in height of the proposed building, of which the Planning Officer gave a detailed account.

The Planning Officer drew attention to the consultations and representations received. Following the drafting of the report, local residents and the Parish Council's wrote to state that their objections still stood and they had considered, as indicated by the Chairman, that a site visit was needed. The Highways Authority had confirmed that the proposed footway to the north would meet its requirements as would the car parking. They now considered that the application could not be refused on highway grounds, there was an overall improvement in terms of highway safety and they had removed their objection. One of the letters in support of the application had come from the Broads Hire Boat Federation (BHBF) indicating that improvement of the facilities and continuation of the site as a hire boatyard would help in providing links and facilities in this part of the Broads.

The Planning Officer emphasised that as the application proposed a partial change of use from boatyard, the applicant had submitted a viability assessment and details of marketing of the Halls Old Yard section, which covered a full 12 months as required. No new purchasers or alternative or community uses had come forward and therefore criteria of Policy DM26 (b) and criteria (g) of Policy DM28 of the Local Plan had been met. In addition, the viability information and assessment had been assessed by an independent assessor who agreed that the new building was required for the Sanderson Marine part of the site, and that the 3 dwellings would be a means in part to support this continued use of the site as a boat yard.

The Planning Officer addressed the matter of amenity and design, particularly that of loss of light, privacy and loss of outlook. It was acknowledged that there would be some impact on property no 62, but that the loss of light would not be significant and that the amendments to the siting would reduce the impact on the views. There would not be such a significant impact as to warrant a refusal.

The Planning Officer concluded that whilst the site lay outside a defined settlement boundary and included residential development, so was technically a departure from the Local Plan, there were a number of considerations which weighed in favour of the proposal. The site was assessed as a sustainable location with links to services and acceptable levels of public transport. The development would enable the existing marine hire business to continue and an adequate marketing assessment had been made showing that the long-term future of the site in its current use was not viable. Although in an area of flood risk, the proposed improvements to the flood defences and economic support to the existing business, which the proposal would enable, meant that the site had met the Exceptions test and adhered to the Environment Agency's (EA) criteria. The proposals would therefore conform to policy and could be recommended for approval subject to a suitable mechanism to control the implementation of the replacement boatshed building, flood defences and footway prior to the occupation of the dwellings, preferably by a Section 106 agreement and detailed conditions.

Mr Day, owner of no 62 Riverside, Reedham, opposite the boatyard, voiced his concerns set out in his submission. He considered the proposals were in conflict with policy. There was no element of creativity in the design of the building making it worthy of inclusion in such a highly sensitive and prominent location within the Broads National Park. The workshop was considered to represent overcrowding and out of character for a riverside setting. He considered that the new boatshed was double the size of the existing boatshed and therefore contrary to Broads Local Plan Policy DM25. Reedham was well served with housing in the village and therefore there was not a need in such a location. The purpose of the development was to improve the profitability of the business. He considered that the Authority should rule that the present two sites should remain as a whole. He did not feel that the marketing of the one site was sufficient and that it should have included both sites. The provision of housing on the Old Halls site was considered unnecessary, unwanted, outside the development boundary, and in a vulnerable flood zone. He was of the view that the concerns of local residents had not been wholly considered. He called on the Members to decline the application.

Mr Barnes on behalf the applicant, explained that he represented a Trust founded to assist small to medium sized enterprises improve their business and increase their viability and the Trust had a track record of doing so. Sanderson's Marine Craft provided a valuable much needed resource to boats using the southern rivers and was also a positive contributor to the economy of the village. He confirmed that the operator was committed to retaining a boat hire fleet. In response to a question he explained that the operator would no longer retain a crane on site, but hire one as required so as to provide more space for manoeuvre within the site. At present, the repair work was undertaken outdoors and therefore limited to favourable weather conditions. The new boatshed would enable work to be undertaken under cover as required. It was explained that its height of 1.75 metre was the minimum requirement for work to be undertaken on a boat when inside and allowed for floor levels above flood level. Mr Barnes was sympathetic to the resistance from the Parish Council and their right to object

but as the boatyard was a contributor to the village, asked the Committee to support the application.

Following questions, Members were satisfied with regard to the flood risk, the impact on the neighbouring properties, car parking and the manoeuvrability including the use of a hire crane on site only as required. They were encouraged by the extensive discussion and negotiations with the applicant and the resulting modifications of the proposals to attempt to meet the comments from the objectors as well as achieve scale and proportionality. They recognised and were not insensitive to the concerns of the objectors, regretting that there was conflict, but they also considered it essential to maintain operating working boatyards. It was recognised that from the perspective of the Broads as a whole this was one of the only remaining boatyards that provided such facilities in the Southern Broads on the River Yare between Yarmouth and Norwich. It was encouraging to see proposed improvements and investment in a site which would otherwise become derelict. Therefore, on balance they wished to support the proposal subject to there being sufficient controls to ensure the boatshed replacement building was undertaken and other matters in place before the occupation of the dwellings. It was noted that this could be best achieved through a Section 106 Agreement.

Harry Blathwayt proposed, seconded by Bruce Keith and

It was resolved unanimously

Subject to the prior completion of a Section 106 to control the implementation of the replacement boatshed building prior to the occupation of the dwellings,to approve the application subject to the conditions outlined within the report as well as conditions relating to flood defences and the footway and Informatives regarding Broads Authority Rivers Works Permits, EA flood defence consents and Highway specifications.

The development is considered to be in accordance with Policy DM11, DM43, DM26, DM28 and DM5 of the Local Plan for the Broads. Whilst the residential development is not in compliance with Policy DM35 and is therefore a departure from the Local Plan, in this instance other material planning considerations on balance mean that this development is considered to be sustainable development and therefore considered acceptable.

Following a break, Jacquie Burgess and Julie Brociek-Coulton gave apologies for having to leave the meeting.

9. Enforcement Update

The Committee received an updated report on enforcement matters previously referred to Committee. Further updates were provided for:

Former Marina Keys Great Yarmouth – the footpath was now cleared and progress was being made on site to enable development.

Land at the Beauchamp Arms Public House, Carleton St Peter – no further caravans were on the site since 16 September but monitoring was continuing.

Blackgate Farm, High Mill Road, Cobholm: Unauthorised development - following the Committee meeting on 8 November 2019, officers had been in correspondence with Great Yarmouth Borough Council. They had also informed the landowner's representative of the Committee's decision. The pending enforcement action had prompted correspondence with the landowner's solicitor and planning agent. The agent had indicated that they were still in the process of preparing an application for submission. In addition, responses had now been received to the Planning Contravention Notice (PCN), which was issued some time ago. This informed the Authority that only two of the static caravan units were occupied by the landowner's relatives and the other 5 were advertised for rent, thus undermining the claim for private use. The matter had not been resolved and it was intended to serve an Enforcement Notice within the next week. A member queried whether this should be delayed until after Christmas. It was clarified that the Enforcement Notice would not take effect for 6 weeks, which would be well into the new year. There would also be a compliance period of 6 months from the date the Enforcement Notice took effect. It was noted that the landowner would have the opportunity to appeal on grounds including that planning permission should be granted.

It was resolved to endorse the action being taken and note the report.

10. Statement of Community Involvement – consultation responses and adoption

The Committee received the Authority's Statement of Community Involvement (SCI) that had been reviewed, updated and been subject to consultation between 27 September and 22 November 2019. Members noted the comments received and the changes to the draft SCI which were set out as track changes. This was welcomed. The Planning Policy Officer reported that since writing the report, Bramerton Parish Council had responded with no comments. It was noted that North Norfolk District Council and Chedgrave Parish Council had asked for an extension to the deadline for their comments to 13 December 2019. It was not anticipated that there would be any major changes. Therefore, it was proposed that any comments received be assessed and responses to those as well as any potential changes required be discussed with the Head of Planning, Director of Strategic Services and Chair of Planning Committee. Any responses or changes would then be detailed in the report to the Authority when seeking agreement for adoption.

It was resolved to endorse the final SCI subject to any changes considered by the Head of Planning, Director of Strategic Services and Chair of the Planning Committee for inclusion and that it be recommended to the Broads Authority for adoption.

11. Trowse with Newton Neighbourhood Plan

The Committee received a report introducing the Trowse with Newton Neighbourhood Plan. Trowse with Newton Parish Council had submitted the application for the entire parish of Trowse with Newton to be an area designated for the purposes of producing a

Neighbourhood Plan. The nomination had been received on 12 November 2019 and there were no known or obvious reasons to not agree the Neighbourhood area.

It was resolved that the entire parish of Trowse with Newton be approved as a Neighbourhood Area to produce a Neighbourhood Plan.

12. Consultation documents update and proposed responses – Great Yarmouth North Quay

The Committee received a report providing a proposed response to the planning policy consultations from Great Yarmouth Borough Council about helping to guide the regeneration of Great Yarmouth's riverside at North Quay. This would eventually form a Supplementary Planning Document. The key issues for the Broads were understanding and strengthening the historic links between the town and the Broads beyond, maintaining a dark river corridor for wildlife and ensuring safety features were considered as integral parts of any development.

It was resolved to note the report and endorse the nature of the proposed response.

13. Horning and Ludham Conservation Areas – Drafts for Consultation

The Committee received a report and presentation on the work that had been carried out on the re-appraisal of the Conservation Areas at Horning and Ludham as part of the Authority's statutory duty to review Conservation Areas and consider designation of new ones. These defined the special qualities of the area for protection and were important in considering development proposals. Members were asked to consider the drafts and authorise officers to commence a public consultation exercise.

The Heritage Planning officer explained that the Horning and Ludham re-appraisals were the last two Conservation Area reappraisals to be completed out of the 25 Conservation Areas within the Broads, which had been reviewed over the last 10 years. HARG had considered the draft re-appraisals at its meeting on 7 December 2018 where they were supported by Members and endorsed for consultation. The Heritage Planning Officer provided members with boundary maps of the proposed areas. In Horning it was proposed to retain the main existing area with 2 extensions, one to the north to include the Ropes Hill Dyke waterway and parts of Crabbetts Marsh and the other a satellite area along the River Bure around the church and pumping station. It was also proposed to remove one section.

In Ludham, smaller alterations were proposed with the retention of the centre, small inclusions along Horsefen Road, School Road, Norwich Road and Staithe Road and the exclusion of some farm land. This was based on Historic England's advice and criteria that the Conservation Area should only include those parts of historical value.

It had originally been intended to report the consultation process to Planning Committee in February 2019 but the timetable had not been met in full, although some actions had taken place. The drafts had been submitted to Horning Parish Council in early summer 2019 and

preliminary findings to Ludham Parish Council in August 2019 and then the draft appraisal in October 2019. A site meeting was held with Horning Parish Council on 21 September 2019 and it was anticipated that a site meeting with Ludham Parish Council would take place early in 2020. It was intended that, once endorsed and agreed by the Planning Committee, a public consultation would commence with the production of a summary leaflet to be distributed to all households in the Conservation Area and other stakeholders including the Parish Councils. This would be followed by a public exhibition.

A member commented that North Norfolk District Council was very supportive of the proposed Conservation Areas for consultation. A member queried if there was a residential mooring allocation in the area around Ropes Hill Dyke. The Head of Planning commented that this would not have an adverse effect on the character of the area nor would it compromise the designation. The Authority was required to apply high standards and be objective. Officers would assess whether to include reference to this in the consultation.

Members congratulated the officers on the quality of the material in the draft Conservation Area Re-appraisals, requesting that they contain the proposed boundary maps as part of the report in future. They agreed that the detailed assessment of the areas identified by the draft boundary maps and described in the draft appraisals at Horning and Ludham were worthy of Conservation Area designation.

Fran Whmark proposed, seconded by Bill Dickson and it was resolved unanimously

(i) to endorse the draft re-appraisals for the Horning and Ludham Conservation Areas and

(ii) **the public and stakeholder consultation be progressed**.

13a Item of Urgent Business: Building worthy of listing

The Head of Planning reported that the new owner of a property in Wroxham had approached the Authority with a view to making alterations to the building. An application had been submitted to replace all external materials including thatching and historically notable fenestration as well as a Certificate of Lawful Use (CPLUD) for the removal of thatch and replacement with pin tile over the existing roof. Early discussions with a solicitor indicated that the replacement of a thatched roof could fall under permitted development rights. At present, the property in question, Heronby along Beech Road, originally built in 1907 in an Arts and Craft style on a prominent waterside plot in the Broads, was not listed although it was within the Conservation Area and considered to be worthy of listing as Grade II.

The Heritage Planning Officer provided members with the context and history of the building, its special qualities and interest, significance and major contribution to the character of the area as well as its historic connections, having been owned and designed by Charles Curzon as well as in the ownership of George Formby, all of which contributed to the key criteria for listing.

The Head of Planning set out the process of applying for listed building consent. She explained that it would be necessary to issue a Building Preservation Notice (BPN) by way of a temporary listing until a decision on listing could be made. This would be in order to protect a building considered to have special architectural or historic interest, but which was in danger of being demolished or altered in such a way as to affect its character. Once the BPN had been served, the building would be treated as if it were listed and the BPN would remain in force for six months from when it was served and would cease to be in force once the Secretary of State had made a decision.

The Head of Planning drew attention to the risk of liability and claim for compensation. If the Secretary of State decided the building was not worthy of listing, compensation might be payable by the Local Authority for losses sustained by those with an interest in the building as a result of the BPN. The risk of such was clearly stated and in conclusion, it was considered that it was unlikely that commencement of works was imminent, particularly as no application for Building Regulations approval had been submitted and due to the time of year to carry out such works.

Members considered that there was a strong case for the building to be listed.

Fran Whymark proposed, seconded by Andrea Gee and

It was resolved unanimously

(i) to submit an application to Historic England for the building of Heronby, Beech Road, Wroxham to be nationally listed and

(ii) to serve a Building Preservation Notice.

14. Appeals to the Secretary of State

The Committee received a schedule of appeals to the Secretary of State since April 2019.

It was resolved to note the report.

15. Decisions made by officers under delegated powers

The Committee received a schedule of decisions made by officers under delegated powers from 26 October to 20 November 2019.

It was resolved to note the report

16. Date of next meeting

The next meeting of the Planning Committee would be held on Friday 10 January 2020 starting at 10.00 am at Yare House, 62- 64 Thorpe Road, Norwich. This meeting was followed by the Members Heritage Asset Review Group (HARG).

The meeting ended at 12.55 pm

Signed by

Chairman

Appendix 1 – Declaration of interests Planning Committee, 06 December 2019

Member	Agenda/minute	Nature of interest
Melanie Vigo di Gallidoro	On behalf of All Members 8 Application BA/2018/0359/FUL	Lobbied: Receipt of letters and photographs from Objectors
Harry Blathwayt	13 Ludham and Horning Conservation Area Reappraisals.	North Norfolk District area and resident of Ludham
James Knight	8 Application BA/2018/0359/FUL 13 Conservation Areas 14 Appeals to SoS	Know applicant Brother did Marketing for the site. Horning Resident. Planning Appeal
Leslie Mogford	12	Appointed by Great Yarmouth Borough Council
Tim Jickells	None other than general as above 8	

Planning Committee

10 January 2020
Agenda item number 8

BA 2018 0514 FUL Ludham Field base

Report by Planning Officer

Proposal

Extension of mooring basin and realignment of access from Womack Dyke.

Applicant

Mr Paul Carrington

Recommendation

Approval subject to conditions and s106 agreement

Reason for referral to committee

Objections from internal consultees

Application target date

12 March 2019

Contents

1. Description of site and proposals

1.1. The subject site comprises a mooring basin and adjacent land at the Ludham Field Base Centre sited on the north-east side of Womack Water at the far south-eastern end of the village of Ludham. The subject mooring basin serves the workshop and offices of the former Broads Authority field base, currently the home of the Norfolk Broads Yachting Company, accessed from Horsefen Road. The wider site also provides an area of car parking and associated hardstanding.

1.2. The area at the southern end of Horsefen Road and fronting Womack Water is home to a small cluster of boat workshops and mooring basins. To the immediate east of the subject site is Hunters Yard, home to the Norfolk Heritage Fleet Trust. To the immediate west is the Forsythe Wherry Yard, home to the Norfolk Wherry Trust, a site which includes a boathouse utilised by the Broads Authority as a billet for a launch, and beyond that is the Swallowtail Boatyard. There are residential properties to the north and west of the commercial sites. The surrounding landscape is dominated by expanses of grazing marsh interspersed with narrow dykes draining into the River Thurne which lies to the south of Womack Water. At the end of Horse Fen Road a public footpath runs along the eastern edge of the Hunters Yard site, leading south towards the River Thurne.

1.3. The application site lies within the Ludham Conservation Area and approximately 100 metres to the west of the Ludham-Potter Heigham Site of Special Scientific Interest and National Nature Reserve, the Broads Special Protected Area and Ramsar Site and the Broadland Special Area of Conservation.

1.4. The existing basin is rectangular with a narrow access opening diagonally from Womack Water, set back from the water's edge by approximately 13.5 metres. The basin measures 16 metres by 33 metres, which is a footprint of around 528 square metres, and has current capacity for up to 18 small boats.

1.5. The proposal would see the basin enlarged to 45 metres by 47 metres which would provide capacity for up to 18 large boats; this would be achieved by expanding the basin to both sides and also towards Womack Water. The enlarged basin would be realigned to reflect the course of Womack Water where it passes the site, and the access widened. The basin's set back from Womack Water would be between 2 and 4 metres. The basin would be surrounded by 2 metre wide boardwalks, and 8 finger jetties would be provided within the basin.

1.6. The overall footprint of the enlarged basin would be 1,920 square metres, with the area of proposed excavation being 1,263 square metres, requiring the removal of approximately 2,210 cubic metres of spoil.

1.7. The application proposes the establishment of narrow areas of new reedbed within the site using reed turves. This would be on a strip of land between the workshop building and the reedbed on the adjacent site (which is currently being used as amenity grassland), on an area to the north-west of the workshop, adjacent to the boundary

with the Norfolk Wherry Trust and on the strip of land to be retained between the proposed enlarged basin and the basin at the Norfolk Wherry Trust site.

1.8. There are currently a number of trees within the area of proposed development, these are mostly at the extremities of the site. The trees which are sited between the existing basin and Womack Water appear to be self-seeded in that they are fairly randomly sited, and the proximity to the water's edge has resulted in them growing at angles presumably due to the ground conditions. The trees adjacent to the boundary with the Norfolk Wherry Trust site appear better considered, although by number, siting, and proximity have an overall haphazard appearance. By virtue of the works proposed the trees within and adjacent to the enlarged basin area would be removed.

2. Site history

2.1. BA/1990/2882/HISTAP - Broads Authority joint field base (workshops, ancillary offices). Approved subject to conditions, May 1990.

2.2. BA/2004/1386/HISTAP - Siting of secure container. Approved subject to conditions, October 2004.

2.3. BA/2017/0268/PREAPP - Redevelopment of site to include enlargement of basin. Advice given.

3. Consultations received

Parish Council

3.1. We would like a condition requested that the spoil has to be removed by river as Horse Fen Road is totally unsuitable for a large number of large lorries up and down during the excavation. The PC would also like to see a condition that any large boats have to arrive at the site in future by water. A condition such as this was put on Swallowtail Boatyard when it was developed.

Environment Agency

3.2. No objection subject to flood risk considerations and application of the sequential test.

Norfolk County Council (NCC) Highways

3.3. No objection raised, recommended that the river/Broads network be utilised for the transport of arisings, otherwise conditions proposed to ensure protection of Horsefen Road.

District Councillor for St Benets Ward (Cllr Varley)

3.4. I have read through all the relevant documents and believe that it doesn't need to go to committee and therefore, the application can be determined by the Head of Planning (delegated decision).

BA Landscape Architect

3.5. The opening up of views into the site from Womack Water and beyond. The proposals involve enlarged moorings and ancillary features, parking, equipment etc., the adverse landscape effects of which would be increased by removal of tree screening.

Removal of the trees would expose the Forsythe Wherry Yard and buildings to views from Womack Water. It would be helpful to have the need/justification for the removal of these trees clarified.

The revised proposals are an improvement although details are rather unclear. On balance the development would have an overall adverse impact on landscape.

The mitigation proposed would not be sufficient to offset adverse effects on the character of the surrounding landscape and its visual amenity arising from the development. Although the revisions and additional information are appreciated, I remain unable to support the application.

BA Tree Officer

3.6. It will still be difficult to retain trees without compromising their roots and associated structural integrity, and consequently the present screening would be lost. However, there could be potential to replant if sheet piling is to be used as will restrict and 'control' the roots of any new trees planted. Given this is a commercial project I am sure the owners would want to be sure the trees did not affect the quay headings.

However, with the restricted access there is also the issue of the trees being a nuisance to owners restricting movement around the quay-heading and branch/leaves messing up the boats and restricting access to the moorings.

On reflection, if the project is to go ahead perhaps future tree planting should be restricted to a minimum with perhaps just a few willows planted that can be regularly pollarded to maintain/restrict their size and potential nuisance.

BA Ecologist

3.7. The application site is reedbed, a priority Biodiversity Action Plan (Section 41) habitat with national targets for no net loss. Reedbeds support an array of wildlife including nesting birds, invertebrates as well as mammals including otters and water voles.

The proposed tree removal would break up an ecological corridor leading to the river. The removal of the peat soils would subsequently result in a loss of a finite resource and the subsequent drying and oxidation of the peat leading to the release of carbon dioxide to the atmosphere.

Conclusion: Strong objection based on removal of peat soils and loss of Section 41 priority habitats.

If the planning team/committee are considering granting planning permission for the removal of UK priority habitat, then an offsite mitigation project for the creation of

reedbed should be secured. This is to ensure there is no net loss of Biodiversity Action Plan/Section 41 habitat in the National Park.

BA Rivers Engineer

3.8. I would like to see a ground investigation survey which would give me confidence that they are planning to penetrate far enough into firm material to ensure the piling above water retains its position and integrity? As there is no room or scope for tie rods, so the sheets are going to have to be very well driven down and of a high specification to cope.

A Works licence will be required if working in, on, or over the navigation channel.

4. Representations

4.1. Norfolk Wherry Trust made the following comments:

While we have no actual objections to the development we have two concerns that we wish to raise:

(a) There will be quite a narrow spit of land separating the enlarged basin from our dyke and the method of removal of any tree and shrub roots may affect the stability of that land.

(b) The manoeuvrability of the two wherries - Albion and Maud - into and out of our dyke would be adversely affected by any mooring in Womack Dyke immediately outside the enlarged basin. Anything that made Womack Dyke narrower for navigation would be of considerable concern to us. The front bank of the property concerned in the application has in recent years partially collapsed into the water already causing some restriction.

We wish to have assurances that these aspects related to the development have been raised and will be considered during the planning process.

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:

SP5 - Historic environment

SP7 - Landscape character

SP11 - Waterside sites

SP14 - Mooring provision

DM5 - Development and flood risk

DM10 - Peat soils

DM11 - Heritage assets

DM16 - Development and landscape

DM23 - Transport, highways and access

DM28 - Development on waterside sites in employment or commercial use, including boatyards

DM31 - Access to water

DM33 - Moorings, mooring basins and marinas

DM43 - Design

DM47 - Planning obligations and developed contributions

Landscape Character Assessment: Area 31 Thurne/ Bure Valley - Martham Ferry to Oby

National Planning Policy Framework (NPPF)

6. Assessment

6.1. The proposal is for an enlargement of the existing mooring basin, a repositioning of the access from the adjacent water body, and the provision of areas of reedbed. The main issues in the determination of this application are the principle of development, impact on landscape, impact on priority habitats, impact on trees and highways safety.

Principle of development

6.2. The principle of the proposed development is acceptable as the enlarged basin will contribute to the network of facilities around the Broads system and would result in an improvement to the quality of the mooring provision. The mooring provision is existing and the improvement would increase the revenue stream which would help support the viability of the business at the site. In these respects the proposal is considered to accord with the general thrust of Policy DM33 of the Local Plan for the Broads.

Impact upon the landscape

6.3. The proposed development would result in changes to the appearance of the subject site and consequently the appearance of the landscape in this area. This has led to objections being raised by the BA landscape architect. Whilst the objections are acknowledged, the changes must be considered in the context of the site and the surrounding area, and take into account the nature and scale of development in this location.

6.4. The subject site lies within a sensitive area in landscape terms, where the areas to the south, south-east, and south-west comprise open, flat grazing marsh and areas of arable farmland. Owing to the areas of woods and trees along Womack Water, it is only the commercial areas towards the south of Horsefen Road that are visible from the wider area. The site is readily visible from Womack Water and the public footpath

running to the south-east, and there are long views into the site from properties to the west situated along Cold Harbour Road.

6.5. The location, siting, and scale of the workshop buildings at both the subject site and the adjacent Hunters Yard site are such that they are part of the landscape character in this locale. Other development along Horsefen Road is only hinted at, whereas the workshop buildings are particularly apparent. That they are on waterfront sites, have a clear commercial character and are of a scale which means they sit below the tree line backdrop, results in an appearance which does not appear unsuitable or unexpected. They neither dominate nor undermine the landscape character. It is inevitable and conventional that a commercial boatyard workshop would have a mooring basin to its river side, and this is the case with all such businesses in this small cluster of waterside commercial interests. The notable point about the subject site is the relatively small scale of the basin in comparison to the scale of the building, such that an increase in the scale of the basin would not appear at odds with the scale of development at the site.

6.6. The impacts on the landscape would come in the form of the increase in activity or perception of activity at the site and the loss of some areas of landscaping, particularly the trees on the north-west boundary. The BA landscape architect has made the point that a larger basin for larger vessels will result in additional impact on the appearance of the landscape. It is the case, however, that the moorings at Hunters Yard and Swallowtail both support larger vessels and these do not impact adversely on the landscape, and, in the context of the group of sites and the backdrop of large workshops, any increase in vessel size at the application site would not appear out of place, or at odds with the scale of development locally. Indeed the presence of moored vessels to the front of a large commercial building gives it an important context so that the relationship between water and land-based development is reinforced.

6.7. The loss of the trees is regrettable as they do provide a level of screening to the adjacent boatyard. The adjacent boatyard, both the canopy and workshop, along with the boathouse utilised by the Broads Authority, are of an evidently smaller scale than the two larger buildings to the south-west. The removal of the trees and consequent revealing of the neighbouring site would make that site more visible, but its scale, particularly when considered within the setting of the larger buildings, is low key and has a character and appearance which complements the two larger buildings. Therefore the loss of some screening to this site is not considered to be sufficient to justify refusal of the application. Further to this, the majority of views of the neighbouring site would be as background to the proposed enlarged basin, and in this setting would appear as an expected part of the commercial waterside interests, and therefore not markedly detrimental to the landscape appearance in this area.

6.8. With regard to the loss of the areas of existing reedbed, it must be noted that these are relatively small areas in terms of the scale of the larger areas of reedbed elsewhere in the immediate area. Whilst the loss of reedbed is unfortunate, it is not considered that the proposed development would have an unacceptable impact on the local landscape

or that of the wider Broads area because the enlarged basin would be seen as extension of the existing use and activity at the site and would not appear as an incongruous feature in the landscape. Therefore, the loss of these areas would not have a detrimental impact in strictly landscape terms.

6.9. The proposed enlargement of the mooring basin, the potential for use by larger vessels, and the opening up of the views to the neighbouring site, taking into account existing development, the setting within the landscape and the existing backdrop, would not result in a significant adverse impact on landscape character and appearance and in this respect the proposed works are acceptable with regard to Polices DM16 and DM33 of the Local Plan for the Broads, with regard to Landscape Character Assessment: Area 31.

Impact on ecology and protected sites

6.10. The proposed enlargement of the existing mooring basin would be achieved by digging out adjoining areas of land, these areas are identified as Section 41 habitat in the form of peat soils supporting for the most part reedbed. These areas would be lost as a direct consequence of the development and there is not sufficient space within the application site for compensation in the form of reprovision of comparable areas with sufficient value and forming part of a coherent ecological network.

6.11. Some areas of new reedbed are proposed where possible within the site, and whilst it is accepted that these are limited in scope and value they do nonetheless provide some small landscape gains, and contribute to a group of similar narrow bands of reed and other vegetation.

6.12. As the proposal involves the excavation of peat it is necessary to consider this carefully. Policy DM10 sets out a presumption in favour of the preservation of peat in-situ, with development proposals that will result in unavoidable harm to peat only being permitted subject to assessment against specific criteria, namely:

i) There is not a less harmful viable option;

ii) The amount of harm has been reduced to the minimum possible;

iii) Satisfactory provision is made for the evaluation, recording and interpretation of the peat before commencement of development; and

iv) The peat is disposed of in a way that will limit carbon loss to the atmosphere.

6.13. Throughout the processing of the applications, discussions have taken place with the applicant regarding the scale of the development and viability of the business with regard to the current proposal. Small reductions in the loss of peat were made through reducing the overall scale of the enlarged basin, but given the requirements of modern marinas and the additional capacity required to make a meaningful contribution to the business, it became apparent that to meet the business need would inevitably result in the loss of a not insignificant area of peat soils. The applicants have considered this carefully and the basin footprint has been positioned such that areas of made ground are utilised where possible to allow for the smallest amount of reedbed to be removed.

Although not an especially significant contribution, it does demonstrate that the process and relevant policy have informed the approach at this site. It is considered that this does address criteria i) and ii) of Policy DM10 of the Local Plan for the Broads.

6.14. Following advice from the Broads Authority, the current proposal was submitted to Norfolk County Council's Historic Environment Officer. It is noted that a significant excavation took place at the Hunters Yard site in 2011 and relevant research was undertaken of the geoarchaeological and paleoenvironmental value of the site, which resulted in no requirement for further archaeological work or archaeological conditions. In an assessment submitted with the current application, it was noted that the proposed development will result in the removal of approximately 150-200 cm depth of material, the majority of this being comprised of made ground, clays and secondary peat. As part of a package of mitigation measures, local geodiversity specialists would be invited to undertake recording and sampling of geological features uncovered during development work, excavated peat will be reused on site along the site frontage and in the newly created areas of reedbed and excess peat will be taken to a local water garden site and used for void infilling. It is considered that this does address criteria iii) and iv) of Policy DM10 of the Local Plan for the Broads.

6.15. In terms of impact on Section 41 habitat, there is a national target for no net loss. The proposed basin enlargement would result in the loss of an area of this protected habitat and the areas of compensatory habitat proposed on site will not (and cannot) provide equivalent biodiversity value. The NPPF is clear when assessing a proposal which would result in significant harm to biodiversity, if that harm cannot be avoided through locating development on an alternative site with less harmful impacts, then it should be adequately mitigated, or as a last resort compensated for. Only if these options are not possible should planning permission be refused.

6.16. The applicants are mindful of the site's limitations, and through a number of discussions made proposals for habitat creation at the site. Unfortunately, the existing site's limitations mean that any habitat creation which would be achievable here is not comparable either in area or quality, but the willingness to seek a solution does demonstrate an awareness of the issues by the applicant. With on-site options exhausted, the applicant has proposed instead to make a financial contribution to reedbed creation and management projects to be carried out by or on behalf of the Broads Authority. This will require both parties to enter into a legal agreement (known as a s106 agreement) which would be completed prior to issuing a planning decision.

6.17. Whilst it is always preferable to avoid or reduce harm, or mitigate where possible, national policy makes it clear that compensation, in this case in the form of a contribution to an apposite project, is an acceptable mechanism where no other option presents itself, and should be utilised to avoid refusal of an application on these grounds. The fund will be used to offset the loss of Section 41 habitat, and in this way makes the proposal acceptable with regard to Policy DM13 of the Local Plan for the Broads.

6.18. With regard to protected species, a water vole survey has been undertaken which concluded that the impact of the development on water voles is assessed as neutral. Precautionary mitigation has been proposed to render the site less favourable to this species prior to construction commencing. A re-survey of the site prior to commencement has been recommended to ensure that water voles remain absent from the construction zone and this will be secured by planning condition.

6.19. With regard to the designated sites which are situated approximately 100 metres to the east of subject site, taking into account the nature of the proposal, along with the separation to the designated sites, it is considered that there would be no adverse impact on the designated sites.

Removal of trees

6.20. The trees at the site are afforded some level of protection by virtue of being sited in a Conservation Area so that works to them or their removal would require permission. Were an application for such works to be submitted and were it concluded that the trees should be retained, the LPA would have to serve a Tree Preservation Order to achieve this; if the trees were not considered to be worthy of protection, the application for the works would have to be approved. In this case the quality and status of the trees have been assessed and it is accepted that they are not of a sufficient quality to be protected.

6.21. An arboricultural assessment was submitted with the application and this describes the trees as relatively poor-quality, young self-seeded trees and some slightly larger (perhaps also self-seeded) individual trees. They are showing signs of decline and are likely to be relatively short lived because of the high water table and the relatively narrow habitable soil horizon in which they are growing. In addition, two groups of younger self-seeded trees which would be partially impacted by the proposals and will also be removed.

6.22. The BA Tree Officer has commented that it would be difficult to retain the trees without compromising their roots and associated structural integrity, and accepts that they are also likely to prove a nuisance boat owners. It is common practice to require replacement planting, and the BA Tree Officer has suggested that perhaps future tree planting should be restricted to a minimum with a few willows planted that can be regularly pollarded to maintain/restrict their size and potential nuisance. This is considered to be a pragmatic solution.

6.23. At this point it is worth noting the comments of the adjacent site owners, the Norfolk Wherry Trust; they highlight the quite narrow spit of land that would separate the enlarged basin from their mooring dyke. Their concern regards the method of removal of any tree and shrub roots and that this may affect the stability of that land and, with this in mind, it is recommended that a tree removal method statement be provided, secured by planning condition.

Highways and public rights of way

6.24. Horsefen Road which provides land based access to the site is a narrow road with soft verges, a number of which are protected by marker posts. The proposal has been considered by Norfolk County Council as Highways Authority who commented that "the development if approved will involve significant excavation and disposal of arisings. The use of Horsefen Road to facilitate significant construction traffic movements is likely to give rise to verge damage and or even pavement damage, as well as conflict with other road users." Taking into account the river fronting location, arisings could be transported from the site by river which is considered to be the favoured method of transportation. The applicant has confirmed that this is the approach that they will take and this can be covered by planning condition.

6.25. The applicant is confident that this is achieveable. However, if it proves unfeasible and it is necessary to remove the materials by road, then details of a of Construction Traffic Management Plan and Access Route, provision for addressing any abnormal wear and tear to the highway together, wheel cleaning facilities, and contractor parking will be required. It is recommended that a condition in the alternative be attached to the decision covering this.

Impact on residential amenity

6.26. The proposal is for an enlargement of an existing basin where provision of a larger mooring would accommodate larger vessels. The number of moorings would not be increased, the overall siting of the basin is not altered, and the separation in excess of 100 metres to the nearest residential property is maintained. Taking into account the existing use and the neighbouring uses, it is considered that the proposed development will not be detrimental to the amenity enjoyed by nearby residents.

Mooring policy

6.27. Policy DM33 of the Local Plan for the Broads covers moorings, mooring basins, and marinas. Relevant to this specific planning proposal, and not covered in previous sections of this report, the following considerations are addressed.

6.28. The proposed moorings are sited within an off-river basin and although extending towards the river, do not encroach on the river channel. There has been erosion of the reedbed so that the quayheading at the adjacent Norfolk Wherry Trust site appears to stick out into the river channel. This will be addressed by reinstating reedbed along its original line, but without extending further into the river channel than the previous situation, thereby having no impact on navigation.

6.29. There would be no net loss of visitor/short stay moorings. The existing basin would be enlarged but the number of moorings provided would remain the same, demarcated by finger jetties to provide a regulated layout and control the intensity of use. By virtue of the works proposed there would be no increase in vessels using the basin and consequently no increase in the number of vessels on this part of the Broads system, it

is therefore considered that no provision of visitor/short stay moorings is required as part of any grant of planning permission.

6.30. Car parking is provided at the site. In terms of other services, pump-out and potable water are available further north along Womack Water and will be made available at the site. Electric charging points are not available on site, however, given the setting of the basin these would not be necessary or appropriate in this location. Taking into account the other facilities available in the area it is considered that the proposal is broadly compliant with this policy requirement. Overall it is considered that the proposal has addressed the requirement of Policy DM33 of the Local Plan for the Broads.

Flood risk

6.31. The Environment Agency has considered the proposal and raised no objections. The enlargement of the mooring basin will increase the area within the site where water can flow. There is no proposed increase in the number of visitors to the site. An Emergency Flood Plan has been produced which is considered satisfactory. With regard to the sequential test (NPPF paragraph 158 which states that development should not be permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower probability of flooding), the subject site has an established boat workshop and mooring basin use and there are no reasonably available comparable sites in the area at a lower risk of flooding. The proposal is therefore considered to be acceptable in accordance with Policy DM5 of the Local Plan for the Broads and the NPPF.

Other matters

6.32. The BA Rivers Engineer has raised issues regarding how the works would be carried out to an acceptable standard, bearing in mind how narrow the resulting spit of land would be on the north-west and south-west side of the basin. The Rivers Engineer has pointed out that there is no room or scope for tie rods, so the piling sheets are going to have to be very well driven down to penetrate far enough into firm material to ensure the piling above water retains its position and integrity, and be of a high specification to cope. The Agents for the application have confirmed that such details can be provided via a planning condition.

7. Conclusion

7.1. The proposed development represents an opportunity for the owners of the former Ludham Field Base site to upgrade their mooring provision to reflect current requirements. The proposed development would not have an adverse impact on either landscape character or appearance, and whilst there would be an impact on ecology this has been mitigated by on-site works as far as is achievable and a contribution to off-site works to provide biodiversity gain. There would be no adverse impact on designated sites, or the amenity of neighbouring residents. The removal of peat soils is considered acceptable subject to swift reuse on a neighbouring sites, and the loss of

Section 41 habitat whilst regrettable is considered reasonably offset by a contribution to related projects. Consequently, the application is considered to be in accordance with Policies DM5, DM10, DM16, DM23, DM28, DM31, DM33, and DM47 of the Local Plan for the Broads, along with the National Planning Policy Framework.

8. Recommendation

8.1. To delegate authority to the Head of Planning to approve subject to the completion of a S106 to secure the financial contribution towards offsite biodiversity gain, along with the following conditions:

i. Standard time limit
ii. In accordance with approved plan
iii. Details of method statement for piling and dredging works
iv. Details of reedbed management plan
v. Details of tree removal method statement
vi. Details of replacement trees/landscaping
vii. Details of ecological mitigation method statement, and an ecological management plan
viii. Water vole re-survey prior to works
ix. No external lighting without agreement in writing
x. Reuse of peat within 7 days of extraction
xi. Timber preservatives
xii. Arising transported by water
xiii. Highways conditions as recommended, if the transportation by water is unachievable

9. Reason for recommendation

9.1. The proposal is considered to be in accordance with Policies DM5, DM10, DM16, DM23, DM28, DM31, DM33, and DM47 of the Local Plan for the Broads, and the National Planning Policy Framework (2012) which is a material consideration in the determination of this application.

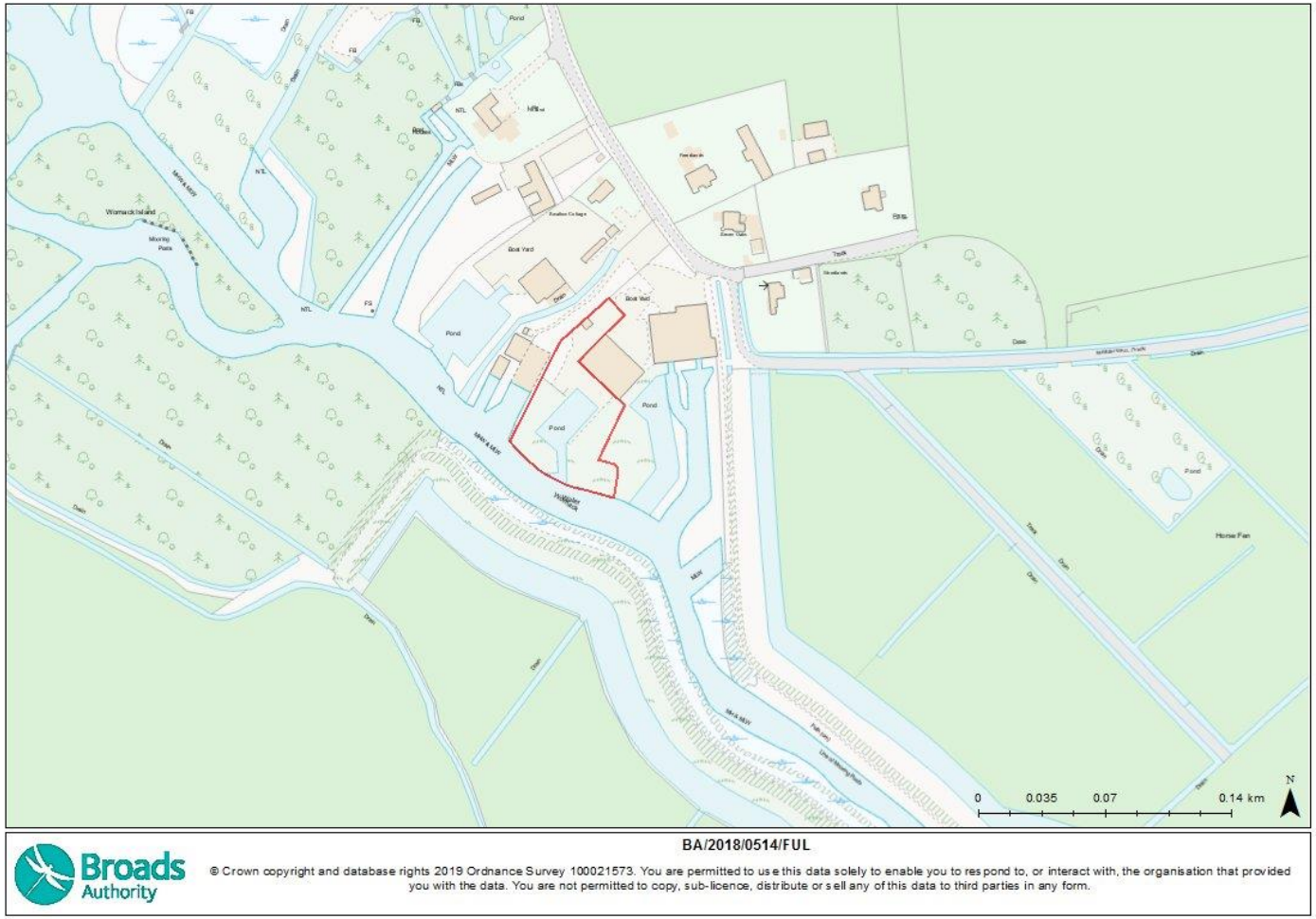
Author: Nigel Catherall

Date of report: 17 December 2019

Background papers: Application file BA/2018/0514/FUL

Appendix 1 – Location map

Appendix 1 - Location map



Planning Committee

10 January 2020
Agenda item number 9

Enforcement update – 10 January 2020

Report by Head of Planning

Summary

This table shows the monthly updates on enforcement matters. The financial implications of pursuing individual cases are reported on a site by site basis.

Recommendation

That the report be noted.

Committee Date	Location	Infringement	Action taken and current situation
31 March 2017	Former Marina Keys, Great Yarmouth	Untidy land and buildings	• Authority granted to serve Section 215 Notices. • First warning letter sent 13 April 2017 with compliance date of 9 May. • 26 May 2017: Some improvements made, but further works required by 15 June 2017. Regular monitoring of the site to be continued.

Committee Date	Location	Infringement	Action taken and current situation
			• Monitoring 15 June 2017. Further vandalism and deterioration. • Site being monitored and discussions with landowner. • Landowner proposals unacceptable. Further deadline given. • Case under review. • Negotiations underway. • Planning Application under consideration December 2018. • Planning application withdrawn and negotiations underway regarding re-submission. • Works undertaken to improve appearance of building. • Revised planning application submitted 1 April 2019. • Planning Committee 19 July 2019: Resolution to grant planning permission • Arson at building, with severe damage 18 August 2019. • Discussions around securing building and partial demolition 19 August 2019 • Pre-demolition surveys almost completed and works commence thereafter 24 October 2019 • **Works underway to secure and commence agreed demolition. 16 December 2019.**

Committee Date	Location	Infringement	Action taken and current situation
14 September 2018	Land at the Beauchamp Arms Public House, Ferry Road, Carleton St Peter	Unauthorised static caravans	• Authority given to serve an Enforcement Notice requiring the removal of unauthorised static caravans on land at the Beauchamp Arms Public House should there be a breach of planning control and it be necessary, reasonable and expedient to do so. • Site being monitored. • Planning Contravention Notices served 1 March 2019. • Site being monitored 14 August 2019 • Further caravan on-site 16 September 2019 • **Site being monitored**.
8 November 2019	Blackgate Farm, High Mill Road, Cobholm	Unauthorised operational development – surfacing of site, installation of services and standing and use of 5 static caravan units for residential use for purposes of a private travellers' site.	• Delegated Authority to Head of Planning to serve an Enforcement Notice, following liaison with the landowner at Blackgate Farm, to explain the situation and action. • Correspondence with solicitor on behalf of landowner 20 November 2019. • **Correspondence with planning agent 3 December 2019** • **Enforcement Notice served 16 December 2019, taking effect on 27 January 2020 and compliance dates from 27 July 2020**.

Author: Cally Smith

Date of report: 16 December 2019

Planning Committee

10 January 2020
Agenda item number 10

Flood Risk Supplementary Planning Document – consultation responses and next steps

Report by Planning Policy Officer

Summary

The Flood Risk Supplementary Planning Document (SPD) was adopted in 2017. As a result of the adoption of the Local Plan for the Broads (May 2019), the SPD is being reviewed and updated. The SPD was subject to first stage public consultation and this report details responses received, includes a track changed version of the SPD, and details the next steps in the process.

Recommendation

To note the responses received, endorse the revised draft SPD and recommend that the Broads Authority agrees to the required second stage of public participation.

1. Introduction

1.1. Now that the Broads Local Plan is adopted, it is considered that some requirements or policies would benefit from supporting guides or Supplementary Planning Documents (SPDs) to help with their interpretation and implementation.

1.2. The Flood Risk SPD adopted in 2017 has been reviewed, as the policy it is based around is no longer in place. We have also taken this opportunity to update and amend various parts of the SPD. The revised SPD is now subject to public consultation.

2. Supplementary Planning Documents (SPDs)

2.1. The National Planning Policy Guidance (NPPG) says: 'Supplementary planning documents (SPDs) should build upon and provide more detailed advice or guidance on policies in an adopted local plan. As they do not form part of the development plan, they cannot introduce new planning policies into the development plan. They are however a material consideration in decision-making. They should not add unnecessarily to the financial burdens on development. Regulations 11 to 16 of the Town and Country Planning (Local Planning) (England) Regulations 2012 set out the requirements for producing Supplementary Planning Documents. In exceptional

circumstances a Strategic Environmental Assessment may be required when producing a Supplementary Planning Document.'

3. SEA Assessment

3.1. SPDs are required to be screened for impacts on the environment with the 'Consultation Bodies' of Natural England, Environment Agency and Historic England. A full SEA has not been completed, reflecting the responses from the Consultation Bodies. The responses to the SEA screening request were included in the original Flood Risk SPD report to Planning Committee.

3.2. No comments were received on the SEA Assessment during the consultation period and therefore no changes have been made to it.

4. First stage consultation on the Flood Risk SPD

4.1. The draft SPD was subject to public consultation for 8 weeks between 27 September and 22 November 2019. The responses received are at Appendix 1.

5. Next steps – second stage public participation

5.1. An amended Flood Risk SPD is included at Appendix 2.

5.2. The Regulations require two stages of public participation in producing an SPD. It is proposed that we consult on the Flood Risk SPD potentially from 31 January to 6 March 2020 (approximately 5 weeks). The consultation period for SPDs is 4 weeks, so the 5 weeks allows for February half term. The consultation responses and amended documents will be presented to Planning Committee for approval and subsequently to the Broads Authority for adoption.

6. Financial implications

6.1. A press advert is required and some paper copies will be printed for various public venues around the Broads. This will cost approximately £500 in total.

Author: Natalie Beal

Date of report: 22 November 2019

Broads Plan objectives: 8.1

Appendix 1 – Flood Risk SPD – comments received to first consultation

Appendix 2 – Track changed Draft Flood Risk SPD for consultation

Appendix 1 – Flood Risk SPD – comments received to first consultation

Ref	Name	Organisation	Comment	BA Responses	Proposed changes
#1	Laura Waters	Norfolk County Council	On 3rd January this year we responded directly to Natalie Beal on the Broads SPD as consulted on at the time. Elaine Simpson had various short comments to make on the document and we welcome that these comments have been included/utilised in the current document. Having had this opportunity to review the most recent consultation, as LLFA, we have no further comments to make on the SPD.	Support noted.	No change to Flood Risk SPD
#2	Lorraine Houseago	Norfolk County Council	We have no other comments to make.	Noted.	No change to Flood Risk SPD
#3	Nathan Makwana	Anglian Water Services	Having previously had the opportunity to comment and be involved on the development of the previous draft, I note that this iteration incorporates previously suggested comments. On this basis, Anglian Water have no further comment to make. We of course welcome any further opportunity to comment.	Support noted.	No change to Flood Risk SPD
#4	Penny Turner	Norfolk Policy ACLO	We have no comments on the above at this stage.	Noted.	No change to Flood Risk SPD
#5	Charlette Hounsell	Norwich City Council	Section 6.2 – it may be useful to reference in this section that consultation with neighbouring/overlapping authorities at pre-application stage is advised	Agree. Will incorporate into SPD.	6.2.2 It will also be appropriate to consult neighbouring Local Planning Authorities if scheme proposals are on or near to the border.
#6	Charlette Hounsell	Norwich City Council	Section 6.5.5 – in setting out what should be considered for a site to be reasonably available, there is no mention of site ownership or whether the owners of sites have any intention of them being developed. If owners of sites have no intention of developing them, can they be considered as reasonably available sites?	This is covered to some extent by the first bullet point, but we will expand this to address this comment.	6.5.5 A site is considered to be reasonably available if all of the following apply: • The site is available to be developed (including considering site ownership or whether the owners of sites have any intention of them being developed);
#7	Charlette Hounsell	Norwich City Council	Section 6.5.9 & Section 7.1.3 – Suggest inclusion of reference to the need to comply with relevant planning policies of any relevant local authorities to the development site/proposal	Noted. This is a given, but we have added some text.	6.5.9 It is acknowledged that the area of search could be outside of the Broads Authority Executive Area and would require discussions with other Local Planning Authorities (and proposals would therefore need to comply with relevant planning policies of the relevant Local Planning Authorities). 7.1.3 It should be noted that all aspects of the development need to comply with policies of the Local Plan (adopted 2019) and that conformity with policies SP2 and DM5 does not override applicability of other policies (of the Broads Authority and other relevant Local Planning Authority).
#8	Charlette Hounsell	Norwich City Council	Section 6.10.6 – The last sentence of this paragraph refers to flood resistance and resilience of buildings information to be found at section 5. I believe this information is found at section 7.	Agreed.	Change from 5 to 7.
#9	Charlette Hounsell	Norwich City Council	Section 9 – Suggest inclusion of web links to local authorities and LLFAs	It is not clear what links are required. The changes to the SPD as a result of other comments from Charlotte may help raise awareness of other LPAs.	No change to SPD.
#10	Charlette Hounsell	Norwich City Council	Does this document take account of ADEPT and EA Flood Risk Emergency Plans for New Development guidance? https://www.adeptnet.org.uk/floodriskemergencyplan	The guide has been reviewed and a link included in the SPD and parts referenced throughout Appendix D. Generally, we feel the Broads SPD covers the thrust of the guide, but if any specific changes are required, please let us know as part of the next round of consultation on the SPD.	Text added to section 1. Link added to Section 3 of Appendix D.

Ref	Name	Organisation	Comment	BA Responses	Proposed changes
#11	Charlette Hounsell	Norwich City Council	Part of utilities site is within Broads Authority area and adjacent to the East Norwich Area as defined in JCS 12 – should there be some reference to this?	The issue of cross boundary sites (which after clarification with Charlotte was what this comment sought to address) is covered by the other changes to the comments from Charlotte.	No change to SPD.
#12		Marine Management Organisation	Page 16, Section 5.5.4: Refers to the tidal influence within the Broads, as well as the National Planning Policy Framework. We would also recommend you mention the East Inshore and East Offshore Marine Plans here, or elsewhere in section 5.5. Asked for clarification: As these are recommendations, I am not able to provide specific text. We suggest that your own interpretation of the East Marine Plans informs your plans, and refer to the Marine Plans where you deem appropriate. Coastal, and tidal flooding is covered across multiple policies within the East Marine Plans such as SOC1, CC1 and Objectives 6 and 9. Other signposting includes Paragraph 249 –Coastal change management.	Noted and we will include some text.	5.4 Marine Management Organisation and flood risk 5.4.1 Coastal, and tidal flooding is covered across multiple policies within the East Marine Inshore and Off Shore Plans such as SOC1, CC1 and Objectives 6 and 9. Other references include Paragraph 249 – Coastal change management.
#13		Marine Management Organisation	Page 67: You refer to Environment Agency permits. It may also be appropriate to refer to Marine Licences from the Marine Management Organisation, as this may be relevant to applicants. Asked for clarification: With regards to referencing the Marine Management Organisations Marine Licences, lines 1552-1556 refer to the appropriate requirements for a "a permit under the Environmental Permitting 1554 (England and Wales) Regulations 2010 from the Environment Agency". As there are exemptions, particularly within the Broads, I cannot suggest specific text. However, as this is directed at applicants this seems to be an appropriate place to note that a Marine Licence may be required for works that are carried out on tidal rivers.	Noted and we will include some text.	As requested, we will add this to the Flood Risk Tick Sheet: Also note that a Marine Management Organisation Marine Licence may be required for works that are carried out on tidal rivers.
#14	Ben Wright	East Suffolk	Para 5.4.2 refers to the Waveney SFRA (2018). This SFRA was produced for both Councils and may be better referred to as the East Suffolk SFRA.	Agree - will change text.	Change to say 'East Coast'.
#15	Ben Wright	East Suffolk	Para 5.4.3 refers to Waveney. This reference should be changed to "the former Waveney area".	Agree - will change text.	Change to say 'the former Waveney area'
#16	Ben Wright	East Suffolk	Para 5.4.4 – the joint statement with the EA continually refers to Waveney. This should be changed to either East Suffolk or the former Waveney area.	Noted and that is because it was produced in 2018. It is not proposed to go through all old documents adopted put in place before April 2019 to change the reference. But as and when documents like this are updated then we will make the amendment.	No change to Flood Risk SPD
#17	Jessica Nobbs	Water Management Alliance	Section 8.3.5 of the document refers to Land Drainage Consent. It is identified that consent would be required from the relevant Internal Drainage Board (IDB) where alterations to a watercourse (including infilling, culverting or amending) are proposed as per the Board's Byelaws (specifically Byelaw 4) and Section 23, Land Drainage Act 1991. In addition to this, we feel it would be relevant to refer to other consents that may be required from the Board by including the two following statements: - If a surface water (or treated foul water) discharge is proposed to a watercourse within an Internal Drainage District (IDD) (either directly or indirectly), then the proposed development will require a Land Drainage Consent in line with the Board's byelaws (specifically byelaw 3). Any consent granted will likely be conditional, pending the payment a surface water development contribution fee, calculated in line with the Board's charging policy. - If there is a Board Adopted watercourse	Noted and will amend text.	Other consents that may be required from the IDB include: • If a surface water (or treated foul water) discharge is proposed to a watercourse within an Internal Drainage District (IDD) (either directly or indirectly), then the proposed development will require a Land Drainage Consent in line with the Board's byelaws (specifically byelaw 3). Any consent granted will likely be conditional, pending the payment a surface water development contribution fee, calculated in line with the Board's charging policy. • If there is a Board Adopted watercourse within/adjacent to the site boundary and should works be proposed within 9 metres of the watercourse, consent would be required to relax Byelaw 10 (no works within 9 metres of the edge of drainage

Ref	Name	Organisation	Comment	BA Responses	Proposed changes
			within/adjacent to the site boundary and should works be proposed within 9 metres of the watercourse, consent would be required to relax Byelaw 10 (no works within 9 metres of the edge of drainage or flood risk management infrastructure).		or flood risk management infrastructure).
#18	Jessica Nobbs	Water Management Alliance	Maps of the Broads (2006) Internal Drainage District and the Norfolk Rivers Internal Drainage District are available here and here. These maps show which watercourses are designated as Adopted Watercourses by each Board. The adoption of a watercourse is an acknowledgement by the Board that the watercourse is of arterial importance to the Internal Drainage District and as such will normally receive maintenance from the IDB. This maintenance is not necessarily carried out on an annual basis but on a recurrence deemed necessary to meet water level management requirements. The designations are made under permissive powers (meaning there is no obligation for IDBs to fulfil any formal maintenance requirement and there is no change in the ownership or liability associated with the watercourse).	Noted and will amend text.	4.8.4 Maps of the Broads (2006) Internal Drainage District and the Norfolk Rivers Internal Drainage District are available here and here. These maps show which watercourses are designated as Adopted Watercourses by each Board. The adoption of a watercourse is an acknowledgement by the Board that the watercourse is of arterial importance to the Internal Drainage District and as such will normally receive maintenance from the IDB. This maintenance is not necessarily carried out on an annual basis but on a recurrence deemed necessary to meet water level management requirements. The designations are made under permissive powers (meaning there is no obligation for IDBs to fulfil any formal maintenance requirement and there is no change in the ownership or liability associated with the watercourse
#19	Liam Robson	Environment Agency	In relation to paragraph 5.5.8 it should be noted that Environment Agency flood warnings cover both tidal and fluvial flooding.	Noted and will amend text.	Although tidal surges can develop rapidly within 6-12 hours because of the movements of weather systems in the North Sea, the Environment Agency Flood Warning System covers the whole of the Broads area which could provide early warning (for fluvial and tidal flooding).
#20	Liam Robson	Environment Agency	Paragraph 5.5.9 states the standard of protection in the Broads area. It should be noted that some defences have a 1 in 200 standard or higher.	Noted and will amend text.	5.6.9 Existing flood defences in the Broads area offer a low standard of protection (typically up to a 1 in 7-year standard, although some defences have a 1 in 200 standard or higher), so they may be overtopped during a flood event.
#21	Liam Robson	Environment Agency	The tidal flood risk section of this document states that "…the prior has defences to protect up to the 0.5% annual probability tidal flood". It should be noted that not all defences may be up to this standard.	Noted, although this was copied verbatim from the SFRA. Will amend text.	There is acute risk of tidal flooding in Great Yarmouth and across the Broads within the study area; the prior has defences to protect up to the 0.5% annual probability tidal flood (although not all defences may be up to this standard).
#22	Liam Robson	Environment Agency	The fluvial section of this table states how climate change will significantly influence the predicted flood levels as a consequence of changes to mean sea level. As this is in the fluvial section, it should mention climate change increasing river flows (between 25% and 65% increase).	Noted, but that is the fluvial column in a few tables, not just Great Yarmouth's. In the absence of a suggestion that addresses all of the tables, some text will be added to section 4.1.	4.1.1 Fluvial flood risk is flooding from rivers because of a river overflowing or its banks being breached. It should be noted that climate change is likely to result in increased river flows (between 25% and 65% increase)
#23	Liam Robson	Environment Agency	It is good to see the inclusion of paragraph 6.3.2 however, it is unclear that this is the only flood risk issue mentioned in detail in this summary section. This could therefore be moved to a more detailed section. Section 7.6.1 would be best, as it links to the need to let water in and adopt flood resilient construction measures if more than 600mm of water around the building.	Agree. Will move text.	6.3.2 moved to 7.6.1.
#24	Liam Robson	Environment Agency	In relation to point i in paragraph 6.10.3, the FRA should show the accurate location of the flood zones on their site based on a comparison of EA flood levels and GPS site survey, not just using our flood maps.	Noted and will amend text.	i) Flood risk zones 1 – 3 within the site with reference to the SFRA/EA Flood Zone maps. The FRA should show the accurate location of the flood zones on the site based on a comparison of EA flood levels and GPS site survey;

Ref	Name	Organisation	Comment	BA Responses	Proposed changes
#25	Liam Robson	Environment Agency	It appears that the document states that what is considered to be safe will be taken on a case-by-case basis. You may want to consider further what safe specifically looks like.	EA were asked for their thoughts about what safe would look like but replied saying they did not object to the SPD. They were asked again for wording changes but did not provide any by the deadline for Planning Committee.	If any further comments are received then these will be reported to Planning Committee. Otherwise, no change.
#26	Liam Robson	Environment Agency	The mention of whether less vulnerable development at risk of flooding would be safe seems to indicate that you will not allow more vulnerable to flood. The SPD could therefore be enhanced by explicitly saying this as we require more vulnerable flood levels to be above actual risk 1%/0.5 cc flood levels (unless replacement dwellings). It should probably be under 6.10.5, could be under 6.10.6 but does not relate to residual risk, just actual risk. Perhaps a new paragraph between the two referring to the need for new more vulnerable development to not flood in the actual risk 1%/0.5% climate change flood event, through defences, raised land or raised floor levels.	Noted. Will add a new paragraph	6.10.6 It is important to note that the Environment Agency require that need new development which falls within the 'more vulnerable' risk category will flood in the actual risk 1%/0.5% climate change flood event, through the provision of defences, raised land or raised floor levels.
#27	Liam Robson	Environment Agency	In terms of safe refuge, we require all more vulnerable developments to have safe refuge above the extreme climate change flood level, unless agreed in consultation with emergency planners that it can be made safe through a flood response plan without refuge. It could be beneficial if the SPD were to have comments on refuge requirements e.g. are stairwells acceptable and when is refuge required?	Asked for clarification on this. Currently, Emergency Planners of the districts are not involved in Flood Response Plans/applications in the Broads. EA were asked for their thoughts about if stairwells are acceptable and when a refuge is required but replied saying they did not object to the SPD. They were asked again for wording changes but did not provide any by the deadline for Planning Committee.	Liaise with Emergency Planners regarding this comment. If any further comments are received then these will be reported to Planning Committee. Otherwise, no change.
#28	Liam Robson	Environment Agency	Paragraph 6.11.3 states that a Flood Risk Assessment should propose mitigation measures. These should be provided up to the design flood event (1% fluvial/0.5% tidal) including climate change for the lifetime of the development.	Noted and will amend text.	6.11.3 A Flood Risk Assessment should consider whether this will happen and propose mitigation measures which should be provided up to the design flood event (1% fluvial/0.5% tidal) including climate change for the lifetime of the development. These may include, for example, the provision of compensatory floodplain storage~~,~~ ~~although this can be difficult to achieve in the Broads area.~~ Compensatory floodplain storage is the lowering of land levels elsewhere to provide additional flood storage at the same level because flood storage capacity is removed as a consequence of the development. It is noted that this can be difficult to achieve in the Broads as the floodplain is very flat with little higher land available to lower. One of the only options in the Broads is the raising of buildings on stilts to provide voids underneath and not remove flood storage. Such measures would need to be designed to ensure that water is always stored under the building and can empty after a flood. This would require intermittent boarding, no storage under the building and regular maintenance.
#29	Liam Robson	Environment Agency	Paragraph 6.11.3 also references compensatory storage. It would be beneficial to define what compensatory storage is here i.e. the lowering of higher land levels to provide additional flood storage at the same level as the flood storage is removed. Therefore, this is difficult to achieve in the Broads as the floodplain is very flat with little higher land available to lower.	Noted and will amend text.	
#30	Liam Robson	Environment Agency	Paragraph 6.11.3 also includes a sentence which states "such measures would need to be designed to ensure that water is always stored under the building and can empty after a flood". This is not compensatory storage and is instead providing a void under the building to reduce the volume of flood storage removed. There should therefore be a sentence before this one saying that 'one of the only options in the Broads is the raising of buildings on stilts to provide voids underneath and not remove flood storage'.	Noted and will amend text.	
#31	Liam Robson	Environment Agency	The Flood Response Plan may be one aspect of the proposed management measures that make a development safe and acceptable in flood risk terms. So the development might not be acceptable terms until the Flood Response plan is submitted and considered.	Noted.	No change to Flood Risk SPD

Ref	Name	Organisation	Comment	BA Responses	Proposed changes
#32	Liam Robson	Environment Agency	The Environment Agency and the Association of Directors of Environment, Economy, Planning and Transport (ADEPT) have produced some joint guidance on flood risk emergency plans for new development which can be downloaded at https://www.adeptnet.org.uk/floodriskemergencyplan. The SPD should ensure that it follows the requirements.	The guide has been reviewed and a link included in the SPD and parts referenced throughout Appendix D. Generally, we feel the Broads SPD covers the thrust of the guide, but if any specific changes are required, please let us know as part of the next round of consultation on the SPD.	Text added to section 1. Link added to Section 3 of Appendix D.
#33	Liam Robson	Environment Agency	Raising Floor Levels In relation to paragraph 7.2.3; we require raised floor levels (above 1% cc/0.5% cc) for residential building conversions, unless it is confirmed in consultation with emergency planners that the safety of the development can be managed through other means such as resilience/resistance measures and flood response plan. It could be beneficial if the SPD specifies when this would be acceptable and when raised floor levels required?	Asked for clarification on this. Currently, Emergency Planners of the districts are not involved in Flood Response Plans/applications in the Broads. EA were asked what specific changes they would like but replied saying they did not object to the SPD. They were asked again for wording changes but did not provide any by the deadline for Planning Committee.	Liaise with Emergency Planners regarding this comment. If any further comments are received then these will be reported to Planning Committee. Otherwise, no change.
#34	Liam Robson	Environment Agency	In terms of paragraph 7.2.4 We require the finished floor levels of new residential development to be above the actual risk design flood level including 100 years of climate change (1% fluvial plus cc / 0.5% tidal plus cc). We also require higher refuge above the extreme 0.1% cc flood level, unless in consultation with emergency planners that the development can be safe without higher refuge through evacuation and the Flood Response Plan. The SPD could therefore be enhanced by specifying when higher refuge is required.	Asked for clarification on this. Currently, Emergency Planners of the districts are not involved in Flood Response Plans/applications in the Broads. EA were asked what specific changes they would like but replied saying they did not object to the SPD. They were asked again for wording changes but did not provide any by the deadline for Planning Committee.	Liaise with Emergency Planners regarding this comment. If any further comments are received then these will be reported to Planning Committee. Otherwise, no change.
#35	Liam Robson	Environment Agency	Please note the sentence for citation 50 at the bottom of the page under line 962 is incomplete.	It is, it just is on the next page.	No change to Flood Risk SPD
#36	Liam Robson	Environment Agency	Environment Agency This paragraph states the Agency has principle responsibility for river flooding. This should also state tidal/coastal flooding.	Noted and will amend text.	The Agency has principal responsibility for river, tidal and coastal flooding.
#37	Liam Robson	Environment Agency	Chapter 1: Flood Response Plan Guidance The Environment Agency and the Association of Directors of Environment, Economy, Planning and Transport (ADEPT) have produced some joint guidance on flood risk emergency plans for new development which can be downloaded at https://www.adeptnet.org.uk/floodriskemergencyplan. This appendix should ensure that it follows the requirements of the ADEPT guidance. The ADEPT guidance goes into more detail on how information on safe access routes and refuge provision should be included in the Emergency Plan, perhaps some of this can be included? But the minimum is to ensure the ADEPT guidance is referenced in Appendix D.	The guide has been reviewed and a link included in the SPD and parts referenced throughout Appendix D. Generally, we feel the Broads SPD covers the thrust of the guide, but if any specific changes are required, please let us know as part of the next round of consultation on the SPD.	Text added to section 1. Link added to Section 3 of Appendix D.
#38	Liam Robson	Environment Agency	Introduction Line 1264 states that "…if not submitted with an application, are often required by planning condition if permission is issue". ADEPT guidance says this is not allowed, the Flood Response Plan needs to be submitted upfront, as it is necessary to determine the safety of the development.	Noted and will amend text.	This guidance has been produced to assist with the preparation of Flood Response Plans (FRP). FRPs ~~should~~ need to be provided as part of a Flood Risk Assessment where this is necessary to accompany a planning application. ~~application or, if not submitted with an application, are often required by planning condition if permission is issued.~~
#39	Charlie Middleton	Beccles Town Council	The Planning Committee, replying on behalf of Beccles Town Council, consider all three documents provide comprehensive support for the planning policies of the Broads Authority.	Support noted.	No change to SPD

Ref	Name	Organisation	Comment	BA Responses	Proposed changes
#40	Iain Withington	North Norfolk District Council	Section 5.1.1 and 5.2.1: Could usefully insert into both paragraphs text around Climate change flood extents, that are incorporated in the SFRA and that development should also have regard to these food risk extents from all sources of flooding.	Noted and will amend text.	Add this text to 5.1.1: Development should also have regard to the climate change flood extents (from all sources of flooding) and these are mapped in the Strategic Flood Risk Assessment (see 5.5). Add this text to 5.1.2: As mentioned previously, the impact of climate change needs to be considered (see 5.1.1)
#41	Iain Withington	North Norfolk District Council	5.3: CC flood extents are mentioned here but greater emphasis that the SFRA demonstrates the CC flood extents and these should also be used as a basis for further comment and assessment i.e. through site specific FRAs	Noted and will amend text.	Add this text to 5.3.1: (and the SFRAs demonstrate the climate change flood extents).
#42	Iain Withington	North Norfolk District Council	5.4.1: Could use the wording climate change flood extents rather than impacts	Noted and will amend text.	Change to say: they consider the ~~impacts of~~ climate change flood extents
#43	Iain Withington	North Norfolk District Council	5.4.3: Could mention that CC allowances have been agreed with the Environment Agency and LLFA in the SFRA and with all the Norfolk authorities	Noted and will amend text.	Add: In Norfolk, climate change allowances have been agreed with the Environment Agency and LLFA in the SFRA and with all the Norfolk authorities.
#44	Iain Withington	North Norfolk District Council	5.4.4: Add text around the precautionary approach adopted by the SFRA and expected time line for the updated modelling rather than as time goes by wording.	Noted and will amend text.	Amend text as follows: If a proposed development is shown to be in Flood Zone 3, further investigation should be undertaken as part of a detailed site specific Flood Risk Assessment to identify and confirm the extent of Flood Zone 3b. This may require detailed hydraulic modelling. ~~so a site-specific flood risk assessment is required to assess actual flood risk to the site~~. To cover this, a joint position statement has been produced between the Broads Authority and the Environment Agency. The Joint Position Statement indicates that modelling on the Broadland Flood Alleviation Project Area (much of the area without modelling) will be completed by the end of 2021.
#45	Iain Withington	North Norfolk District Council	6.3: Include reference to CC flood extents.	Noted and will amend text.	Amend text to say: Developers should carefully assess the full range of issues associated with all sources of flood risk when producing development proposals, including climate change flood extents.
#46	Iain Withington	North Norfolk District Council	Horning development: I can see no reference to the joint position statement with Anglian water on the development restrictions in the Horning water recycling centre catchment , i.e. Knackers wood WRC Reference should be given to the SCG which states that: 'New development likely to give rise to additional foul drainage output will not be permitted where either (a) this intensifies the use of non-mains foul drainage arrangements, or (b) this intensifies the use of mains foul sewer ahead of essential sewerage infrastructure works and demonstration that there is sufficient capacity at the sewage treatment works to serve the proposed development without harming nearby designated sites.' The SCG goes on to say "This means that there will be a presumption against developments that increase flows to the WRC in the short term. Similarly, there will be a presumption against developments that rely upon standalone foul water treatment solutions as they too have the potential to adversely affect water quality." As far as I am aware the situation has not moved on and this still stands, see below AW text	Noted. This SPD is about flood risk, not wastewater. The Position Statement is heavily referenced in the Local Plan. We will reference this in the table for North Norfolk under foul sewerage.	Add this text: Of relevance to the North Norfolk area is the Joint Position Statement relating to Horning Knackers Wood Water Recycling Centre. To summarise, due to capacity issues, development that increases foul drainage output is not likely to be permitted.
#47	Iain Withington	North Norfolk District Council	Hoveton Anglian water have also commented on proposals in out emerging local plan with regard Hoveton, where it is understood they are developing a position statement. These comments stem from the	Noted and will amend text. Also, will request that NNDC keep us informed of the progress on this issue.	Add this text: At the time of writing, there are early discussions between the Environment Agency, North Norfolk District Council and the Broads Authority about particular issues of

Ref	Name	Organisation	Comment	BA Responses	Proposed changes
			acknowledgment of particular issues of discharge and flooding from the river into the drainage systems. "Policy DS13 states that a wider water catchment strategy and foul water drainage strategy are required for this allocation site. However, the supporting text refers to the water catchment strategy being aligned with the overall catchment strategy. Any site-specific strategy would need to be aligned with any wider catchment strategy. Anglian Water asks that the wording relating to foul drainage be amended to ensure it is effective. To be effective there is a need to clarify what is the requirement for the applicant in relation to foul drainage and how this relates to any further technical work or investigation(s) undertaken by Anglian Water rather than the developer." You may like to flag these issues for consideration in your NNDC tables for foul sewer and WRC		discharge and flooding from the river into the drainage systems.
#48	Iain Withington	North Norfolk District Council	Comment to NNDC Local Plan consultation from Anglian Water Services - for information. Horning WRC: There have been a number of recorded incidents of flooding within the Horning sewerage catchment from surface water, groundwater and fluvial sources which are the responsibility of multiple agencies. This reduces the available capacity of foul sewerage network for additional foul flows from additional development within the catchment as outlined in the Joint Position Statement for Horning. Anglian Water has undertaken CCTV surveys of the existing public sewerage network at Horning to investigate the cause(s) of these flooding incidents. Following the completion of surveys, we have undertaken repairs in February/March 2018 to mitigate surface water ingress where it interacts with the foul sewerage network in Anglian Water's ownership. We have also been actively working with relevant (flood) risk management authorities to address historic flooding in the Horning sewerage catchment where it relates to Anglian Water's assets. As part of which we been liaising with North Norfolk District Council to enable the removal of existing surface water connections to the foul sewerage network from existing residential and commercial properties so that existing surface water flows can be discharged to suitable alternatives e.g. watercourses. The Environment Agency has also committed to undertaking threshold surveys within the sewerage catchment to establish flood risk from the Broads for every household within the catchment. The Joint Position Statement for Horning is to be updated to reflect the current position relating to the investigation and works undertaken to date by Anglian Water and by other risk management authorities within the catchment.	Noted.	No change to SPD
#49	Iain Withington	North Norfolk District Council	Comment to NNDC Local Plan consultation from Anglian Water Services - for information. Hoveton: Anglian Water is currently preparing a position statement relating to Hoveton catchment which follows recent discussions with Cllr Dixon. It is intended to set out the current position relating to this catchment including historic issues within the network and the implications for new development.	Noted.	No change to SPD

Appendix 2

Broads Flood Risk Supplementary Planning Document

Draft for consultation ~~September~~ December 2019

Broads Authority
Yare House
62-64 Thorpe Road
Norwich
NR1 1RY

Contents

1. Introduction

1.1 The purpose of this SPD is to

a) increase awareness of the nature of flood risk in the Broads area;
b) give advice to developers and others about the Authority's approach to the issue of development and flood risk, and;
c) stress the need to maintain a high standard of design in new waterside development.

1.2 Flooding can cause damage to property and infrastructure. Coastal flooding can be particularly damaging. The threat of flooding can also cause fear and distress to people and in some cases, flooding can lead to injury[1] and even loss of life. Inappropriate flooding can also harm the important habitats and species who rely on the Broads. This can have long term consequences for site maintenance and achieving conservation objectives. On the other hand, flooding is also a natural process within a floodplain. In some circumstances it can benefit wildlife.

1.3 The Broads Authority is the Local Planning Authority within the Broads area and this Supplementary Planning Document (SPD) applies only to land within the Authority's executive boundary. The Authority takes advice from the Environment Agency (EA) and Lead Local Flood Authorities (LLFA) on flood related issues concerning development. The EA is responsible for flood defence and has permissive powers to carry out work to construct and improve flood defences.

1.4 The NPPF 2019 defines supplementary planning documents as '*documents which add further detail to the policies in the development plan. They can be used to provide further guidance for development on specific sites, or on particular issues, such as design. Supplementary planning documents are capable of being a material consideration in planning decisions but are not part of the development plan.'*

1.5 The Authority considers that this SPD will help applicants consider the issue of flooding in an appropriate way. The SPD should be read alongside policy SP2 and DM5 of the Local Plan for the Broads (adopted 2019). The SPD is a material consideration in determining planning applications. The advice and guidance herein will not add unnecessary financial burden to development.

[1] [1] There is a residual risk from all water, especially if it is moving (a flood, at certain velocity and above 4-6cm in depth) which would sweep people and things before it.

2. About this consultation

2.1 This SPD replaces the 2017 SPD. This update to the 2017 SPD is required because the policy on which the 2017 SPD was based (DP29 of the Development Management DPD) has been superseded and replaced by SP2 and DM5 of the Local Plan for the Broads. We have also taken this opportunity to make some other changes that perhaps make things clearer or reflect changes to guidance/practice.

2.2 We consulted on the first draft of this document back in September 2019. We have made some amendments following the comments we received as part of that consultation. As the regulations for producing a SPD require two stages of consultation, we are consulting you again.

2.3 This version is the second draft for consultation. Please tell us your thoughts and suggest any changes you think would make the SPD better and set out your reasons. This consultation runs **for 5 weeks only and will run** from 27 September to 4pm 22 November. We will then read to each of the comments received with our responses. We may make changes if we agree with you. If we do not make changes we will set out why. The final SPD will be adopted at a future meeting of Full Authority. Please email us your comments: planningpolicy@broads-authority.gov.uk.

2.4 This consultation document and consultation process have been developed to adhere to the Broads Authority's Statement of Community Involvement[2].

2.5 Information provided by you in response to this consultation, including personal data, may be published or disclosed in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 2018 (DPA), and the Environmental Information Regulations 2004). Please see Appendix G for the Privacy Notice.

2.6 **Are you satisfied that this consultation has followed the Consultation Principles**? If not, or you have any other observations about how we can improve the process, please contact us at planningpolicy@broads-authority.gov.uk.

2.7 Historic England, Natural England and the Environment Agency were asked for their opinions relating to the need for a Strategic Environment Assessment. Historic England replied saying 'we would advise that it is not necessary to undertake a Strategic Environmental Assessment of this particular SPD'. The Environment Agency said 'we are satisfied that in itself the SPD will not have additional significant environment effects further than those assessed as part of the Local Plan. The SPD outlines the approach to take in order to comply with the Local Plan. Therefore our view would be that the Flood Risk SPD does not require a specific SEA to be undertaken'. Natural England said 'that there are unlikely to be significant environmental effects from the proposed plan on sensitive sites that Natural England has a statutory duty to protect'. The SEA Screening is at Appendix H.

[2] Our current SCI is here: http://www.broads-authority.gov.uk/__data/assets/pdf_file/0006/576609/Final-Adopted-Statement-of-Community-Involvement-November-2014.pdf

3. Local Plan policies SP2 and DM5.

3.1 The Flood Risk SPD is in conformity with the Local Plan for the Broads (adopted 2019) and the National Planning Policy Framework (NPPF) (2019). It expands on Local Plan policy SP2 and DM5 and DM6:

Policy SP2: Strategic flood risk policy

All new development:

a) Will be located to minimise flood risk, mitigating any residual risk through design and management measures, and ensuring that flood risk to other areas is not materially increased; and

b) Will incorporate appropriate surface water drainage mitigation measures, and will implement sustainable drainage (SuDS) principles, to minimise its own risk of flooding and to not materially increase the flood risk to other areas.

Particular care will be required in relation to habitats designated as being of international, national, regional and local importance in the area and beyond which are water sensitive.

Development proposals which would have an adverse impact on flood risk management will be refused.

Policy DM5: Development and flood risk

Development within the Environment Agency's flood risk zones will be acceptable only when:

i) It is compatible with national policy and when the sequential test and the exception test, where applicable, have been satisfied;

ii) A site specific Flood Risk Assessment, where required, demonstrates an acceptable flood risk and/or suitable flood protection mitigation measures are incorporated into the proposals, where necessary, which can be satisfactorily implemented; and

iii) It would not affect the ability for future flood alleviation projects to be undertaken.

The Site Specific Flood Risk Assessment will need to meet the requirements of the NPPG and demonstrate or assess:

a) That the development is safe for its lifetime, taking into account the vulnerability of its users and climate change;

b) Whether the proposed development will make a significant contribution to achieving the objectives of the Local Plan;

c) Whether the development involves the redevelopment of previously developed land or buildings and would result in environmental improvements over the current condition of the site;

d) Whether appropriate measures to ensure resilience to potential flooding have been incorporated into the development;

e) Whether appropriate measures to reduce the risk of flooding (on and offsite), including sustainable drainage systems, have been incorporated;

f) Where the proposal involves the replacement of an existing building, whether the replacement building is located and/or designed without increasing flood risk and, where possible, to reduce the risks and effects of flooding;

g) Whether an acceptable flood risk and/or suitable flood protection mitigation measures are incorporated into the proposals, where necessary, which can be satisfactorily implemented;
h) Whether the risk of flooding is not increased elsewhere and, wherever possible, is reduced;
i) That the integrity of existing coastal and river defences are not undermined;
j) That the development does not reduce the potential of land used for current or future flood management;
k) Compatibility with the appropriate Catchment Flood Management Plan or Shoreline Management Plan;
l) Use of development to reduce the risk of flooding through location, layout and design and incorporate sustainable drainage systems to minimise surface water run-off and avoid pollution (see DM6);
m) That sites at little or no risk of flooding are developed in preference to areas at higher risk;
n) There is safe access and egress from the site;
o) There are management and maintenance plans for flood protection/mitigation measures, including arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime;
p) That the development would not negatively impact on water quality of surface water and ground water; and
q) There is a Flood Response Plan (FRP).

The relocation of existing development to an undeveloped site with a lower probability of flooding will be permitted where:

r) The vacated site would be reinstated as naturally functioning flood plain;
s) The benefits of flood risk reduction outweigh the benefits of leaving the proposed new site undeveloped; and
t) The development of the proposed new site is appropriate when considered against the other policies of the Local Plan.

In the case of the replacement of an existing residential property in flood zone 3a, the replacement dwelling must be on a like-for-like basis, with no increase in the number of bedrooms, on the same sized footprint[3] and wherever possible being relocated in a less vulnerable part of the site.

Any required additional or enhanced flood defences should not conflict with the purposes and special qualities of the Broads.

Policy DM6: Surface water run-off

All development proposals will need to incorporate measures to attenuate surface water run-off in a manner appropriate to the Broads. This will need to reflect the characteristics of the site in accordance with a drainage hierarchy for rainwater so that, in order of priority, they:

a) Continue natural discharge processes;
b) Store water for later use;
c) Adopt shallow infiltration techniques in areas of suitable porosity;
d) Store water in open water features for gradual release to a watercourse;

[3] The "footprint" is the aggregate ground floor area of the existing on-site buildings, including outbuildings which affect the functionality of the floodplain but excluding temporary buildings, open spaces with direct external access between wings of a building, and areas of hard standing.

e) Store water in sealed water features for gradual release to a watercourse;
f) Discharge direct to a watercourse;
g) Discharge direct to a surface water drain (highways, Anglian Water or other body or within private ownership);
h) Discharge direct to deep infiltration or borehole soakaways; or
i) Discharge direct to a combined sewer

The surface water runoff rate that will occur as a consequence of the development is required to be no more than the existing pre-development greenfield runoff rate. Brownfield sites should aim to reduce runoff as close to greenfield rates as possible. The discharge rate for brownfield sites should be no more than the rate prior to any new development. Applicants are encouraged to seek betterment in surface water runoff as part of their proposals for brownfield sites. The runoff rate should be agreed with the Local Planning Authority, in conjunction with the Lead Local Flood Authority and where relevant sewerage undertaker.

Sustainable Drainage Systems (SuDS) shall be used unless, following adequate assessment, soil conditions and/or engineering feasibility dictate otherwise.

Proposals to address surface water must be considered at an early stage of the scheme design process. The following criteria need to be addressed when designing measures to address surface water:

i) Use a risk assessment on treatment stages to reflect the type of proposed development and how surface water run-off and drainage will affect the receptor. A 1.2m clearance between the base of infiltration SuDS and the peak seasonal groundwater levels is required;
ii) Take the current drainage arrangements of the area into account (including groundwater levels);
iii) Take natural site drainage and topography into account;
iv) Effectively manage water including maintenance of and, where possible improvement to water quality; and
v) Provide amenity for local residents whilst ensuring a safe environment.

Where SuDS via ground infiltration is feasible, to ensure that SuDS discharge water from the development at the same or lesser rate as prior to construction, developers must undertake groundwater monitoring within the winter period and winter percolation testing in accordance with the current procedure[4].

Minor developments that increase the footprint of an impermeable surface are required, where appropriate, to incorporate mitigation measures to reduce surface water runoff, manage surface water flood risk to the development itself and to others, maximise the use of permeable materials to increase infiltration capacity, incorporate on-site water storage, and make use of green roofs and green walls wherever reasonably practicable and appropriate, in accordance with design policies.

Within the critical drainage catchments as identified by the Lead Local Flood Authority, and in other areas where the best available evidence indicates that a serious and exceptional risk of

[4] Currently BRE Digest 365: www.brebookshop.com/details.jsp?id=327592

surface water flooding exists, all development proposals involving new buildings, extensions and additional areas of hard surfacing shall ensure that adequate and appropriate consideration has been given to mitigating surface water
flood risk.

Schemes that involve SuDS will be required to provide details of the management regime to ensure effective operation of the type of SuDS delivered in perpetuity.

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4. Sources of flood risk

4.1 Fluvial

4.1.1 Fluvial flood risk is flooding from rivers because of a river overflowing or its banks being breached. It should be noted that climate change is likely to result in increased river flows (between 25% and 65% increase)

4.2 Surface water runoff (pluvial flooding)

4.2.1 This is rainwater (including snow and other precipitation) which (a) is on the surface of the ground (whether or not it is moving), and (b) has not entered a watercourse, drainage system or public sewer. (The Flood and Water Management Act 2010 (FWMA) definition)

4.2.2 Intense rainfall, often not lasting a long time, that is unable to soak into the ground or enter drainage systems, can run quickly off land and result in local flooding. Surface water flooding problems are linked to issues of poor drainage, or drainage blockage by debris, and sewer flooding.

4.2.3 There are several stakeholders identified by the FWMA who have a role in managing surface runoff flooding, these are; Lead Local Flood Authorities, Local Planning Authorities, Water Utilities Companies, Highways Authorities, Riparian Owners.

4.3 Tidal

4.3.1 Tidal flooding is caused by extreme tide levels beyond ground and/or defence levels. Tidal flooding often also occurs by waves overtopping or breaching defences (artificial or natural like dunes).

4.3.2 Tidal flood risk is assessed based on Extreme Still Water Sea Levels (ESWSL), plus an allowance for the interaction of wind and waves. An ESWSL is the level the sea is expected to reach during a storm event for a particular magnitude of flood event as a result of the combination of astronomical tides and meteorological surges. The scale of these events is referred to as 'still' water with additional allowances for the effect of waves, wind and swell. The astronomical tide levels are mainly generated by the gravitational effects of the sun and the moon. Surge events are the result of meteorological conditions where low atmospheric pressure causes the sea level to be increased to a higher level than during more average or high atmospheric pressure conditions. The wave heights and swells are influenced by the strength, direction and persistence of the wind and the profile of the nearshore.

4.4 Groundwater

4.4.1 This is water below the surface of the ground and in direct contact with the ground or subsoil. It is worth noting that this definition does not include water in buried pipes or other containers. (The Flood and Water Management Act 2010 (FWMA) definition).

4.4.2 The UK Groundwater Forum describes groundwater flooding because of water rising from the underlying strata or from water flowing from abnormal springs.

4.4.3 In comparison to fluvial flooding, current understanding of the risks posed by groundwater flooding is limited and mapping of flood risk from groundwater sources is in its infancy.

4.4.4 Flooding from groundwater is classed as a Local Flood Risk and as such is the responsibility of the Lead Local Flood Authority which is Suffolk/Norfolk County Council. Under the Flood and Water Management Act (2010), LLFAs have powers to carry out risk management functions relating to groundwater flood risk.

4.4.5 Groundwater flooding is most likely in low-lying areas with permeable strata (aquifers) underneath and more likely to appear after periods of sustained rainfall. Groundwater flooding tends to occur sporadically in both location and time, and tends to last longer than fluvial, pluvial or sewer flooding. Groundwater flooding can also interact with other flood sources, worsening the risk of pluvial, fluvial or sewer flooding by reducing rainfall infiltration or discharge to sewers.

4.4.6 Groundwater flooding risk increases where long reaches of watercourse are culverted and higher groundwater levels are not able to naturally pass into watercourses. It should be noted that although an area may be designated as susceptible to groundwater flooding, this does not mean that groundwater flooding will definitely be a problem within these areas; rather it indicates potential risk.

4.4.7 The future risk from this source is less certain than other sources as climate change predictions indicate that, although sea levels will rise (thus possibly raising groundwater levels), overall summer rainfall will decrease, with a long-term effect of lowering the groundwater levels. However, long periods of wet weather, such as those experienced in the autumn and winter of 2000/01 are predicted to increase. These are the type of weather patterns that can cause ground water flooding to occur.

4.5 Foul Sewerage Flooding

4.5.1 Sewer flooding can occur during periods of extreme weather when intense rainfall overloads the sewer system capacity (surface water, foul or combined), and/or when sewers cannot discharge properly to watercourses due to high water levels. Sewer flooding can also happen because of blockages[5], collapses or equipment failure in the sewerage system. Infiltration or entry of soil or groundwater into the sewer system via faults in the fabric of the sewerage system, is another cause of sewer flooding. Infiltration is often related to shallow groundwater, and may cause high flows for prolonged periods of time.

4.5.2 Even where sewers are built to current standards, they are likely to be overwhelmed by larger events of the magnitude often considered when looking at river or surface water flooding. Existing sewers can also become overloaded as new development adds to the discharge to their catchment, or due to incremental increases in roofed and paved surfaces at the individual property scale (urban creep). Sewer flooding is therefore a problem that could occur in many locations.

[5] Anglian Water actively works with their customers as part of their Keep it Clear Campaign to reduce the number of blockages which occur from cooking fat, wipes and other items which should not be disposed in drains.

4.5.3 The applicant will need to consider the available capacity of existing sewers to receive additional foul flows into the public sewerage network rather than historic issues which are the responsibility of Anglian Water and other risk management authorities (where relevant).

4.5.4 Applicants should also assess the risk of foul sewerage flooding. Anglian Water Services are the sewerage undertaker and can provide relevant information to applicants to inform preparation of Flood Risk Assessments. See section 7.9 for the submission requirements for applicants when preparing a foul drainage strategy proportionate to the scale of the proposed development. Anglian Water offer pre-planning service for identifying feasible drainage solutions for major development proposals. (https://www.anglianwater.co.uk/developers/development-services/pre-planning-services)

4.6 Coastal

4.6.1 If the coast is eroding, then the potential effect is that tidal flood and erosion defences near to the sea will be lost and flood risk may increase. To maintain an appropriate standard of safety from flooding works may be needed to slow down or stop the rate of coastal erosion and so maintain the integrity of the coastal defences. The (2010) North Norfolk Shoreline Management Plan (SMP) SMP 6 Kelling to Lowestoft describe the high-level strategy and coastal policies.

4.7 Reservoirs

4.7.1 Reservoir flooding is very different from other forms of flooding. It may happen with little or no warning and evacuation will need to happen immediately. The likelihood of such flooding is difficult to estimate, but it is less likely than flooding from rivers or surface water. It may not be possible to seek refuge upstairs from floodwater as buildings could be unsafe or unstable because of the force of water from the reservoir breach or failure.

4.7.2 Flooding from reservoirs with an impounded volume greater than 25,000 cubic metres are governed by the Reservoir Act 1975 and are listed on a register held by the Environment Agency. The level and standard of inspection and maintenance required under the Act means that the risk of flooding from reservoirs is relatively low. Recent changes to legislation under the Flood and Water Management Act require the Environment agency to designate the risk of flooding from these reservoirs. The Environment agency is currently progressing a 'Risk Designation' process so that the risk is formally determined.

4.8 Ordinary Watercourses

4.8.1 Ordinary Watercourses are defined as; every river, stream, ditch, drain, cut, dyke, sluice, sewer (other than a public sewer) and passage through which water flows and which does not form part of a main river. These watercourses, although not shown at risk on the Environment Agency flood map for planning, can be a source of fluvial flooding. The Environment Agency flood map for planning can only model and show risk of flooding on catchments greater than 3km^2. Appropriate site-specific risk assessments still need to consider ordinary watercourses as a source of flood risk.

4.8.2 In terms of local flood risk management, these watercourses are still largely influenced by the Land Drainage Act 1991. This Act identifies three key stakeholders in the management of ordinary watercourses, these are; Internal Drainage Boards, Local District Authorities and Riparian Owners.

4.8.3 In the County of Norfolk for example there are approximately 7,178 km of mapped ordinary watercourses included in the Environment Agency's Detailed River Network dataset. This is probably a conservative figure as many ordinary watercourses in Norfolk remain unmapped.

4.8.4 Maps of the Broads (2006) Internal Drainage District and the Norfolk Rivers Internal Drainage District are available here and here. These maps show which watercourses are designated as Adopted Watercourses by each Board. The adoption of a watercourse is an acknowledgement by the Board that the watercourse is of arterial importance to the Internal Drainage District and as such will normally receive maintenance from the IDB. This maintenance is not necessarily carried out on an annual basis but on a recurrence deemed necessary to meet water level management requirements. The designations are made under permissive powers (meaning there is no obligation for IDBs to fulfil any formal maintenance requirement and there is no change in the ownership or liability associated with the watercourse

Commented [NB1]: add link

5. Understanding Flood Risk

5.1 What is flood risk?

5.1.1 According to the National Planning Practice Guidance (NPPG), "flood risk" is a combination of the probability and the potential consequences of flooding from all sources – including from rivers and the sea, directly from rainfall on the ground surface and rising groundwater, overwhelmed sewers and drainage systems, and from reservoirs, canals and lakes and other artificial sources~~.~~. Development should also have regard to the climate change flood extents (from all sources of flooding) and these are mapped in the Strategic Flood Risk Assessment (see 5.5).

5.2 What are flood risk zones?

5.2.1 Flood Zones 1, 2 and 3 outline areas at low risk, medium risk and high risk respectively from both tidal and fluvial flooding. Flood Zones do not consider the effects of flood defences, so are a worst-case assessment of flood risk. They are shown on the Environment Agency's Flood Map for Planning (Rivers and Sea)[6] and on the SFRA maps[7] and defined in the table below (taken from the NPPG). As mentioned previously, the impact of climate change needs to be considered (see 5.1.1)

Flood Zone	Definition
Zone 1 Low Probability	Land having a less than 1 in 1,000 (0.1%) annual probability of river or sea flooding. All land outside Zones 2 and 3
Zone 2 Medium Probability	Land having between a 1 in 100 (1%) and 1 in 1,000 (0.1%) annual probability of river flooding; or Land having between a 1 in 200 (0.5%) and 1 in 1,000 (0.1%) annual probability of sea flooding.
Zone 3a High Probability	Land having a 1 in 100 (1%) or greater annual probability of river flooding; or Land having a 1 in 200 (0.5%) or greater annual probability of sea flooding.
Zone 3b The Functional Floodplain	This zone comprises land where water has to flow or be stored in times of flood. Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency.

5.3 EA flood risk

5.3.1 The Environment Agency (EA) flood risk maps (river and sea) show the current probability or likelihood of flooding without defences in place. They therefore show a 'worst case' scenario. However, the EA maps do not include climate change predictions of rising sea levels, increase in peak river flow, or increased peak rainfall intensity. Also, the EA flood risk maps just show areas identified as Flood Zone 3 and do not set out zones 3a and 3b. So, the EA maps are not sufficient to use to consider the impact of flooding to an individual property. Site-specific flood risk assessments (FRA) are required to consider the impacts of all sources of flooding on an individual property. These should also include climate change considerations (and the SFRAs demonstrate the climate change flood extents).

[6] See the flood maps here: http://apps.environment-agency.gov.uk/wiyby/37837.aspx
[7] SFRAs in place relevant to the Broads: http://www.broads-authority.gov.uk/planning/planning-policies/sfra/sfra

5.3.2 Whilst most of the Broads Authority area is covered by the river and coastal flood map, those areas outside of it (e.g. Flood Zone 1) should also look at the Risk of Surface Water Flood Map on the EA website. This shows surface water flooding but also shows a proxy risk for fluvial flooding experienced from an ordinary watercourse until a specific FRA is undertaken (i.e. where the EA fluvial modelling could not extend as the catchments were too small to include (those smaller than 3km^2)).

5.4 Marine Management Organisation and flood risk

5.4.1 Coastal, and tidal flooding is covered across multiple policies within the East Marine Inshore and Off Shore Plans[8] such as SOC1, CC1 and Objectives 6 and 9. Other references include Paragraph 249 – Coastal change management.

5.5 Strategic Flood Risk Assessment

5.5.1 A Strategic Flood Risk Assessment is a study carried out by one or more local planning authorities to assess the risk to an area from flooding from all sources, now and in the future. They consider the ~~impacts of~~ climate change flood extents, and assess the impact that land use changes and development in the area will have on flood risk. They are used to inform Local Plans and act as a starting point or basis for considering flood risk on a particular site. SFRAs are high-level strategic documents and, as such, do not go into detail on an individual site-specific basis.

5.5.2 The Broads Authority Executive Area is covered by four Strategic Flood Risk Assessments (SFRA)[9]:

- Greater Norwich SFRA (2017)
- Great Yarmouth SFRA (2017)
- North Norfolk SFRA (2017)
- ~~Waveney~~ East Suffolk SFRA (2018)

5.5.3 Many of the SFRA's did flood modelling to reflect up to date climate change allowances such as surface water extent with 40% climate change included. They also brought together the many flood model outputs that have been competed around Norfolk and the former Waveney area. In Norfolk, climate change allowances have been agreed with the Environment Agency and LLFA in the SFRA and with all the Norfolk authorities.

5.5.4 Not all of the Broads Authority Executive Area has been modelled for flood risk. For some areas the actual extent of flood zone 3b and 3a is not known. As such, a precautionary approach has been adopted. In areas of no modelling, it is presumed that the entire area is flood zone 3 (in ~~Waveney)~~East Suffolk) or indicative flood zone 3b (in Norfolk). If a proposed development is shown to be in Flood Zone 3, further investigation should be undertaken as part of a detailed site specific Flood Risk Assessment to define and confirm the extent of Flood Zone 3b. This may require detailed hydraulic modelling. ~~so a site-specific flood risk assessment is required to assess actual flood risk to the site.~~ To cover this, a joint position

[8] https://www.gov.uk/government/publications/east-inshore-and-east-offshore-marine-plans
[9] Go here to see the SFRAs: https://www.broads-authority.gov.uk/planning/planning-policies/sfra/sfra

statement has been produced between the Broads Authority and the Environment Agency[10]. The Joint Position Statement indicates that modelling on the Broadland Flood Alleviation Project Area (much of the area without modelling) will be completed by the end of 2021.

5.5.5 More information on SFRAs can be found in Appendix C of the Local Plan or you can go here to see the SFRAs yourself: https://www.broads-authority.gov.uk/planning/planning-policies/sfra/sfra

5.5.6 As time goes by and further modelling is done, the EA maps will be updated and the SFRA will become outdated. As DM5 explains in the reasoned justification, site specific FRAs will find out the precise nature of flood risk on site, so they will consider both the SFRA and Flood Map for Planning. Even in the future when they don't correspond anymore, the SFRA will still be useful as it is likely that areas of flood zone 3b will not be drastically different.

5.6 Nature of flood risk in the Broads

5.6.1 Approximately 82.5% of the Broads Authority Executive Area is covered by flood zone 3 (3, 3a & 3b). This equates to 25,472 hectares. The Broads Authority boundary is tightly drawn around the edge of the floodplain. The extent and nature of flood risk, with significant areas of 'functional floodplain', mean that flood risk is a major constraint on development in the Broads.

5.6.2 The flood risk in the Broads is mainly from both fluvial and tidal sources. The whole character and development in the Broads over many hundreds of years has been closely associated with the water environment and flood risk. Much of the Broads area is defended by flood defence embankments, which are maintained by the Environment Agency to reduce flooding. The flood defences, where they exist, only reduce the risk of flooding and will never eliminate it; this has been the case historically within the Broads.

5.6.3 Working, living and visiting the Broads have been, and will continue to be, activities that have co-existed with the risk of flooding. However, any new development (which includes change of use, etc) must be in line with government policy and minimise flood risk. In the Broads area, this means identifying the risks from flooding and ensuring that they are at as low a level as possible compatible with the wetland and water-based environment.

5.6.4 The Broads is not subject to open sea conditions (relating to tidal range and wave action) but much of the Broads are tidally influenced. Paragraph 163, footnote 50 of the NPPF refers to 'other sources of flooding' being assessed (surface water, sewer, reservoir, groundwater, tidal, fluvial). Any flood risk assessment should therefore consider all sources of flooding but it is acknowledged that the main focus will be tidal and fluvial flood risk.

5.6.5 The flood probability mapping carried out within the SFRA does not signify the degree of hazard likely to be experienced in the Broads Authority area, especially in the more upstream catchment areas and those areas not at risk of breaching of coastal defences,

[10] Go here for the Joint Position Statement: http://www.broads-authority.gov.uk/__data/assets/pdf_file/0011/958286/SFRA-Position-Statement-June-2018.pdf

because it does not quantify depth or water velocity. Hazard, or "danger to people", is a function of depth and velocity. Hazard is very site specific and could vary greatly over a relatively small area due to the presence of drains, dykes, quay-headings, flood banks, etc. Hazards can be hidden by turbid floodwaters and a site-specific Flood Risk Assessment will need to measure this.

5.6.6 Setting aside the above, hazard and risk does tend to be predictable on the Broads and this has implications for how these are managed.

5.6.7 Fluvial flooding associated with upstream areas of individual catchments within the Broads is not normally "flashy" and the hazard from these floods, apart from unusual meteorological conditions, is not severe. Consideration of flood risk at a particular location should also take account of climate change as highlighted in section 5.3 and 5.4.

5.6.8 The typical Broads river has a permeable catchment[11], is groundwater dominated[12], and is a slow responding watercourse with a slow increase and decrease of flow in response to rainfall. Although tidal surges can develop rapidly within 6-12 hours because of the movements of weather systems in the North Sea, the Environment Agency Flood Warning System covers the whole of the Broads area which could provide early warning (for fluvial and tidal flooding). Signing up to this service is voluntary or it may be a requirement of planning permission.

5.6.9 Existing flood defences in the Broads area offer a low standard of protection (typically up to a 1 in 7-year standard and some defences have a 1 in 200 standard or higher), so they may be overtopped during a flood event. The nature of flooding in the Broads is such that flood water is likely to have a slow velocity, shallow depth and low hazard, unless it is in an area beside a breach in defences where the flow could be greater and the risk would subsequently be higher.

5.6.10 Some people living and working within the Broads are historically familiar with the water environment and are unlikely to be surprised or alarmed by the possibility of floods or rising water levels or may be more prepared. That being said, others may not have had any experience of flooding. Measures will need to be in place to ensure effective communication with visitors - an issue which is already addressed on many sites locally.

5.6.11 Any development encroaching within any of the plotted Flood Zones may increase flood risk to adjacent areas. The effect on flood risk of several small encroachments is cumulative. If the requirements of the NPPF and NPPG are met in full, then additional development should not increase flood risk elsewhere.

[11] A river catchment is the area of land whose water drains into that river. A permeable catchment lies on porous rock, such as chalk or sandstone.
[12] Where groundwater accounts for much of the inflow and outflow of the watercourse.

5.6.12 The following provides information about specific areas of the Broads and the type of flood risk that is particularly relevant to them. This information is taken from the various Strategic Flood Risk Assessments.

	Sources of flood risk						
	Tidal	**Surface water**	**Fluvial**	**Groundwater**	**Foul sewer**	**Coastal**	**Reservoirs**
Greater Norwich	• Fluvial and tidal interactions influence flooding in the river network. • Along parts of the River Yare (downstream of Norwich) and across the Broads tidal levels are higher than fluvial levels in some places. • Combined river and tidal flooding is known to sometimes affect settlements including Wroxham and Brundall whilst high tide levels combined with a storm surge can affect the Broads. • Additional impacts of tidal influence include rivers not being able to flow freely at high tide (called tide-locking). This would affect settlements such as Norwich and Wroxham. This can affect any locations up to the tidal limit of the rivers in the Greater Norwich area.	• No settlements in the Broads part of Greater Norwich identified as history of surface water flooding or being at the most risk.	• Fluvial flood risk is primarily associated with the River Yare, River Bure and River Waveney watercourses and their tributaries. • Urban settlements are at risk from fluvial flooding from the River Yare, River Bure and River Waveney catchments (as well as other sources of flooding). • The greatest fluvial flood risk area is from the River Wensum in Norwich (part of the River Yare catchment). • Additional risk from the River Bure. • Fluvial flooding can be exacerbated in the upper reaches of the catchment, due to mill structures restricting the flow (i.e. in Horstead). • Often the combination of watercourses and the interaction of two or more sources of out of bank flow across the floodplain can have profound implications for the extent of the risk (i.e. the River Wensum and the River Yare within Norwich).	• Within Norwich city there are areas containing cavities in the underlying chalk strata. Water infiltration in the past has led to the collapse of these cavities resulting in subsidence. • There are several locations within South Norfolk identified as being at risk of groundwater flooding but these are not in the Broads. • Within the Broadland area it is believed pumping from the IDB maintain the water table at a relatively lower level reducing the risk of groundwater flooding. • Much of the Broads Authority administrative area is shown to have a low susceptibility to groundwater flooding, i.e. within the <25% category. Areas with increased susceptibility tend to be found along the valleys of watercourses including the Rivers Waveney, Yare and Bure. However, for significant parts of the Broads Authority administrative area, there is no data shown in the AStGWf dataset.	• The 2007 Greater Norwich Water Cycle Study identified that sewerage treatment works ranged from having no spare capacity to considerable capacity • The sewerage system within the city centre of the Norwich is at capacity and recommended upgrading the system. • The majority of Norwich city is served by sewers with a 1 in 30-year design standard. Some smaller parts of the city have drains with a design below 1 in 5-years. • A Section 19 Flood Investigation Report was created after heavy rainfall exceeded the capacity of the drainage systems and caused surface water flooding that resulted in approximately 80 properties being flooded in the Norwich Urban Area. A lack of coordination between stakeholders to maintain and clean the drainage system was identified as a key cause. • Additional Section 19 Flood Investigation Reports found that flooding primarily due to the exceedance of drainage capacity had taken place at Station Road in Ditchingham. This indicates that some of flooding in South Norfolk is caused or exacerbated by sewer flooding. • The DG5 register* indicates a total of 264 recorded flood incidents in Greater Norwich.	• N/A.	• Several reservoirs are located within the Greater Norwich area. However, there are also reservoirs outside of the area whose inundation mapping is shown to affect the Greater Norwich area

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	Sources of flood risk						
	Tidal	**Surface water**	**Fluvial**	**Groundwater**	**Foul sewer**	**Coastal**	**Reservoirs**
Great Yarmouth	• Tidal flooding is the most significant flood risk in the borough. There is acute risk of tidal flooding in Great Yarmouth and across the Broads within the study area; the prior has defences to protect up to the 0.5% annual probability tidal flood (although not all defences may be up to this standard). • Great Yarmouth is bound to the east by the North Sea and is entirely located within the tidally influenced area of the Broadlands River catchment. • The Rivers Yare, Bure and Waveney are subject to significant tidal influences at the downstream ends of their catchments. Tidal influences are powerful enough to reverse the flow of the rivers and hold back water within the surrounding drainage system. This 'tide-locking' effect raises levels further up the catchments and in adjoining tributaries increasing the flood risk over a broad area. • A combination of a storm surge caused by a low-pressure system within the North Sea coinciding with the arrival of high tide could result in a high risk of tidal / coastal flooding. • The tidal flood risk is managed by an extensive network of flood asset infrastructure. However, there remains residual risk in the event of a breach or overtopping scenario. The consequences of a breach/failure of an asset could be significant and result in widespread inundation of adjacent lowlying land and property, as well as the potential for significant risk to life.	• Several settlements are at risk of flooding. • These include Martham, Winterton-on-Sea, Caister-on-Sea, Great Yarmouth, Hemsby, Ormesby-St-Margaret, Hopton-on-Sea, Gorleston, Bradwell and Belton. • More detailed investigation revealed eight Critical Drainage Areas (CDAs) where the risk of surface water flooding was most acute. Great Yarmouth CDA include Bradwell, Claydon, Southtown and Cobham, Gorleston, South Yarmouth, Northgate and North Yarmouth. • Other CDAs in the study area are Caister on-Sea and Hemsby. • A Section 19 Flood Investigation Report was prepared in 2015 following extensive flooding in the summer of 2014 that affected 59 properties. The flooding affected properties across eight catchments with the worst affected being Hemsby (28 properties) and Ormesby St. Margaret (17 properties). The flooding affected a wide area.	• Primarily associated with the Rivers Yare, Bure and Waveney and their tributaries. • Due to the low-lying nature, fluvial as well as tidal flooding represents a significant risk.Tidal water levels along downstream reaches are strongly influenced by tide levels (climate change will significantly influence the predicted flood levels as a consequence of changes to mean sea level). • Most of the rivers are embanked and are higher than the adjacent land. This represents a residual risk in the event of a breach or overtopping due to fluvial, tidal or combined flood events. • Breach / failure events are difficult to predict but the effects are likely to be severe with rapid inundation of land behind the embankments and a severe risk to life to be expected. • Flooding may not be from one watercourse alone. Often the combination of watercourses and the interaction of two or more sources of out of bank flow across the floodplain can have profound implications for the extent of the risk (i.e. the Rivers Bure Yare within Great Yarmouth).	• Groundwater emergence is more susceptible in areas to the north and south of the town. • Areas to the north and south of the town centre, as well as those close to the coast where the tidal influence on groundwater is greatest, are considered among the most susceptible in the study area. • Underlying groundwater levels in the Great Yarmouth area are very high. However, the water table is likely to be kept artificially low through the extensive use of pump infrastructure. As a result, pumping failures could have a potential effect on the water table.	• Surface water and sewer flooding within Great Yarmouth and Gorleston was frequently caused by the inadequate capacity of the existing sewage system, or by sewers unable to drain freely into rivers. • There is an additional risk of foul sewer flooding as a resulting from misconnections between the surface water drainage and foul sewer. • Historically the sewer network within the urban area of Great Yarmouth had been susceptible to flooding, although efforts were made by Anglian Water, and completed in 2009, to reduce this risk. • Further reports of flooding had been made for both the Hemsby and Ormesby areas where sewage had reportedly escaped from the foul system. • The DG5 register* indicates a total of 144 recorded flood incidents in the Great Yarmouth borough	• Coastal erosion is a prominent process along much of the Great Yarmouth coastline directly threatening some settlements and posing an additional threat to coastal defences. • Should these defences be compromised there could be the additional risk of inundation to properties behind in areas susceptible to coastal flooding. • Coastal flooding can also often occur by wave overtopping of defences. • Coastal flood risk is expected to be attributable to storm surge tides combined with large waves. This may result in flooding of the beaches and undefended areas or cause overtopping of defences within the town of Great Yarmouth, as well as affecting the coastal zones to the north and south of the town.	• Three reservoirs are located within the Great Yarmouth borough however, there is also one reservoir outside of the area whose inundation mapping is shown to affect the district.

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	Sources of flood risk						
	Tidal	**Surface water**	**Fluvial**	**Groundwater**	**Foul sewer**	**Coastal**	**Reservoirs**
North Norfolk	• Tidal flooding is the most significant hazard in the district as **North Norfolk** is bounded to the north and east by the North Sea and many of its watercourses are tidally influenced. • The Broads river network located to the east of the district in particular is dominated by tidal influence. As such, flooding within the Broads area is typically slow and relatively predictable due to the predominant tidal influence. • Tidal flooding due to combination of high tidal levels and a storm surge is also a recognised issue throughout the Broads area.	• SFRA does not identify settlements in the Broads part of North Norfolk as having a history of surface water flooding or being at the most risk in the district.	• Fluvial flooding in North Norfolk district is predominantly a combination of fluvial and tidal flooding particularly in the Broads river system that lies to the east and south of the district. • Although North Norfolk is a largely rural district there are a sizable number of towns and villages where these watercourses have the potential to get out of bank and cause flooding to property. • Fluvial flooding can be exacerbated in the upper reaches of the Broadlands catchment, due to mill structures restricting the flow (i.e. in Fakenham). • Another complicating factor could be the failure or the overwhelming of pumping stations that may result in localised flooding.	• No concerns specific to North Norfolk.	• The DG5 register indicates a total of 109 recorded flood incidents in the North Norfolk district. • Of relevance to the North Norfolk area is the Joint Position Statement relating to Horning Knackers Wood Water Recycling Centre[13]. To summarise, due to capacity issues, development that increases foul drainage output is not likely to be permitted. • At the time of writing, there are early discussions between the Environment Agency, North Norfolk District Council and the Broads Authority about particular issues of discharge and flooding from the river into the drainage systems.	• Coastal erosion is a prominent process along much of the North Norfolk coast directly threatening some settlements and posing an additional threat to coastal defences.	• 15 reservoirs are located within the North Norfolk area however; there are also five reservoirs outside of the area whose inundation mapping is shown to affect the district.

[13]Knackers Wood Water Recycling Centre, Horning, Joint Position Statement https://www.broads-authority.gov.uk/__data/assets/pdf_file/0006/1152357/20170124-Joint-Position-Statement-inc-LAs-Horning-v4-2017-signed.pdf

	Sources of flood risk						
	Tidal	**Surface water**	**Fluvial**	**Groundwater**	**Foul sewer**	**Coastal**	**Reservoirs**
Waveney/East Suffolk	• The eastern boundary of (the former) Waveney Districts is formed by the land-sea interface. • Daily tidal fluctuation, occurring when the freshwater from the rivers is met by the incoming tide from the North Sea and Surge tides, which occur due to climatic conditions creating bands of low pressure in the Atlantic and North Sea. This causes a surge of water to move across the Atlantic, travelling southwards into the North Sea and becoming compressed as it travels towards and through the narrow English Channel, between Great Britain and mainland Europe. This causes a rapid rise in sea levels, which can be exacerbated by strong northerly winds. • Along the coastline there are several Main River estuaries and therefore the tidal conditions interact with fluvial mechanisms, caused by prolonged rainfall within the upper reaches of the river catchments. • Tidal flooding constitutes the main form of flood risk along this boundary, which comprises an exposed but defended coastline.	• The area is mainly underlain by the Lowestoft Formation, which is found in the majority of inland non-riverine areas which is mainly chalky, pebbly, sandy clay (till), with variable permeability. • Impermeable areas will encourage surface water runoff, potentially exacerbating surface water flood risk, whilst areas which are permeable will reduce the risk of surface water flooding by facilitating faster drainage of rainfall. • As such, new development, and associated hard standing areas, can increase volumes of runoff. Ultimately this may lead to exceedance of the available pipe network capacity, resulting in surface water flooding.	• The **River Waveney** has a relatively shallow gradient of 1:2100 creating a low carrying capacity and a limited ability to erode and alter its course during a flood event. Areas surrounding the river are low-lying and flat, meaning when its banks are overtopped it spreads into an extensive floodplain. This subsequently drains slowly due to the low gradient and may be marshy in areas. • There are a multitude of sluices found along the non-tidal reaches of the river to regulate levels during low flow conditions, to assist in land drainage and to supply a limited amount of flood storage to the system. • Flooding in July 2015 demonstrated the high risk associated with **Kirkley Stream,** which flows north to join the Inner Harbour at Lowestoft. Subsequent hydraulic modelling has identified several locations along the watercourse as at risk of river and surface water flooding. The stream survey shows that there is very little fall along its length, only a 1.4 m drop in height over a distance of 1,500 m; a restriction in flow anywhere along the stream will quickly lead to rising water as the channel is essentially flat.	• Primary mechanisms for elevated groundwater are associated with ○ Short period of above average rainfall in permeable superficial deposits ○ Permeable superficial deposits in hydraulic continuity with high river water levels; ○ Interruption of groundwater flow paths; and ○ Cessation of groundwater abstraction causing groundwater rebound. • The vast majority of the study area has a designation of "Limited potential for groundwater flooding to occur", except in some concentrated areas surrounding the watercourses where the designation given is "Potential for groundwater flooding to occur at surface". This is due to the permeable superficial alluvium being in hydraulic continuity with high water levels (river or tidal).	• Sewer outfalls linked to the harbour may become tide-locked during high tide; this has previously resulted in flooding of low-lying areas within Lowestoft (notably Station Square, Beven Street, Tonning Street and Norwich Road) north of the harbour. • South of the harbour also experiences similar levels of flood risk as the area is dependent on storm water overflows into the harbour and Anglian Water's harbour pumping station which discharges towards Ness point.	• As many of the major settlements are located along the coast, there have been multiple flood alleviation schemes undertaken to protect these areas. • Coastline is exposed but defended. • It is expected that sea level will rise which will increase the rate of coastal erosion	• Throughout the district there are around 24 waterbodies with Potential Reservoir Flood Risk

***** Anglian Water hold a DG5 register this database records incidents of flooding relating to public foul, combined or surface water sewers and identifies which properties suffered flooding. It is important to recognise the DG5 register does not contain information about properties and areas at risk of sewer flooding caused by operational issues such as blockages. Also, the register represents a snap shot in time and will get outdated with properties being added to the register following rainfall events, whilst risk will be reduced in some locations by capital investment to increase the capacity of the network. As such the sewer flooding flood risk register is not a comprehensive 'at risk register'.

5.7 The Broads Flood Risk Alleviation Project and Broadland Futures Initiative

5.6.1The Broadland Flood Alleviation Project (BFAP) is a long-term project to provide a range of flood defence improvements, maintenance and emergency response services within the tidal areas of the Rivers Yare, Bure, Waveney and their tributaries.

5.6.2 The main aim of project work was to strengthen existing flood defences and restore them to a height that existed in 1995 (a level defined by the Environment Agency) and make additional allowances for sea level rise and future settlement of the flood banks.

5.6.3 This aim has largely been achieved, through a phased programme of improvement works comprising:

- Strengthening the existing flood banks, restoring them to agreed levels where excessive settlement has occurred
- Replacing existing erosion protection that is in a poor condition using more environmentally acceptable methods wherever possible
- Providing new protection where erosion is currently threatening the integrity of the flood defences
- Carrying out works at undefended communities

5.6.4 The Broadland Futures Initiative (BFI)[14] is a partnership for future flood risk management in the Broadland area. The main goal is to agree a framework for future flood risk management that better copes with our changing climate and rising sea level. The focus will be on what happens from the mid-2020s onwards. Planning is needed now to secure support and make well-informed decisions.

5.6.5 The Initiative has been set up by organisations responsible for managing coastal and inland flood risk. The Environment Agency have the lead responsibility and will be working with Natural England, County Councils, Internal Drainage Boards, Broads Authority and National Farmers Union. The Broads Authority will support the Initiative Project Team and governance arrangements.

5.6.6 The BFI will also work in partnership with local communities and other stakeholders to identify the way forward. This will be a democratic process, with local politicians making the core decisions to agree a framework for future flood risk management that better copes with our changing climate.

5.8 Functional Flood Plain

5.7.1 The NPPG[15] describes the Functional Flood Plain as '*where water has to flow or be stored in times of flood*' and goes on to say:

> *A functional floodplain is a very important planning tool in making space for flood waters when flooding occurs. Generally, development should be directed away from these areas using the Environment Agency's catchment flood management plans, shoreline management plans and local flood risk management strategies produced by lead local flood authorities.*

5.7.2 The flood probability mapping indicates in some areas that the functional floodplain extends to the boundary of the Broads Authority area. The SFRAs identify Functional Floodplain and it covers a

[14] Broadland Futures Initiative: https://www.broads-authority.gov.uk/looking-after/climate-change/broadland-futures-initiative
[15] Functional floodplain: https://www.gov.uk/guidance/flood-risk-and-coastal-change#Strategic-Flood-Risk-Assessment-section

significant part of the Broads Authority area. FRAs will need to take this into account. See section 5.4 for more detail.

5.9 The Coast

5.8.1 The Broads Authority has a small stretch of coast in the Executive Area (Winterton/Horsey area). The Kelling to Lowestoft Ness Shoreline Management Plan unit 6.13[16] covers Eccles to Winterton Beach Road. Coastal erosion is a sensitive issue and the detail of the approach for this area is included in the Management Plan. As a summary for this document, the general approach to coastal erosion along this stretch for the present day and medium term is to hold the line up to 2055. This is dependent on the option continuing to be technically and economically deliverable and over time other options may be investigated such as possible managed realignment, or a retired line of defence further inland. In relation to the present day, the Plan says:

> *'Due to the considerable assets at risk and the uncertainty of how the coastline could evolve, the policy option from the present day is to continue to hold the line of the existing defence. This policy option is likely to involve maintenance of existing seawalls and reef structures, replacing groynes as necessary and continuing to re-nourish beaches with dredged sand. This policy option will provide an appropriate standard of protection to all assets behind the present defence line, and, with the recharge, a beach will be maintained as well as a supply of sediment to downdrift areas.'*

[16] Go to page 100: https://www.great-yarmouth.gov.uk/CHttpHandler.ashx?id=1239&p=0

6. Making and assessing a planning application

6.1 Site-Specific Flood Risk Assessment (FRA).

6.1.1 Proposals for developments in areas at risk of flooding are subject to set requirements and must be accompanied by an appropriate Site-Specific Flood Risk Assessment (FRA). The basic requirements of the FRA are set out in the NPPG. There is more on FRAs later in this section.

6.2 Where to get advice

6.2.1 The Broads Authority encourages applicants to seek pre-application advice on their proposals and officers can provide advice on which proposals will require an FRA. The Environment Agency[17] can provide some of the necessary data for an FRA and offer a pre-application advice service[18]. The Environment Agency offer one free preliminary opinion to developers which outlines the nature of the information required to accompany an application. Further detailed advice, which may include a technical review of documents prior to submission, is available from the Environment Agency as part of a charged service. All requests for data are provided free of charge.

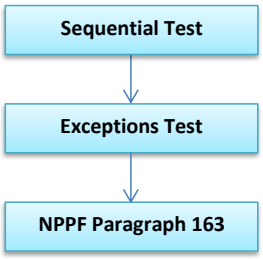
6.2.2 It will also be appropriate to consult neighbouring Local Planning Authorities if scheme proposals are on or near to the border.

6.3 Considering flood risk

6.3.1 Developers should carefully assess the full range of issues associated with all sources of flood risk when producing development proposals, including climate change flood extents. Failure to consider these issues is likely to lead to delay or to refusal of planning permission. Developers must demonstrate that development minimises flood risk both on and off site, will ensure the safety of the occupants and will still be of a scale and design appropriate to its Broads setting. Flood risk mitigation, resilience and resistance measures should be considered at an early stage and integrated into a high-quality design which satisfies the objectives of other planning policies.

~~6.3.2 The Broads Authority, when determining a planning application, will need to be aware that if a building is subject to more than 600mm of external flood water, it may not be safe. We may refuse the application if this has not been considered adequately in the FRA.~~

6.4 Sequential and exceptions tests - general



6.4.1 The NPPG sets out a Sequential Test[19] to development and all sources of flood risk that is done by the planning authority to direct development away from flood risk areas. It also sets out an Exception Test[20] for development located in zones of higher flood risk. This provides a method to manage all sources of flood risk, while still allowing necessary development to occur, subject to appropriate risk reduction and

[17] You can email enquiries_eastanglia@environment-agency.gov.uk
[18] The pre application enquiry form can be found here: https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion
[19] Sequential test: http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/the-sequential-risk-based-approach-to-the-location-of-development/
[20] Exceptions Test: http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/the-exception-test/

mitigation measures. The steps taken to assess an application for development in flood zones 3a and 3b are in this simple flow chart.

6.4.2 The NPPF sets out clearly that the sequential test and exception test should be applied to all sources of flooding and prioritise acceptable land uses. There is a distinction between proposed development in flood risk zones 1, 2 and 3a and proposed development in flood risk zone 3b. In the case of the former, the NPPG is very clear on circumstances in which the Sequential and Exception tests must be applied. In terms of proposed development in Flood Zone 3b the NPPG sets out (in the table below, copied from the NPPG) which types of development are water compatible and may therefore be acceptable[21] [22].

Flood Zones	Flood Risk Vulnerability Classification				
	Essential infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test required	✓	✓	✓
Zone 3a †	Exception Test required †	✗	Exception Test required	✓	✓
Zone 3b *	Exception Test required *	✗	✗	✗	✓*

Key: ✓ Development is appropriate ✗ Development should not be permitted.

† In Flood Zone 3a essential infrastructure should be designed and constructed to remain operational and safe in times of flood.

* In Flood Zone 3b (functional floodplain) essential infrastructure that has to be there and has passed the Exception Test, and water-compatible uses, should be designed and constructed to:

- remain operational and safe for users in times of flood;
- result in no net loss of floodplain storage;
- not impede water flows and not increase flood risk elsewhere

Although the sequential test must be applied, due to the limited availability of sites in Flood Zone 1, the main objective, as applied to the Broads, is likely to be to reduce flood risk to new development through the application of the sequential approach and to maximise opportunities to build in resilience both at the site and buildings level through design. The improvement of safety and management of risk, including response to risk, must be addressed at the design stage.

[21] Flood Zone and flood risk tables: http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/flood-zone-and-flood-risk-tables/table-2-flood-risk-vulnerability-classification/
[22] For more detail, go here: http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/flood-zone-and-flood-risk-tables/table-3-flood-risk-vulnerability-and-flood-zone-compatibility/

Any development being promoted in Flood Zone 1 should also consider flood risk from other sources (not just river and sea flooding). This means that the updated surface water flood map on the Environment Agency's flood map and assessed through the 2017 and 2018 SFRAs, should also be checked to apply the sequential approach and sequential test when making decisions. The 1:1000 year surface water map can be seen as equivalent probability to Flood zone 2 (river and sea map) or flood zone 3 accounting for an allowance of climate change, and the 1:100 year surface water map can be seen as equivalent to Flood Zone 3 (river and sea flood map) without climate change. This is only practical to apply to significant flow paths shown on the surface water flood map and not to small areas of ponding.

6.5 Sequential Test – specific requirements

6.5.1 The sequential test is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. The Sequential Test will be carried out by the Broads Authority on relevant applications located in Flood Zones 2 and 3 in accordance with the NPPF (except for minor development or changes of use – excluding a change of use involving camping and caravans), drawing on information provided by the developer. Sites must be reasonably available (see page 6.5.5 for more on this) to be considered as part of the Sequential Test. The Environment Agency advises that the Sequential Test should be undertaken in isolation and judged on flood risk issues only. The results of the test should then be compared to other non-flood risk matters - a site may therefore pass the Sequential Test but still be considered inappropriate for other reasons, such as being contrary to the Local Plan.

6.5.2 The Authority will aim to minimise flood risk by directing development away from areas of high risk. However, this does not override other Local Plan policies which may indicate the unsuitability of land in Flood Zones 1 or 2 for other reasons.

6.5.3 The NPPG says:

> *The aim is to steer new development to Flood Zone 1 (areas with a low probability of river or sea flooding). Where there are no reasonably available sites in Flood Zone 1, local planning authorities in their decision making should take into account the flood risk vulnerability of land uses and consider reasonably available sites in Flood Zone 2 (areas with a medium probability of river or sea flooding), applying the Exception Test if required. Only where there are no reasonably available sites in Flood Zones 1 or 2 should the suitability of sites in Flood Zone 3 (areas with a high probability of river or sea flooding) be considered, taking into account the flood risk vulnerability of land uses and applying the Exception Test if required.*

6.5.4 The following sections elaborate on how various elements of the Sequential Test should be addressed. In applying the sequential test, the Authority will use the following:

6.5.5 A site is considered to be **reasonably available** if all of the following apply:

- The site is available to be developed (including considering site ownership or whether the owners of sites have any intention of them being developed); and
- The site is within the agreed area of search; and

- The site is of comparable size in that it can accommodate the requirements of the proposed development; and
- The site is not safeguarded in the relevant Local Plan (including Minerals and Waste) or Neighbourhood Plan for another use; and
- It does not conflict with any other policies in the Local Plan.

6.5.6 A site is not considered to be reasonably available if they fail to meet all of the above requirements or already have planning permission for a development that is likely to be implemented.

6.5.7 The **area of search** should be guided by the requirement for the proposed development in a particular area and should be discussed with the Broads Authority at the pre-application stage.

6.5.8 The Authority considers the following areas of search to be reasonable:

- The rest of the particular district within the Broads Authority Executive Area
- Within the entire Parish (including the part that may be out of the Broads)
- Other settlements/parishes that are nearby (that may be out of the district)

6.5.9 It is acknowledged that the area of search could be outside of the Broads Authority Executive Area and would require discussions with other Local Planning Authorities (and proposals would therefore need to comply with relevant planning policies of the relevant Local Planning Authorities). However, sites that are at less risk of flooding could be in the part of the settlement that is not in the Broads.

6.5.10 The Authority acknowledges that some schemes are site specific, such as the regeneration of a particular brownfield site or extension of a building, so it is impractical to change the location.

6.5.11 In all cases the developer must justify with evidence to the Broads Authority what area of search has been used when making the application.

6.5.12 If there are found to be other reasonably available sites at a lower risk of flooding, then the development has **failed the Sequential Test** and this could lead to refusal of planning permission. Failing to pass the Sequential Test is sufficient grounds for refusal, as it would make the proposal contrary to the NPPF and Local Plan policies.

6.5.13 If, however there are no other reasonably available sites, then the development has **passed the Sequential Test**. The Exception Test may also need to be undertaken at this point (if required).

6.6 Exception Test – specific requirements

6.6.1 The NPPF says:

> *158. The aim of the sequential test is to steer new development to areas with the lowest risk of flooding. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding. The strategic flood risk assessment will provide the basis for applying this test. The sequential approach should be used in areas known to be at risk now or in the future from any form of flooding.*

159. If it is not possible for development to be located in zones with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in national planning guidance.

6.6.2 The requirements of the Exception Test are set out in the NPPG. Table 3[23] of the NPPG sets out when the Exception Test needs to be carried out. The Broads Authority has considered these tests and has clarified how they will be interpreted locally in the context of the landscape character and spatial vision. Again, the developer must provide the evidence to enable the Exception Test to be applied by the Authority.

6.6.3 The following conditions must be met for the Authority to be sure that a proposal is appropriate, in flood risk terms, if an Exception Test is required.

6.6.4 The NPPF at paragraph 160 says that for the Exception Test to be passed *'it should be demonstrated that: a) the development would provide wider sustainability benefits to the community that outweigh the flood risk'*. To assess this, the Authority will use the most **up to date Local Plan Sustainability Appraisal Objectives**. The current objectives are set out at Appendix C.

6.6.5 The NPPF at paragraph 160 goes on to say that for the Exception Test to be passed '*b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.* The Broads Authority will presume **100 years for residential** development as per the National Planning Policy Guidance. The Authority requires **developers to set out the anticipated lifetime of non-residential development and justify this**.

6.6.6 In addition to these conditions, the following will also be applied as part of the Exception Test:

a) The development must not compromise future flood alleviation or flood defence schemes;
b) The Flood Risk Assessment must demonstrate how resilience to flooding has been incorporated through a design which does not detract from the character of the locality;
c) The site-specific Flood Risk Assessment must demonstrate how the development will be compatible with the nature of flooding in the Broads, considering climate change and sea level rise over the planned life of the development (see section 6.5 on Climate Smart Thinking); and,
d) in the case of the replacement of a residential property, a residential development must be on a like-for-like basis, with no increase in the number of bedrooms, on the same sized footprint[24], potentially being relocated in a less vulnerable part of the site.

6.7 The nature of the land and the specific functionality of the floodplain

[23] For more detail, go here: http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/flood-zone-and-flood-risk-tables/table-3-flood-risk-vulnerability-and-flood-zone-compatibility/

[24] The "footprint" is the aggregate ground floor area of the existing on-site buildings, including outbuildings which affect the functionality of the floodplain but excluding temporary buildings, open spaces with direct external access between wings of a building, and areas of hardstanding.

6.7.1 The approach in any particular case will depend on the nature of the land and the specific functionality of the floodplain, considering the presence of built structures and site infrastructure. The following principles will apply to development in flood zone 3.

6.7.2 In the case of a **'greenfield' site** which has not been the subject of any previous development, the site could function as an unconstrained, open floodplain, subject to the presence of any 'defences'. It may provide areas for water storage in times of flood and may have other value associated with this, for example as wet woodland.

6.7.3 Sites categorised as "**brownfield sites which have been previously developed**" will often cover sites larger than a single plot and may have been in use for a variety of uses, often employment based. These will often be characterised by areas of built development, including buildings and hardstandings, with undeveloped areas which might include vegetated margins or open areas. Parts of the site may function as functional floodplain and parts will not. The functionality of any part will depend on the way in which the water would behave in times of flood. If flood waters which inundate the site in a 1:20 (5%) annual probability event can pass under or through a building or sit on land this will be defined as functional floodplain. Where an existing building or structure acts as a barrier to flood water then its functionality is compromised and it will not be classified as Flood Zone 3b and can be described as Flood Zone 3a.

6.7.4 When considering development proposals for brownfield sites which have been previously developed, the objective is to locate development in a sequentially appropriate manner on the site and to reduce risk through design. An initial site appraisal should identify the different flood risk zones on the site (where applicable) and differentiate between areas of Flood Zone 3a and Flood Zone 3b, as described above.

6.7.5 The objective when looking at development proposals on previously developed brownfield sites is to seek opportunities to restore the functionality of the floodplain. This must, however, be balanced against the need to maintain the land uses and development which support the economic and social viability of the Broads communities. So, the over- riding principle in respect of development is that it should not increase risk above the existing level.

6.7.6 Development should be located in a sequentially appropriate manner (which considers areas of lower flood risk first as discussed in the following section) across any flood risk zones, in accordance with the NPPG. Where there is existing development within Flood Zone 3a or 3b, opportunities to improve flood risk should follow the following hierarchy:

i) relocate development to Flood Zone 1 (subject to other sources of flooding as discussed previously)
ii) relocate development to a lower flood risk zone
iii) ensure there is no net increase in the development area within Flood Zone 3a.

6.7.7 Land uses or development which is of a higher level of vulnerability, as defined in the NPPG, than existing or previous uses on the site will only be permitted if it complies with table 3[25] of the NPPG and all the other policy requirements (such as safety and not increasing flood risk elsewhere).

6.7.8 Sites categorised as "**brownfield sites which are currently developed**" will often cover individual sites where replacement development is proposed. These will often be smaller plots and are owner occupied with limited (if any) opportunity for relocating development to an area of lesser flood risk, either on-site or elsewhere.

6.7.9 When considering proposals for replacement development, an initial appraisal should identify whether the development is in Flood Zone 3a or Flood Zone 3b.

6.7.10 If the site is in Flood Zone 3b, new water compatible development and essential infrastructure that has been subject to the Exception Test (as defined in the NPPG) will be permitted or a like-for-like replacement of an existing use. As detailed above, existing built development on site may prevent parts of the site from functioning as Flood Zone 3b, meaning it will be considered as Flood Zone 3a. In those cases, it may be acceptable to locate development appropriate to Flood Zone 3a within the extent of the previously developed footprint. This will be subject to the usual considerations in terms of safety of the development.

6.7.11 If the site is in Flood Zone 3a, new development for water compatible uses, less vulnerable uses or more vulnerable subject to the Exception Test (as defined in the NPPG) will be permitted or a like-for-like replacement of an existing use. In all cases the safety of the proposed development would need to be considered.

6.7.12 The objective when looking at development proposals on brownfield sites which are currently developed is to ensure that development does not increase flood risk to the site or the building or elsewhere above the existing level. Opportunities to reduce flood risk should also be considered.

6.7.13 The Authority may permit the relocation of existing development out of Flood Zone 3b to an undeveloped site with a lower probability of flooding where the vacated site is reinstated as naturally functioning floodplain, and where the benefits to flood risk outweigh the benefits of leaving the new site undeveloped. Such proposals will be considered against adopted planning policies.

6.8 Existing footprint of development in Flood Zone 3b and Permitted Development (PD)

6.8.1 Firstly, it is worth noting that the following only applies to development within Flood Risk Zone 3B where 'more vulnerable' development is not considered appropriate, according to the NPPG.

[25] Table 3 is copied previously in this SPD or can be found here: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/575184/Table_3_-_Flood_risk_vulnerability_and_flood_zone__compatibility_.pdf

6.8.2 For a replacement dwelling in Flood Zone 3B the existing footprint is currently defined in the footnote to policy DM5[26]. This does not make any reference to permitted development rights, only to existing buildings. The 'like for like' requirement of the policy is still valid as that is the starting point for the application – that the base position for any replacement dwelling in flood zone 3b is like for like. The Authority and Environment Agency consider that a scheme for a replacement dwelling may only include what is permitted through PD rights Class A enlargement, improvement or other alteration of a dwelling house[27] as a pragmatic approach. The inclusion of these PD rights in the calculation of footprint is considered a reasonable approach to take, as it would avoid the need for applicants to first construct a rear extension only to include it in the calculations for a replacement dwelling. It is important to note however that there may be other considerations that might be relevant to decision making other than flood risk; for example landscape character impacts.

6.8.3 If an application for a replacement dwelling is approved, the PD rights for extensions/outbuildings will be removed by the Authority in order to restrict further development within the functional floodplain. Householder PD rights would also be removed when permitting householder extensions within Flood Zone 3B, for the same reason; to restrict the further development within the functional floodplain.

6.9 Environment Agency's standing advice

6.9.1 You need to follow the Environment Agency's standing advice[28] if you're carrying out a flood risk assessment for a development classed as:

- a minor extension (household extensions or non-domestic extensions less than 250 square metres) in flood zone 2 or 3
- 'more vulnerable' in flood zone 2 (except for landfill or waste facility sites, caravan or camping sites)
- 'less vulnerable' in flood zone 2 (except for agriculture and forestry, waste treatment, and water and sewage treatment)
- 'water compatible' in flood zone 2

6.9.2 This includes developments involving a change of use into one of these vulnerable categories or into the water compatible category.

6.10 Information for Flood Risk Assessments

6.10.1 Guidance on when an FRA is required and on preparing an FRA, including how to obtain flood risk data, is available from the Environment Agency[29]. The NPPG[30] sets what is required in an FRA with a useful checklist.

6.10.2 The flood maps on the Environment Agency website[31] and the SFRA[32] show the flood zones and other sources of flood risk, highlighting when an FRA is required for flood risk from a main river or the sea. Further more detailed information will be required to consider the specific risk to the site

[26] Footnote 22 says the "footprint" is the aggregate ground floor area of the existing on site buildings, including outbuildings which affect the functionality of the floodplain but excluding temporary buildings, open spaces with direct external access between wings of a building, and areas of hard standing.
[27] SCHEDULE 2 Permitted development rights, PART 1 Development within the curtilage of a dwellinghouse, Class A – enlargement, improvement or other alteration of a dwellinghouse http://www.legislation.gov.uk/uksi/2015/596/made
[28] https://www.gov.uk/guidance/flood-risk-assessment-standing-advice
[29] Flood risk assessment for planning applications https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications
[30] Site-specific flood risk assessment: Checklist http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/site-specific-flood-risk-assessment-checklist/
[31] EA flood maps http://apps.environment-agency.gov.uk/wiyby/37837.aspx
[32] SFRAs http://www.broads-authority.gov.uk/planning/planning-policies/sfra/sfra

and how it should be managed. Other documents should be consulted to assess risk of flooding from other sources and historical accounts such as Strategic Flood Risk Assessments, Surface Water Management Plans[33] or local studies. Any site-specific FRA needs to also include an assessment of historical flooding.

6.10.3 A comprehensive and accurate site appraisal will be essential as part of an FRA to identify constraints and potential areas for development on a site within the floodplain[1]. The appraisal as part of a Flood Risk Assessment should identify:

i) Flood risk zones 1 – 3 within the site with reference to the SFRA/EA Flood Zone maps. -The FRA should show the accurate location of the flood zones on the site based on a comparison of EA flood levels and GPS site survey;
ii) The boundaries between areas of Flood Zone 3a and the Flood Zone 3b;
iii) The boundaries within mapped areas of Flood Zone 3b where water has to flow or be stored and land areas where buildings and other infrastructure restrict this functionality. The following will need to be considered in identifying these boundaries:
    - Extent of buildings on site and their footprints
    - Extent of hardstandings on site and their coverage
    - Permeability of the buildings and hardstandings on site, including the contribution of voids
    - Extent of open areas and drainage infrastructure on site and their capacity
    - Flow pathways and patterns within and off-site

6.10.4 Climate change is an important consideration in producing FRAs. An allowance for climate change must be included as part of any submitted flood risk assessment. The SFRAs[34] show how climate change could affect an area. Guidance on the allowances to use can be found by using the following hyperlink https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances. Environment Agency has prepared a locally specific factsheet on climate change allowances. This can be requested via enquiries_eastanglia@environment-agency.gov.uk.

6.10.5 Where redevelopment is appropriate in Flood Zones 3a and 3b, according to the principles of the Planning Practice Guidance (NPPG), it should seek to demonstrate an improvement in flood risk management (considering climate change over the development lifetime). For example, a building may be redesigned to be more flood resistant or have habitable areas raised and so at less risk. The frequency of flooding to the surrounding land may become greater and more hazardous with time, therefore offsetting any improvement to the design of the building and challenging the overall sustainability of the location for the given land use. These issues will need to be addressed in the site-specific Flood Risk Assessment (FRA). Some landowners may decide that risk management is too onerous and seek to relocate.

6.10.6 It is important to note that the Environment Agency need new more vulnerable development to not flood in the actual risk 1%/0.5% climate change flood event, through the provision of defences, raised land or raised floor levels.

6.10.7 The management of residual risk is another area that has to be addressed. There is no definition of what is deemed to be 'safe', but there is information from various sources that can provide a guide to what is acceptable in respect of flood depths and velocities. It will be the Authority's role to determine what is considered safe in terms of access routes during flood events and whether unsafe access can be adequately managed through the submission of a Flood Response Plan. The Authority will also consider if proposed less vulnerable developments at risk of flooding

[33] Surface Water Management Plans https://www.norfolk.gov.uk/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/flood-and-water-management-policies/surface-water-management-plans and http://www.greensuffolk.org/flooding/surface-water-management-plans/
[34] SFRA http://www.broads-authority.gov.uk/planning/planning-policies/sfra/sfra

that would be safe and sustainable and whether flood resilient measures and flood response plans are sufficient to mitigate risk. A key document in this respect is the Defra/EA Research Report FD2320, 'Flood Risk Assessment Guidance for New Development'[35]. Advice on the flood resistance and resilience of buildings can be found at section ~~5~~ 7 of this SPD.

6.10.8 Provision of this information (as set out in 6.10.3) will allow an accurate calculation to be made of the extent and location of Flood Zone 3a and Flood Zone 3b within the site. The objective of the appraisal is to identify the location and extent of the site that would be appropriate for development, so that the Broads Authority can ensure that it does not increase flood risk either off site or to the development. Understanding how a site is affected at times of flooding can identify opportunities to allow a development to go ahead, reduce flood risk and identify mechanisms to improve flood storage capacity through layout and design. The appraisal will demonstrate where this is required.

6.10.9 For certain application types the Environment Agency has prepared Flood Risk Standing Advice[36]. Considerable additional information for developers and landowners is available. Developers should refer to these sources of information so they are fully informed of the requirements at the time of their application.

6.10.10 For minor development[37,] a Local Flood Risk Tick Sheet has been produced. This will assist applicants in producing a flood risk assessment for minor developments. It is in conformity with the NPPG FRA guidance and is designed to be user friendly for the applicant yet provide the information the BA needs to determine applications. See Appendix F.

6.11 Without increasing flood risk elsewhere

6.11.1 The NPPF at paragraph 163 says '*when determining planning applications, local planning authorities should ensure flood risk is not increased elsewhere…".*

6.11.2 One of the key objectives of a Flood Risk Assessment is to establish if a proposal will increase flood risk elsewhere. This may happen where development causes flows to be diverted, or where development takes up additional space within the floodplain causing floodplain storage capacity to be reduced.

6.11.3 A Flood Risk Assessment should consider whether this will happen and propose mitigation measures which should be provided up to the design flood event (1% fluvial/0.5% tidal) including climate change for the lifetime of the development. These may include for example the provision of compensatory floodplain storage~~, although this can be difficult to achieve in the Broads area~~. Compensatory floodplain storage is the lowering of higher land levels to provide additional flood storage at the same level as the flood storage is removed. Therefore, this is difficult to achieve in the Broads as the floodplain is very flat with little higher land available to lower.~~.~~ One of the only options in the Broads is the raising of buildings on stilts to provide voids underneath and not remove flood storage. Such measures would need to be designed to ensure that water is always stored under the building and can empty after a flood. This would require intermittent boarding, no storage under the building and regular maintenance.

[35] Defra/EA Research Report FD2320 http://sciencesearch.defra.gov.uk/Document.aspx?Document=FD2320_3364_TRP.pdf
[36]Standing advice https://www.gov.uk/guidance/flood-risk-assessment-standing-advice
[37] Please note that this is minor development in relation to flood risk rather than other definitions of minor development: http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/what-is-meant-by-minor-development-in-relation-to-flood-risk/

6.11.4 Sustainable drainage (SuDS) proposals should also be included within an assessment where a development would increase the impermeable area that would increase the surface water runoff from the site. This will ensure that flood risk is not increased elsewhere. For Brownfield sites, proposals should be put forward to limit the surface water discharge as close to greenfield runoff rates.

6.12 Flood response plan template.

6.12.1 A site-specific Flood Response Plan will always be required for development in flood zone 3. The client/developer responsibilities for health and safety and facilities management may also require a site-specific flood response plan. These are important considerations on commercial sites and are potential requirements for compliance with the Construction (Design and Management) Regulations 2015[38].

6.12.2 They can form one means of managing residual risk where a development is found to be acceptable in flood risk terms and is a valuable document for owners and occupiers of all property at risk of flooding to have in place. The Authority has produced guidance and a suggested structure for these plans. The guidance and structure can be found at Appendix D.

[38] Construction (Design and Management) Regulations 2015 http://www.hse.gov.uk/pUbns/priced/l153.pdf

7. Reducing Flood Risk to Development

7.1 Section introduction

7.1.1 Developers must demonstrate that development both appropriately manages flood risk and will still be of a scale and design appropriate to its Broads setting. The Authority will not permit development where the accommodation of measures to reduce flood risk leads to other, unacceptable, consequences. These may include an intrusive scale of building or land raising[39] which is inappropriate in the landscape or built environment.

7.1.2 Developers should also note that, in accordance with advice in the NPPG, any necessary flood defence works required because of the development form part of that development and should be funded by the developer.

7.1.3 It should be noted that all aspects of the development need to comply with policies of the Local Plan (adopted 2019) and that conformity with policies SP2 and DM5 does not override applicability of other policies (of the Broads Authority and other relevant Local Planning Authority).

7.1.4 The Authority will continue to give considerable weight to the advice of the Environment Agency with regard to the appropriateness of development and necessary flood alleviation measures.

7.1.5 The following sections discuss ways of potentially reducing flood risk to development. Historic England was keen to emphasise the waterlogged archaeology in the area and that changes to the flow of water could affect preservation.

7.2 Raising Floor Levels

7.2.1 This involves setting the building floor level above an appropriate flood level. This approach provides a partial solution by giving protection to people and accommodation, provided that the flood level does not exceed the floor level provided.

7.2.2 A development could be designed to allow the site to flood beneath a raised building. This method does not protect the building curtilage or access roads from flooding. In addition, flooding may prevent the effective operation of local drainage and sewage systems, with potential adverse environmental and amenity consequences.

7.2.3 It is also difficult to apply new floor levels to building conversions.

7.2.4 The appropriate minimum floor levels to manage flood risk will be determined through the site-specific Flood Risk Assessment. The use of raised floor levels has significant implications for development. Firstly, it can lead to a raising of the ridge level and overall height of the building. Secondly, it affects the relationship between the floor level and the surrounding site and therefore the means of access into the building, including access for all (whereby access ramps for example might need to be longer and higher when compared to not raising the floor). These aspects need careful consideration by the architect at an early stage to ensure that the resulting development will

[39] See policy DM17 of the Local Plan for the Broads.

be acceptable in terms of its design in relation to its surroundings and that it complies with legal and policy requirements with regard to access for all.

7.3 Raising Plot Levels

7.3.1 Developers may seek to reduce the risk of flooding by raising the level of the land, either in isolation or in combination with a minimum floor level. This approach is unlikely to be a viable option in the Broads. The Authority and the Environment Agency have a preference against raising land levels, because:

(i) It can serve to divert flood water onto neighbouring plots, particularly in areas primarily affected by fluvial flooding.
(ii) Land in the Broads area is often wet and of poor load bearing capacity. Raising land by adding soil or other material may lead to the site sinking over a period of time.
(iii) It affects the relationship of the site to surrounding plots, and to access roads. On waterside sites, the relationship to the river or broad is changed, often leading to the need for higher piling and quay heading, affecting the visual quality of the water's edge.
(iv) It can be damaging to ecology, geomorphology, trees and other vegetation on the site.
(v) It can change the character of the landscape. Land raising can increase the height and prominence of new buildings.
(vi) It may be difficult to ensure that any replacement of lost flood storage capacity behaves in the same manner.

7.3.2 Furthermore, there is a policy in the new Local Plan for the Broads (policy DM17) which relates to land raising and is of relevance.

7.3.3 Compensatory floodplain storage may be required as a mitigation measure, but this can be difficult to achieve on small plots and the impact off-site would always need to be assessed.

7.4 Bunds or Flood Walls

7.4.1 In some exceptional cases it may be appropriate to consider the use of earth bunds or flood walls to reduce the risk of flooding of development or to protect existing development. This approach is less likely to be applicable to small-scale developments.

7.4.2 While acceptable in some locations, bunds or flood walls are likely to be damaging to the character of the landscape or built environment in others.

7.4.3 As with land raising, bunds can divert flood water onto neighbouring land, particularly in areas primarily affected by fluvial flooding. The provision of alternative flood storage capacity in the drainage compartment will be a requirement in the use of this technique. Careful consideration will be needed to ensure that the engineering requirements for bunds or flood walls are met and that, as far as possible, they are designed to be sympathetic to the local character. In addition, it will be important to ensure that a bund or flood wall does not prejudice the operational requirements of the site, for example at a boatyard or other employment site. This requirement may not apply to the use of bunds to create a temporary storage area or to provide pollution prevention but the potential to increase flood risk elsewhere may need to be considered.

7.4.4 An Environmental Permit may be required under the Environmental Permitting (England and Wales) Regulations 2010. Check the information at https://www.gov.uk/topic/environmental-management/environmental-permits for advice.

7.5 Floating/Amphibious Structures

7.5.1 Another option to explore is a fixed but floating solution to development for commercial uses or replacement residential properties. Development might be located on land or in a mooring cut within a currently developed plot giving connectivity with the landscape, retaining the feeling of intimacy on the waterway and the sense of space between developments experienced throughout the Broads system.

7.5.2 For such development to be acceptable, it must also not increase flood risk elsewhere; reduce flood risk overall wherever possible; and be safe for its lifetime taking into account climate change. Solutions would have to address design issues, including height and the visual impact of floats, as well as consideration of safe access and egress at times of flood and infrastructure requirements. Impact on navigation is also an important consideration.

7.5.3 The appropriateness of such development must be considered based upon its Flood Risk Vulnerability Classification from Table 2 of the Flood Risk and Coastal Change Planning Practice Guidance (discussed previously in this document).

7.5.4 Such development would also need to consider Water Framework Directive impacts through an assessment of direct effects on river morphology.

7.6 Resilience and Resistance

7.6.1 Flood-resilient buildings are designed and constructed to reduce the impact of flood water entering the building (through air bricks, through walls or through toilets or plug holes). As a result, no permanent damage is caused, structural integrity is maintained and drying and cleaning is easier. Flood-resistant construction can prevent entry of water or minimise the amount that may enter a building where there is short duration flooding outside with water depths of 0.6 metres or less. ~~6.3.2~~ The Broads Authority, when determining a planning application, will need to be aware that if a building is subject to more than 600mm of external flood water, it may not be safe. We may refuse the application if this has not been considered adequately in the FRA.

7.6.2 Consideration should be given at the design stage to the potential effects of flooding on the electrical, foul drainage and other key aspects of the development.

7.6.3 Developers may also put forward innovative approaches towards reducing the risks or effects of flooding. The Broads Authority will consider such proposals which:

- Build in resilience and allow sites to flood, for example in commercial non- residential buildings and voids around or under replacement chalets or extensions to buildings for example.
- Utilise floating walkways as a safe means of escape.

- Use soft river edge protection measures which absorb water, reduce erosion from wake and encourage plant growth[40].
- Provide compensatory flood storage capacity or washlands (which are areas provided to be deliberately flooded).

7.6.4 Further information can be found in the following documents:

- Improving the Flood Performance of New Buildings: Flood Resilient Construction (CLG 2007)[41]
- Six Steps to Property Level Flood Protection - Guidance for property owners[42]
- Flood Protection and your property. A guide to protecting your home (Property Care Association, 2014)[43]
- Homeowner's guide to flood resilience – A living document (Know Your Flood Risk)[44]
- The Property Flood Resilience Action Plan - DEFRA[45]

7.7 Sustainable Drainage Systems (SUDS)

7.71 Policy DM6 of the Local Plan for the Broads refers to Surface Water Run Off. There is much detailed information there. This section is more of a summary.

7.72 Surface water drainage systems developed in line with the ideals of sustainable development are collectively referred to as Sustainable Drainage Systems (SuDS). Approaches to manage surface water that consider water quantity (flooding), water quality (pollution), amenity and biodiversity issues are collectively referred to as Sustainable drainage. The idea of SuDS is to copy, as closely as possible, the natural drainage from a site before development. Including the use of shallow surface structures to copy the pre-development scenario and manage water close to where it falls. SuDS can be designed to slow water down (attenuate) before it enters streams, rivers and other watercourses, they provide areas to store water in natural contours and can be used to allow water to soak (infiltrate) into the ground, evaporate from surface water or transpire from vegetation (known as evapotranspiration). It is important to include sufficient treatment steps as part of the design of SuDS to ensure water quality is protected. There is also potential for schemes to include water reuse such as through rainwater and stormwater harvesting as options than can help to alleviate surface water flood risk. These are systems that are designed to both store water for reuse and attenuate flows and would also reduce potable (clean) water use.

7.7.2 All major development is expected to include Sustainable Drainage (SuDS) to manage surface water runoff, unless it is demonstrated to be in appropriate (as per NPPF paragraph 165). Also see Policy DM6 of the Local Plan for the Broads.

[40] See Design Guides: https://www.broads-authority.gov.uk/planning/planning-permission/design-guides
[41] Flood Resilient Construction: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7730/flood_performance.pdf
[42] https://www.bre.co.uk/filelibrary/pdf/projects/flooding/Property_owners_booklet_v2_web_(2).pdf . The guidance has been endorsed by the National Flood Forum, the Association of British Insurers, Defra, the Environment Agency, the Flood Protection Association, and the Local Government Association and was produced through the EUFP7 funded SMARTeST Project (further details: www.floodresilience.eu).
[43] A guide to protecting your home http://www.property-care.org/wp-content/uploads/2015/03/FPG-Leaflet-A5-Folded-to-A3-Draft-3-FINAL-WEB.pdf
[44] Homeowners Guide to Flood resilience http://www.knowyourfloodrisk.co.uk/sites/default/files/FloodGuide_ForHomeowners.pdf
[45] THE PROPERTY FLOOD RESILIENCE ACTION PLAN https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/551615/flood-resilience-bonfield-action-plan-2016.pdf

Applicants should follow SuDS hierarchy by fully considering alternatives before surface water discharge to public sewer. AWS would only accept a surface water connection if evidence were to be provided. AWS would welcome early liaison if applicants wish to pursue this option.

7.7.3 Where any SuDS are proposed it is important to demonstrate that the SuDS hierarchy has been followed both in terms of:

- surface water disposal location, prioritised in the following order: disposal of water to shallow infiltration, to a watercourse, to a surface water sewer, combined sewer / deep infiltration generally greater than 2m below ground level (deep infiltration systems can pose a risk to groundwater quality and are not usually supported. Deep infiltration is unlikely to work in the Broads Authority area due to high groundwater levels. [46]); and
- the SuDS components used within the management train (source, site and regional control).

7.7.4 At least one feasible proposal for the disposal of surface water drainage should be demonstrated and, in many cases, supported by the inclusion of appropriate information. Evidence is required to be provided to the Broads Authority and sewerage undertaker in relevant situations to demonstrate that it is not possible to discharge surface water via infiltration or to a watercourse in accordance with CIRIA SuDS Manual (2015) and Part H of Building Regulations. It is recognised that many areas in the Broads Authority area may not be suitable for infiltration SuDS due to the location in low lying areas very close to main rivers or due to high ground water levels. The Environment Agency are also generally not supportive of infiltration SuDS because at such a shallow depth to groundwater, it is essentially discharging any contaminants straight down to groundwater without treatment. However, other SuDS disposal options are likely to be available and there are many SuDS components which can attenuate and treat water quality without relying on infiltration. Careful consideration would be needed to ensure that any development would not remove flood water storage in areas of fluvial flood risk (e.g. Flood Zone 3) and that the SuDS scheme would work in an area at risk of fluvial / tidal flooding. There may also be constraints to surface water discharges relating to high water levels in a receiving watercourse especially those which are tidal.

7.7.5 There are various sources of technical information that can be used when addressing surface water and designing SuDS:

- NPPG[47]
- Non-statutory technical standards for the design, maintenance and operation of sustainable drainage systems[48]
- SuDS manual produced by CIRIA[49]. More generally CIRIA are developing new best practice guidance for integrated water management (including the use of SuDS). For information, go here: https://www.ciria.org/Research/Projects_underway2/Delivering_successful_integrated_water_mangement_through_the_planning__ystem.aspx.
- With regards to adopting SuDS, Anglian Water's current standards for SuDs adoption are available to view at the following address: http://www.anglianwater.co.uk/developers/suds.aspx

[46] There is guidance from Norfolk and Suffolk County Councils as the LLFAs for the area. At the time of writing, the guidance was under review.

[47] Why are sustainable drainage systems important? http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/reducing-the-causes-and-impacts-of-flooding/why-are-sustainable-drainage-systems-important/

[48] Non-statutory technical standards for sustainable drainage systems https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/415773/sustainable-drainage-technical-standards.pdf

[49] In delivering SuDS there is a requirement to meet the framework set out by the Government's 'non statutory technical standards' and the revised SuDS Manual complements these but goes further to support the cost-effective delivery of multiple benefits. https://www.ciria.org/Memberships/The_SuDs_Manual_C753_Chapters.aspx

7.8 Addressing groundwater flood risk

7.8.1 Groundwater flooding has a unique flooding mechanism. It may emerge from below ground level and for this reason many conventional flood defence and mitigation methods are not suitable. Flood risk may be reduced through building design by ensuring that floor levels are raised sufficiently above the water table. Site design would also need to preserve any flow routes followed by the groundwater overland and make sure flood risk is not increased downstream.

7.8.2 Proposed basement areas are likely to be particularly susceptible to groundwater flooding in certain areas. This may be mitigated through waterproof construction; however, consideration should be given to the potential impact on subterranean flow or water tables. When redeveloping existing buildings, it may be acceptable to install pumps in basements as a resilience measure. However, for new development this is unlikely to be considered an acceptable solution. Site specific ground investigation is also likely to be required in locations where below ground development is proposed or there is known groundwater flood risk.

7.9 Addressing foul water/sewer flooding

7.9.1 Anglian Water wish to emphasise that it shouldn't be assumed there is capacity within the public sewerage network for additional surface water flows. Anglian Water's Surface Water Drainage Policy is available to view here: https://www.anglianwater.co.uk/siteassets/developer/surface-water-drainage-policy.pdf.

7.9.2 Also, of relevance is policy DM2 of the Local Plan for the Broads.

7.9.3 Anglian Water wish to emphasise the submission requirements for applicants when proposing a foul connection to the public sewerage network. The foul drainage strategy should include the following information:

- Development size
- Proposed discharge rate and method (gravity or pumped connection)
- Discharge location identifying specific manhole
- Feasible mitigation strategy in agreement with Anglian Water (if required).

7.10 Addressing reservoir flood risk

7.10.1 The risk of a reservoir failure is a residual risk. Whilst a residual risk, developers should consider reservoir flooding during the planning stage.

7.10.2 Developers should contact the reservoir owner to obtain information which may include:

- reservoir characteristics: type, dam height at outlet, area/volume, overflow location;
- operation: discharge rates / maximum discharge;
- discharge during emergency drawdown; and
- inspection / maintenance regime.

7.10.3 Developers should apply the sequential approach to locating development within the site. The following questions should be considered:

- can risk be avoided through substituting less vulnerable uses or by amending the site lay-out?
- can it be demonstrated that less vulnerable uses for the site have been considered and reasonably discounted? and
- can layout be varied to reduce the number of people or flood risk vulnerability or building units be in higher risk parts of the site?

7.10.4 Developers should consult with relevant authorities regarding emergency plans in case of reservoir breach. In addition to the risk of inundation those considering development in areas affected by breach events should also assess the potential hydraulic forces imposed by the rapid flood event and check that the proposed infrastructure fabric can withstand the loads imposed on the structures by a breach event.

8. Other Important Considerations

8.1 Planning permission does not guarantee insurance cover

8.1.1 Future insurance cover (in terms of adequate value and at a reasonable cost) for development in flood zones should be an important consideration for the applicant/developer of the scheme. If a scheme was to get planning permission, there is no guarantee that it will successfully get adequate insurance cover at a reasonable cost to the owner or occupier. The Broads Authority strongly recommends that prior to application and delivery on site an insurance provider is contacted and the likelihood of a development getting insured for an adequate value at an acceptable cost is investigated. You may wish to contact Flood RE[50] who is 'helping to provide affordable and available home insurance'.

8.2 Check Building Regulation requirements

8.2.1 A development proposal could seek to address flood risk through its design and seem acceptable from a planning point of view, but there could be issues with meeting the requirements of Building Regulations. The Broads Authority strongly recommends that any design measures to mitigate against or manage flood risk and make a development resilient or resistant to flood risk is discussed with a Building Regulations professional prior to application and delivery on site.

8.3 Ensure you have the necessary consents

8.3.1 Under the Environmental Permitting (England and Wales) Regulations 2010, an **environmental permit** may be required for works in, under, over or within 8m of a main river or flood defence; or within 16m of a tidally influenced main river or associated flood defence. In the Broads, main rivers are usually tidally influenced so the wider distance will most likely apply.

8.3.2 'Flood Risk Activities' may require the Environment Agency to issue a **bespoke permit**, or may be covered by a **standard rules permit** which includes a set of fixed rules. Activities identified as lower risk may be excluded from the need for a permit or may need to be registered as an exempt activity and comply with certain rules.

8.3.3 Further information on Flood Risk Activity permits is available from:
https://www.gov.uk/guidance/flood-risk-activities-environmental-permits

8.3.4 To apply or seek further advice, contact the Environment Agency by email:
floodriskactivity@environment-agency.gov.uk or by telephone: 03708 506 506.

8.3.5 **Land drainage consent**[51] may also be required for any culverts or works affecting the flow of an ordinary watercourse (non-main river). This consent would be required from the appropriate Internal Drainage Board (IDB) or where not in an IDB area Norfolk/Suffolk County Council as LLFA. It should be noted that the Broads Authority tries to avoid the use of culverts and the Environment Agency are generally opposed to them as well[52]. Consent for such works will not normally be granted

[50] Flood Re is helping to provide affordable and available home insurance. http://www.floodre.co.uk/
[51] Under section 23 of the Land Drainage Act 1991
[52] The Environment Agency say: *We are generally opposed to the culverting of watercourses because of the adverse ecological, flood risk, human safety and aesthetic impacts. We consider each application to culvert a watercourse on its own merits and in accordance with our risk-based approach to permitting. We will only approve a culvert is there is no reasonably practicable alternative, or if we think the*

in watercourses due to the adverse impacts on ecology and the potential for an increase in flood risk, except when used as part of water control structures within drainage systems on marshes or fen sites and occasionally for access for equipment over marsh drainage dykes. Culverts are generally pipes through which the watercourse is channelled and can potentially restrict the flow. If the use of a culvert cannot be avoided then their size should be designed so they are appropriately designed for both low and high have capacity for high flow conditions (and this specification might be a matter for the IDB, LLFA or Environment Agency to consider). It should be noted that these approvals are separate from the planning process.

Other consents that may be required from the IDB include:

- If a surface water (or treated foul water) discharge is proposed to a watercourse within an Internal Drainage District (IDD) (either directly or indirectly), then the proposed development will require a Land Drainage Consent in line with the Board's byelaws (specifically byelaw 3). Any consent granted will likely be conditional, pending the payment a surface water development contribution fee, calculated in line with the Board's charging policy.
- If there is a Board Adopted watercourse within/adjacent to the site boundary and should works be proposed within 9 metres of the watercourse, consent would be required to relax Byelaw 10 (no works within 9 metres of the edge of drainage or flood risk management infrastructure).

8.4 Flood Warnings – only for tidal and fluvial flooding

8.4.1 It is emphasised that the application of measures referred to in this document is not a guarantee against flooding. While the risk of flooding can be reduced, a residual risk will always remain.

8.4.2 Individual dwellings and whole sites can be registered with the Environment Agency's flood warning service 'Floodline Warnings Direct '. The Floodline Warnings Direct (FWD) service provides information concerning the current and future flooding danger. If flooding in your area is anticipated, the Environment Agency will issue a flood warning by phone, text or email.

8.4.3 The Environment Agency endeavour to give 10 to 12 hours' notice of Tidal Flooding through the Flood Warning Service to the coast, estuaries and Broads. This may vary depending on the conditions on the day, timing of the tide in question and your particular location in the Broads (due to the time the tide takes to travel up the Broadland rivers). The notice given for potential fluvial flooding problems will be no less than 2 hours and will usually be a lot more. Further information can be obtained via: https://flood-warning-information.service.gov.uk.

8.4.4 It is not possible for the EA to warn for a 'Breach' of defences. This should be considered a part of the Flood Response Plan. There is no flood warnings for any watercourse outside of those formally covered by Flood Warning Service, only generalised flood alerts are available to indicate weather conditions that might lead to surface water flooding, flooding on other watercourse or from groundwater. These are not specific to an area or severity of flooding expected.

detrimental effects would be so minor that a costlier alternative would not be justified. In all cases where it is appropriate to do so, applicants must provide adequate mitigation measures, accept sole ownership and responsibility for future maintenance. We will actively pursue the restoration of culverted watercourses to open channels.

8.5 Consider a 'Climate Smart' Approach

8.5.1 To consider how to ensure your development is suitably proofed against a changing climate you may wish to take a Climate-Smart Approach. The Approach takes you through a series of simple steps to consider how a difference in the climate might impact on the way you live or work and what options you could develop to help build resilience or adapt to a changing regime. These are summarised in this diagram and more detail is given in Appendix E.

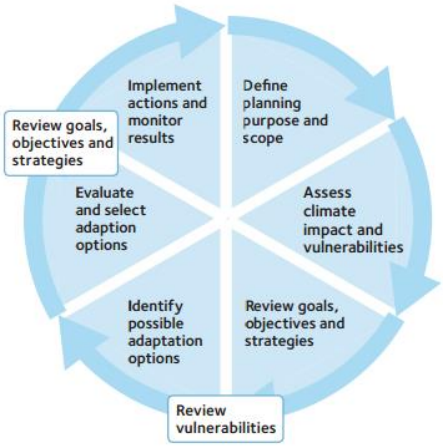


Figure 1 Climate-smart planning cycle

8.5.2 The uncertainty about the impacts of climate change should not be a reason to avoid preparing for it. However, we need climate adaptation responses that are robust, informed and flexible. To help develop adaptation planning in the Broads we are suggesting using a 'climate-smart' approach.

8.5.3 The long-term aim of climate-smart planning is to sustain the environment and the multiple benefits it provides for people. Adaptive actions should also seek to reduce greenhouse gas emissions and improve evidence and understanding of climate change processes and impacts.

8.5.4 We can test whether our plans will help us adapt to changes in weather, climate change and sea level rise by:

- Focusing on future possibilities rather than trying to retain the past
- Being flexible enough to cope with climate uncertainties
- Avoiding adaptation actions that actually makes (other) things worse – sometimes known as 'maladaptation'

8.5.5 Climate-smart planning can be done at an individual site level or a larger area level. It should help identify adaptive options within the proposed development or identify when there needs to be changes to the proposed goals because climate (flood) risks means the original intentions become unachievable – perhaps due to cost or technical issues. Climate-smart planning is therefore a repeating cycle.

8.5.6 An increased risk of flooding (from a rising sea level and more extreme rainfall events) is probably the greatest changing risk but consideration of all extreme events, periods of increased temperature and more cloud free days could all have impacts. Warmer weather and less days of frost could be opportunities that might help a development and could be easily adapted to. A simple table of likely risks and some initial thinking about adaptation options can be found in the Full and Summary Broads Climate Adaptation Plans[53].

[53] Climate Change Adaptation Report http://www.broads-authority.gov.uk/__data/assets/pdf_file/0005/709160/Climate-Adaptation-Plan-Report.pdf

9. Links to useful websites

Finding out about flood risk

The EA website shows flood risk in the area:
https://flood-map-for-planning.service.gov.uk/

Long term flood risk assessment for locations in England can be found here:
https://flood-warning-information.service.gov.uk./long-term-flood-risk

Government Guidance

Government Guidance can be found here:
http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/

Flood Risk Assessment

Flood risk assessment for planning applications. Find out when you need to do a flood risk assessment as part of your planning application, how to do one and how it's processed.
https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications

Framework and Guidance for Assessing and Managing Flood Risk for New Development – Full Documentation and Tools. EA
http://sciencesearch.defra.gov.uk/Document.aspx?Document=FD2320_3364_TRP.pdf

Surface Water Management Plans

Some areas of Norfolk and Suffolk have their own Surface Water Management Plans. Go here to have a look:
https://www.norfolk.gov.uk/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/flood-and-water-management-policies/surface-water-management-plans and
http://www.greensuffolk.org/flooding/surface-water-management-plans/

Preparing for flooding

https://www.gov.uk/prepare-for-flooding

Protecting property

SIX STEPS TO PROPERTY LEVEL FLOOD PROTECTION. Guidance for property owners.
https://www.bre.co.uk/filelibrary/pdf/projects/flooding/Property_owners_booklet_v2_web_(2).pdf

Homeowners Guide to Flood resilience - A Living Document
http://www.knowyourfloodrisk.co.uk/sites/default/files/FloodGuide_ForHomeowners.pdf

THE PROPERTY FLOOD RESILIENCE ACTION PLAN. An action plan to enable better uptake of resilience measures for properties at high flood risk.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/551615/flood-resilience-bonfield-action-plan-2016.pdf

Flood Advice for Businesses.

http://www.knowyourfloodrisk.co.uk/sites/default/files/FloodGuide_ForBusinesses.pdf

Would your business stay afloat? A guide to preparing your business for flooding.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/410606/LIT_5284.pdf

Flooding minimising the risk. Flood plan guidance for communities and groups. Practical advice to help you create a flood plan.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/292939/LIT_5286_b9ff43.pdf

Combined resistance and resilience measures.
http://www.knowyourfloodrisk.co.uk/sites/default/files/FloodGuide_ForResilience.pdf

Blue Pages. This is a directory of property flood products and services put together to advise and inform you of what's available to help reduce the risk of flooding to your home or business.
http://www.bluepages.org.uk/

After a flood

Flood Recovery Guide.
http://www.knowyourfloodrisk.co.uk/sites/default/files/FloodRecoveryGuide_Interactive.pdf

SuDS

Non-statutory technical standards for the design, maintenance and operation of sustainable drainage systems.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/415773/sustainable-drainage-technical-standards.pdf

SuDS manual produced by CIRIA .
https://www.ciria.org/Memberships/The_SuDs_Manual_C753_Chapters.aspx
With regards to adopting SuDS, Anglian Water's current standards for SuDs adoption are available to view at the following address: http://www.anglianwater.co.uk/developers/suds.aspx

Permits

Further information on Flood Risk Activity permits is available from: https://www.gov.uk/guidance/flood-risk-activities-environmental-permits

Flood Warnings

Flood warnings currently issued for England and Wales:
https://flood-warning-information.service.gov.uk.

Sign up for flood warnings (England and Wales)
https://www.gov.uk/sign-up-for-flood-warnings

Norfolk Resilience Forum

http://www.norfolkprepared.gov.uk/local-risks/plans/

10.Summary and Conclusions

The purpose of this SPD is to increase awareness of the nature of flood risk in the Broads area, give advice to developers and others about the Authority's approach to the issue of development and flood risk, and stress the need to maintain a high standard of design in new waterside development.

This SPD replaces the 2017 SPD

The SPD seeks to clarify and expand on Policies SP2 and DM5 of the Local Plan for the Broads. It sets out a local approach to some national guidance. Furthermore, there are templates and checklists relating to small scale Flood Risk Assessments and Flood Response Plans.

Appendix A: Glossary and Abbreviations

Catchment

The area contributing surface water flow to a point on a drainage or river system. It can be divided into sub-catchments.

Climate Change

Climate refers to the weather over a period of time (at least a decade and probably nearer 30 years) and takes account of natural variability. Climate change refers to the current more rapid change of conditions that is being driven by increased greenhouse gas emission primarily from fossil fuels altering the gas levels in the atmosphere. This in turn alters the main weather processes and creates conditions that are unlike normal patterns.

Environment Agency

Are a UK non-departmental public body of DEFRA with the principle aim of protecting and enhancing the environment to contribute towards the objective of achieving sustainable development. The Agency has principle responsibility for river, tidal and coastal flooding.

Exception Test

If, following application of the Sequential Test (see below), it is not possible for proposed development to be located in zones of lower probability of flooding, the Exception Test should be applied. For the Exception Test to be passed:

- it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a Strategic Flood Risk Assessment where one has been prepared; and
- a site-specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

Flood Resilience

Measures that minimise water ingress and promote fast drying and easy cleaning, to prevent any permanent damage.

Flood Resistance

Measures to prevent flood water entering a building or damaging its fabric. This has the same meaning as flood proof.

Flood Risk

The level of flood risk is the product of the frequency or likelihood of the flood events and their consequences (such as loss, damage, harm, distress and disruption).

Flood Zone

Flood Zones show the probability of flooding, ignoring the presence of existing defences

Zone 1: Low Probability of flooding

Land having a less than 1 in 1,000 (0.1%) annual probability of river or sea flooding.

Zone 2: Medium Probability of flooding

Land having between a 1 in 100 (1%) and 1 in 1,000 (0.1%) annual probability of river flooding; or
Land having between a 1 in 200 (0.5%) and 1 in 1,000 (0.1%) annual probability of sea/tidal flooding.

Zone 3a: High Probability

Land having a 1 in 100 (1%) or greater annual probability of river flooding; or

Land having a 1 in 200 (0.5%) or greater annual probability of sea/tidal flooding.

Zone 3b: The Functional Floodplain

This zone comprises land where water has to flow or be stored in times of flood, during a flood event with an annual probability of 1 in 20 (5%) or greater.

Floodplain

Land adjacent to a watercourse that is subject to repeated flooding under natural conditions.

Flood Risk Assessment (FRA)

An assessment of the risk of flooding, particularly in relation to residential, commercial and industrial land use. FRAs are required to be completed according to the NPPF alongside planning applications in areas that are known to be at risk of flooding.

Fluvial flooding

Flooding from a watercourse (brooks, streams, rivers and lakes etc) that occurs when the water features cannot cope with the amount of water draining into them, from the land. When rainfall is heavy and / or prolonged, a large amount of run-off reaches the rivers and eventually causes them to overtop their banks.

Functional Floodplain

Land where water has to flow or be stored in times of flood.

Lead Local Flood Authority (LLFA)

Established through the Flood and Water Management Act as the body responsible for managing local flood risk from surface runoff, ordinary watercourses and groundwater.

Main River

Main rivers are usually larger rivers and streams. In England, the Environment Agency decides which watercourses are main rivers. It consults with other risk management authorities and the public before making these decisions. The main river map is then updated to reflect these changes.

Minor Development - flood risk

- minor non-residential extensions: industrial/commercial/leisure etc. extensions with a footprint less than 250 square metres.
- alterations: development that does not increase the size of buildings eg alterations to external appearance.
- householder development: For example; sheds, garages, games rooms etc. within the curtilage of the existing dwelling, in addition to physical extensions to the existing dwelling itself. This definition excludes any proposed development that would create a separate dwelling within the curtilage of the existing dwelling e.g. subdivision of houses into flats.

Material Consideration

A legal term describing a matter or subject which is relevant (material) for a local authority to consider when using its powers under planning law in dealing with a planning application.

Ordinary Watercourse

An 'ordinary watercourse' is a watercourse that is not part of a main river and includes rivers, streams, ditches, drains, cuts, culverts, dikes, sluices, sewers (other than public sewers within the meaning of the Water Industry Act 1991) and passages, through which water flows.

Pluvial Flooding

Flooding that result from rainfall generated overland flow before the runoff enters any watercourse or sewer. It is usually associated with high intensity rainfall events. Also referred to as surface water flooding.

Residual Flood Risk[54]

The remaining flood risk after risk reduction measures have been considered. Or the risk following the failure of defence/flood protection measures.

River Morphology

The shape of the river channel, including the form of the bed and banks.

Run-off

Water flow over the ground surface to the drainage system. This occurs if the ground is impermeable, is saturated or if rainfall is particularly intense.

Section 106 (Town and Country Planning Act 1990)

A section within the Town and Country Planning Act 1990 that allows a planning obligation to a local planning authority to be legally binding.

Sequential Test

The NPPF advocates that planners use a sequential test when considering land allocations for development to avoid flood risk where possible. The Sequential Test aims to steer development to Flood Zone 1, which is an area at low risk of flooding. Where it is not possible to locate development in such locations sites in Flood Zone 2 will be considered. Only where it is not possible to locate development within Flood Zones 1 and 2 will development in Flood Zone 3 be considered.

SUDS (Sustainable Drainage Systems)

A sequence of management practices and control structures designed to drain surface water in a more sustainable fashion than some conventional techniques. Surface water management - The management of runoff in stages as it drains from a site.

Watercourse

A term including all rivers, streams ditches drains cuts culverts dykes sluices and passages through which water flows.

Water Framework Directive

The Water Framework Directive (WFD) is legislation to protect and improve water resources. It requires an integrated approach to the management of water; including rivers, streams, lakes, estuaries and coastal waters, as well as surface water and groundwater.

[54] http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/developers-to-demonstrate-that-development-will-be-safe-to-satisfy-the-second-part-of-the-exception-test/what-is-residual-risk/

Appendix B: The Broads Planning Policy Context

National Planning Policy

The National Planning Policy Framework sets out government's planning policies for England and how these are expected to be applied. In relation to flood risk, paragraph 155 generally summarises the approach taken to flood risk:

> 155. Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.

The National Planning Practice Guidance is an on-line resource that elaborates and gives more detail of policies in the NPPF. For example, the NPPG has vulnerability classification tables as well as information on what a Strategic Flood Risk Assessment should address.

The NPPF and NPPG have replaced PPS25 in relation to the Government's planning policy on flood risk and flooding.

The NPPG pages on flood risk and coastal change can be found here:
http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/

The NPPF can be found here:
https://www.gov.uk/government/publications/national-planning-policy-framework--2

Neighbourhood Plans

At the time of writing, Acle, Brundall, Salhouse, Strumpshaw and Wroxham Neighbourhood Plans have been adopted. The Neighbourhood Plans do not include an additional policy on flood risk, but where flood risk has the potential to be a consideration on a particular site, the policy emphasises this and directs towards Broads Authority and national flood risk policy.

The New Broads Local Plan

The Core Strategy, Development Management DPD and Sites Specific Local Plan have been replaced in their entirety by the Local Plan for the Broads which was adopted May 2019. The flood risk policies of the new Local Plan are included at chapter 3.

Appendix C: Sustainable Appraisal Objectives and Decision-Making Criteria

The NPPF at paragraph 160 says that for the Exception Test to be passed *'it should be demonstrated that: a) the development would provide wider sustainability benefits to the community that outweigh the flood risk'*. To assess this, the Authority will use the most up to date Local Plan Sustainability Appraisal Objectives. Currently, these are the Sustainability Objectives used to assess the new Local Plan for the Broads and are listed below with decision making criteria.

SA Objective	**Decision making criteria/prompting questions.** Positive impact: + or ++ Not appropriate: N/A Neutral: 0 Negative impact: - or - - Uncertain/depends on implementation: ?

ENV1: To reduce the adverse effects of traffic (on roads and water).	• How does the policy/allocation affect:
	  ○ Walking, cycling, public transport?
	  ○ Air quality?
	  ○ Amenity?
	  ○ Single occupancy car use?
	  ○ Use of waterways?
	  ○ Access to special qualities of the Broads by sustainable transport modes?
	  ○ The net impact of transport infrastructure such as road signage, lighting, conspicuous structures and parking?
	• What is the resulting impact of traffic on
	  ○ Heritage?
	  ○ Landscape?
	  ○ People?
	  ○ Water?
	• Is the allocation within walking distance[55] of key services[56]?
	• Will routes be
	  ○ functional and accessible for all?
	  ○ safe and attractive public spaces?
	• Does it consider the needs of the most vulnerable users first: pedestrians, then cyclists, then public transport users, specialist vehicles like ambulances and finally other motor vehicles?

ENV2: To improve **w**ater quality and use water efficiently.	• How does the policy/allocation affect
	  ○ Water quality?
	  ○ Water quantity?
	  ○ Surface water run off? Does it reduce run-off rates? Does it increase water absorption / management?
	  ○ Wastewater?
	  ○ Drainage?
	  ○ Pathways for pollutants?

ENV3: To protect and enhance biodiversity and geodiversity.	• How does the policy/allocation affect:
	  ○ The ability to retain and maintain soil carbon?
	  ○ Geological interests?
	  ○ The potential for managed accessible geological feature exposures?
	  ○ County Wildlife Sites?
	  ○ Local and National Nature Reserves?
	  ○ Ramsar Sites?
	  ○ SPAs, SACs?
	  ○ SSSIs?
	  ○ BAP Priority Species and habitats?
	  ○ Habitat connectivity and Ecological Networks?

[55] Manual For Streets says this is 10 minutes/800m

[56] Using the Greater Norwich Joint Core Strategy definition for Key Services: primary school; secondary school; convenience shop; village hall; primary health care; library; public transport

SA Objective	Decision making criteria/prompting questions. Positive impact: + or ++ Not appropriate: N/A Neutral: 0 Negative impact: - or - - Uncertain/depends on implementation: ?
	○ Trees and hedgerows? ○ Waterbodies? ○ Green Infrastructure?
ENV4: To conserve and enhance the quality and local distinctiveness of landscapes and towns/villages.	• How does the policy/allocation affect: ○ The setting of the Broads? ○ The perception of the Broads? ○ The Landscape Character? ○ The special qualities of the Broads[57]? ○ Landscape features? ○ Peat? ○ Conservation Areas? ○ Designated and undesignated heritage assets? ○ The quality and local distinctiveness of the Broads towns/villages/buildings? ○ Open Space? ○ Green Infrastructure? ○ Harmful incremental change?
ENV5: To adapt to and mitigate against the impacts of climate change.	• How does the policy/allocation affect: ○ Emissions of greenhouse gases? ○ Single occupancy car use? ○ HGV/delivery movements? ○ Public transport? ○ Cycling/walking? ○ Boat emissions? ○ The ability of communities to adapt? ○ The ability of habitats and species to adapt? ○ Peat? ○ Energy use? ○ Open Space? ○ Green Infrastructure?
ENV6: To avoid, reduce and manage flood risk.	• Is flood risk avoided? • Is flood risk managed/mitigated? • How does the policy/allocation affect flooding: ○ On site? ○ In the vicinity? ○ Elsewhere? • Is the allocation in the area of highest risk of flooding? • Is the allocation appropriate to the flood risk on site? • Does the policy consider different sources of flooding[58]? • What is the impact of climate change on flood risk? • Can flood risk be reduced? • How vulnerable is the proposed land use[59]? • Does it reduce run-off rates? • Does it increase water absorption / management?
ENV7: To manage resources sustainably through the effective use of	• Is the allocation on: ○ Brownfield Land? ○ Greenfield Land? • Does the allocation use land effectively?

[57] Taken from the Climate Change Adaptation Plan: Open water in lakes and rivers, Breydon Water (estuary), Fens / reed beds, Grazing marshes and ditches, Wet woodlands, Historic buildings, especially mills, Boating and the riverside economy, Farmland (including rights of way), Open landscapes, big skies and tranquillity and The coast.

[58] Including from rivers and the sea, directly from rainfall on the ground surface and rising groundwater, overwhelmed sewers and drainage systems, and from reservoirs, canals and lakes and other artificial sources.

[59] http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/flood-zone-and-flood-risk-tables/table-2-flood-risk-vulnerability-classification/

SA Objective	Decision making criteria/prompting questions. Positive impact: + or ++ Not appropriate: N/A Neutral: 0 Negative impact: - or - - Uncertain/depends on implementation: ?
land, energy and materials.	• Does the policy/allocation affect energy efficiency? • Are there any safeguarded mineral sites? • Will it prevent the sterilisation of known or suspected mineral resources by development? • Does the policy consider origin of resource/where resource derived from?
ENV8: To minimise the production and impacts of waste through reducing what is wasted, re-using and recycling what is left.	• Does the policy help reduce waste, reuse waste or recycle/compost?
ENV9: To conserve and where appropriate enhance the cultural heritage and archaeological importance of the area.	• Does the policy/allocation affect: o The quality and local distinctiveness of the Broads towns/villages/buildings? o Designated and undesignated heritage assets? o Conservation Areas? o Archaeology? o Local culture and traditions? o The wider cultural heritage of the broads? o The history, traditions, customs and the spaces and places these rely upon or relate to?
ENV10: To achieve the highest quality of design that is innovative, imaginable, and sustainable and reflects local distinctiveness.	• Does the policy/allocation o Appreciate what is special about the site? o Relate to the site's setting in the landscape/townscape? o Appreciate the rich cultural heritage of the area? • Are these issues considered? o local character (including landscape setting) o safe, connected and efficient streets o a network of greenspaces (including parks) and public places o crime prevention o security and lighting measures o access and inclusion o efficient use of natural resources o cohesive & vibrant neighbourhoods o layout – the way in which buildings and spaces relate to each other o form – the shape of buildings o scale – the size of buildings o detailing – the important smaller elements of building and spaces o materials – what a building is made from o sensitive design of road infrastructure? (E.g. reduced signage road markings, use of local materials and alternative traffic calming methods).
ENV11: To improve air quality and minimise noise, vibration and light pollution.	• Does the policy/allocation affect: o Air quality? o Noise production? o Vibration? o Light pollution/dark skies? • How does the policy/allocation relate to Air Quality Management Areas? • Would the allocation make additional noise or be sensitive to the prevailing acoustic environment? • Does an existing lighting installation make the proposed location for a development unsuitable? • Have cumulative impacts of development/change been considered? • Does the policy/allocation affect the tranquillity of the Broads?

SA Objective	Decision making criteria/prompting questions. Positive impact: + or ++ Not appropriate: N/A Neutral: 0 Negative impact: - or - - Uncertain/depends on implementation: ?

ENV12: To increase the proportion of energy generated through renewable/low carbon processes without unacceptable adverse impacts to/on the Broads landscape	• Does the policy/allocation affect
	  ○ Renewable/low carbon energy generation?
	  ○ Renewable/low carbon energy transmission?
	  ○ The setting of the Broads?
	  ○ The perception of the Broads?
	  ○ The Landscape Character?
	  ○ The special qualities of the Broads?
	• Have Cumulative impacts of renewable/low carbon energy generation been considered?

ENV13: To reduce vulnerability to coastal change.	• Does the policy/allocation affect risk to people or property? • Does the policy affect opportunities for future coastal management? • Does the policy/allocation restrict choice for managing the coast in the future? • Does the policy/allocation consider the effect of or potential for damage (e.g. to a structure)?

SCO1: To improve the health of the population and promote a healthy lifestyle.	• Does the policy/allocation:
	  ○ Affect health?
	  ○ Affect wellbeing?
	  ○ Promote active lifestyles?
	  ○ Promote active travel?
	• Does the policy/allocation include:
	  ○ Publicly accessible open space?
	  ○ Sports facilities?
	  ○ Health infrastructure?
	• Does the policy enable active use of water space?

SOC2: To reduce poverty, inequality and social exclusion.	• Does the policy/allocation affect any of these domains?
	  ○ Income
	  ○ Employment
	  ○ Health and Disability
	  ○ Education, Skills and Training
	  ○ Barriers to Housing and Services
	  ○ Crime
	  ○ Living Environment
	• Does the policy/allocation affect inclusive communities?
	• Does it affect community cohesion?
	• Does it affect quality of life?
	• Does the policy avoid potential for inequality or serve to positively address existing identified inequalities through its implementation?

SOC3: To improve education and skills including those related to local traditional industries.	• Is the allocation/policy for an education/skills establishment? • Does the policy/allocation enable improved understanding of the special qualities, pressures and management of the Broads to all? • Does it relate to Traditional Broads industries? • Will it facilitate improved access to vocational training, education and skills for all, including young people? • Will it facilitate opportunity for delivery and uptake of traditional skills training which may benefit wider Broads purposes?

SOC4: To enable suitable stock of housing meeting local needs including affordability.	• Does the policy/allocation affect:
	  ○ Housing?
	  ○ Affordable Housing?
	  ○ Gypsy and Traveller accommodation?
	  ○ Residential moorings/boats used as residences?

SA Objective	Decision making criteria/prompting questions. Positive impact: + or ++ Not appropriate: N/A Neutral: 0 Negative impact: - or - - Uncertain/depends on implementation: ?

SOC5: To maximise opportunities for new/ additional employment	• Does the policy/allocation affect:
	  ○ Employment land uses?
	  ○ Numbers of jobs?
	  ○ Tourism?
	  ○ Does it relate to Traditional Broads industries?

SOC6a: To improve the quality, range and accessibility of community services and facilities.	• Is the allocation/policy for a key service? • Will the policy/allocation affect public transport, walking and cycling? • Does the policy/allocation relate to Local Green Space? • Will routes be functional and accessible for all? • Will routes be safe and attractive public spaces? • Does it consider the needs of the most vulnerable users first: pedestrians, then cyclists, then public transport users, specialist vehicles like ambulances and finally other motor vehicles?
SOC6b: To ensure new development is sustainability located with good access by means other than a private car to a range of community services and facilities.	• Is the allocation/policy within walking distance (800m) from Key Services (primary school; secondary school; convenience shop; village hall; primary health care; library; public transport)? • Is the allocation within a settlement boundary? • Will it support the retention of key facilities and services ensuring that local needs are met locally wherever possible or alternative sustainable access is provided? • Will the policy/allocation affect public transport, walking and cycling? • Will routes be functional and accessible for all? • Will routes be safe and attractive public spaces? • Does it consider the needs of the most vulnerable users first: pedestrians, then cyclists, then public transport users, specialist vehicles like ambulances and finally other motor vehicles?

SOC7: To build community identity, improve social welfare and reduce crime and anti-social activity.	• Does the policy/allocation relate to:
	  ○ Designing out crime?
	  ○ Designing in community safety?
	  ○ An inclusive environment?
	  ○ Robust structure and identity?
	  ○ Interaction with other uses positively?
	  ○ Avoiding opportunities for conflict?

ECO1: To support a flourishing and sustainable economy	• Will it provide the spaces and infrastructure to support self-employment opportunities and business start-up? • Will it support existing business viability and local employment growth?

ECO2: To ensure the economy actively contributes to social and environmental well-being.	• How does the policy/allocation affect 'Social Capital'?
	  ○ Skills development
	  ○ Community cohesion
	  ○ Amenity
	  ○ Job provision
	  ○ Quality of life
	• How does it affect 'Low Carbon'?
	  ○ Innovation
	  ○ Resource efficiency
	• How does it affect 'Natural Capital'?
	  ○ Landscape
	  ○ Biodiversity

ECO3: To improve economic performance in rural areas.	• Does it contribute to a thriving rural community? • Does it contribute to a prosperous rural community?
ECO4: To offer opportunities for	• Does the policy/allocation affect: ○ Sustainable tourism.

SA Objective	Decision making criteria/prompting questions. Positive impact: + or ++ Not appropriate: N/A Neutral: 0 Negative impact: - or - - Uncertain/depends on implementation: ?
Tourism and recreation in a way that helps the economy, society and the environment.	○ Responsible tourism. • Does it: ○ Promote enjoyment and understanding of the Broads? ○ Raise awareness of the Broads as a special destination? ○ Drive up the quality of the visitor experience? ○ Strengthen tourism performance across the whole Broads area? ○ Maintain the Broads' position as a premier inland boating destination in the UK? ○ Respect the sensitive environment of the Broads? ○ Provide the right conditions for successful tourism businesses? ○ Will it maximise benefits and minimise impacts from visitors to communities?

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Appendix D: Flood Response Plan Guidance and Structure

Broads Authority

Flood Response Plan Guidance and Suggested Structure

Chapter 1: Flood Response Plan Guidance

1. Introduction

This guidance has been produced to assist with the preparation of Flood Response Plans (FRP). FRPs ~~should~~ need to be provided as part of a Flood Risk Assessment where this is necessary to accompany a planning~~. application or, if not submitted with an application, are often required by planning condition if permission is issued.~~

All residents and businesses in flood risk areas are encouraged to prepare and maintain a Flood Response Plan so they are prepared in the event of a flood.

Floods present a danger to health and life and can damage property. It is important to be prepared in advance to limit the dangers and damage. At times of flooding, emergency and other local services will be under significant pressure. The better prepared you are, the less pressure the services wil be under so they can attend to the most vulnerable in the community. Even if you are not physically injured in a flood, the consequences can have an emotional impact. The shock and disruption and damage to, or loss of, property and possessions can have big impacts. Being proactive and having a Plan you are familiar with in advance can help you take prompt, effective action when warnings are issued and result in an easy and efficient recovery.

Every effort has been made to ensure this guidance is accurate and comprehensive as at the date it was prepared. However, it is the responsibility of the developer to ensure that any additional risks relevant to a particular property development are fully considered. The Broads Authority will not accept responsibility for any errors, omissions or misleading statements in this guidance or for any loss, damage or inconvenience caused as a result of relying on this guidance.

You will need to adapt the template to reflect the specifics of your site; such as the size and the number of people who use and what they use it for.

According to a new guide produced by ADEPT and the Environment Agency in September 2019[60], flood response plans should address the following:

- characterise and quantify the flood risk
- list relevant flood warnings and estimate the likely lead-time available
- detail who is at risk – including vulnerable people and transient users
- explain how the EP will be triggered, by who and when
- define any areas of responsibility for those participating in the EP

[60] Flood risk emergency plans for new development: https://www.adeptnet.org.uk/floodriskemergencyplan

- describe what actions are required by the people in the development
- set out the type and performance of any flood resistance or resilience measures to be installed prior to a flood
- establish safe access and escape routes to a safe location
- outline the evacuation procedure, place of refuge and related equipment needed to serve occupants for the required duration
- detail what emergency service infrastructure and/or contributions are proposed
- establish procedures for implementing, monitoring and maintaining the plan throughout the lifetime of the development

2. Flood Response Plans - considerations

2.1 Flood Warnings

The Environment Agency is responsible for providing flood warnings to the public. Anyone can register with the Environment Agency's flood warning service 'Floodline Warnings Direct[61]'. The Floodline Warnings Direct (FWD) service provides information about the current and future flooding danger. If flooding may happen, the Environment Agency will issue a flood warning to registered users by telephoning a pre-arranged number with a recorded message or by sending a text or email.

The 3 flood warning codes are shown below. You can go to the Flood Information Service[62] to see what warnings are in place around the Country.

Severe Flood Warning
Severe flooding. Danger to life.

Flood Warning
Flooding is expected.
Immediate action required

Flood Alert
Flooding is possible.
Be prepared

2.2 Liaise with neighbours

When drafting a FRP you are strongly encouraged to liaise with the owners/occupiers of any neighbouring and nearby sites. That way you can coordinate procedures and minimise confusion during an incident.

2.3 Evacuating

FRPs should reflect the fact that people should evacuate ***prior*** to a flood occurring. Once flooding has ***inundated*** an area, staying put rather than evacuating, could be the safer option. This is because of the dangers of moving in flooded areas such as lifted manhole covers and contaminated water. It is important to note that in the Broads area, flood waters may take a longer time to subside which can cause difficulties for those taking refuge within buildings. Your FRP needs to reflect the local circumstances.

Ensure that the FRP deals with the potential difficulties involved in immediate evacuation which may need to be carried out in inclement weather. The FRP needs to address how people will reach local authority designated rest centres.

2.4 People requiring extra assistance

Informing appropriate response organisations, such as Social Services, about any elderly or vulnerable people who may require extra assistance in the event of an emergency such as a flood.

Particular attention should be given to the communication of warnings to vulnerable people including those with impaired hearing or sight and those with restricted mobility.

3. Other sources of useful information

[61] Register With Floodline Warnings Direct https://www.gov.uk/sign-up-for-flood-warnings
[62] https://flood-warning-information.service.gov.uk/

Emergencies web pages of the County and District Councils contain useful information which you may wish to consult/refer to in your FRP:

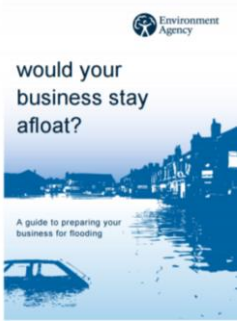
- Norfolk County Council:
  http://www.norfolk.gov.uk/safety_emergencies_and_accidents/index.htm
- Suffolk County Council and Waveney District Council:
  https://www.suffolk.gov.uk/emergency-and-rescue/
- South Norfolk Council:
  http://www.south-norfolk.gov.uk/environment/1507.asp
- Broadland Council:
  http://www.broadland.gov.uk/environment/316.asp
- Norwich Council:
  https://www.norwich.gov.uk/info/20226/emergency_planning
- North Norfolk Council:
  https://www.north-norfolk.gov.uk/tasks/emergency-planning/
- Great Yarmouth Council:
  http://www.great-yarmouth.gov.uk/article/2512/Emergency-planning
- Met Office website.
  http://www.metoffice.gov.uk/public/weather/forecast/?tab=map
- National Flood Forum
  The NFF is an independent body that supports flood preparedness and flood recovery. It has advice about flood protection products and clean up processes. It also covers other areas of post flooding support. http://www.floodforum.org.uk/
- Flood risk emergency plans for new development
  https://www.adeptnet.org.uk/floodriskemergencyplan

4. Your Flood Response Plan

Flood Response Plans may be different for different buildings. This would reflect the time of day someone might be there, how many people are in or around the building and what the building is used for.

- **Businesses** can follow the Environment Agency's guide 'Would your business stay afloat? A guide to preparing your business for flooding'[63].
- **Community organisations** can follow the Environment Agency's guide 'Flooding - minimising the risk. Flood plan guidance for communities and groups. Practical advice to help you create a flood plan'[64].

[63] would your business stay afloat?
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/410606/LIT_5284.pdf
[64] Flooding - minimising the risk
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/292939/LIT_5286_b9ff43.pdf



The following suggested structure is for the production of Plans for residential, holiday and other development which includes overnight accommodation.

Chapter 2: Suggested structure for your Flood Response Plan

1. Introduction

- Describe the site fully and accurately including where it is and what it is used for:
  - State the name and address of the property.
  - Attach a site plan to identify the location and size of the site.
  - Identify what type of development it is (a residential dwelling, holiday let, second home, etc.) and the size (number of storeys, number of bedrooms, any outbuildings, etc).
  - Identify where the access into the site and into the building is – will this be safe at times of flood? If not, are there other safe accesses that can be used?
  - Identify where people could safely be rescued from in an emergency if a flood occurs before the building is evacuated (usable safe refuge).
- Identify potential sources of floodwater and what to look out for.
- What timescale are people likely to have to respond to flood warnings?
- State who will be responsible for implementing the Flood Response Plan and who will review it and how regularly.
- State the date the Plan was adopted and refer to timescales for review.
- State which flood zone the site is in (as identified in a Flood Risk Assessment or on the Environment Agency's website[65]). A flood zone identifies how likely the site is to flood.
- Identify the scope of the plan – the site, building, property and people

Zone 1: Low Probability of flooding
Land having a less than 1 in 1,000 (0.1%) annual probability of river or sea flooding.

Zone 2: Medium Probability of flooding
Land having between a 1 in 100 (1%) and 1 in 1,000 (0.1%) annual probability of river flooding; or Land having between a 1 in 200 (0.5%) and 1 in 1,000 (0.1%) annual probability of sea/tidal flooding.

Zone 3a: High Probability

[65] Long term flood risk assessment for locations in England
http://watermaps.environment-agency.gov.uk/wiyby/wiyby.aspx?topic=floodmap#x=357683&y=355134&scale=2

Land having a 1 in 100 (1%) or greater annual probability of river flooding; or
Land having a 1 in 200 (0.5%) or greater annual probability of sea/tidal flooding.

Zone 3b: The Functional Floodplain
This zone comprises land where water has to flow or be stored in times of flood, during a flood event with an annual probability of 1 in 20 (5%) or greater.

2. Warning arrangements

- Register the site with the Environment Agency's Floodline Warnings Direct service.
- Who receives these warnings and how? What if they are away? What will they do when they receive a warning?
- Where will a copy of this Plan be kept? How will all residents/tenants know where to find it?
- How will response organisations (like the police and fire service) be made aware of elderly or vulnerable people who may require extra assistance in the event of an emergency such as a flood?
- If warnings are received outside of normal working hours, how will you tell the staff/visitors before they leave for work? Who will inspect the premises before letting them arrive?

3. Instructions to residents/tenants in the event of a flood warning

The plan needs to set out clear instructions and actions for each stage of warning. This needs to form an easy-to-refer-to plan that can be followed in an emergency, providing all the necessary information and identifying who is responsible for doing what. It needs to identify at which stage the property should be evacuated, how and where to. A plan showing a safe exit route needs to be included.

If refuge is to be taken within the property, the plan needs to identify the circumstances when this should take place, where there is safe refuge and where any resources such as a flood kit (see below) will be found. Single storey properties may not have a place of safe refuge, so evacuating at an early stage to a safe place is more important.

The following table shows the stages of flood warning. What will you do at each stage?

 **Flood Alert** Flooding is possible. Be prepared.	• How will you respond to this alert? • What will you need to do to be prepared? • Is any other action necessary? • Who do you need to tell there is an alert in place? What will they need to do?
 **Flood Warning** Flooding is expected. Immediate action required.	• How will you respond to this warning? • What is the immediate action you need to take? • Who do you need to tell there is a warning in place? What will they need to do?
	• How will you respond to this severe warning? • What action(s) do you need to take?

 **Severe Flood Warning** Severe flooding. Danger to life.	• Who do you need to tell there is a severe warning in place? What will they need to do?
Warnings no longer in force - no flooding occurred	• How will you know when warnings are no longer in force? • Who do you need to tell the danger has passed? • What action is necessary?
Warnings no longer in force - flooding has occurred	• How will you know when warnings are no longer in force? • Who do you need to tell the danger has passed? • What action is necessary? • Re-occupation of flooded premises should only be carried out following consultation with the emergency services and appropriate authorities. This is because of any residual hazards. Identify who needs to be consulted, when and how.

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Chapter 3: Important Considerations for your Flood Response Plan

The following considerations may be relevant and important to your Flood Response Plan. They could help reduce the impact of a flood on people and property. A comprehensive and effective Plan will identify all actions that would be necessary before, during and after a flood event.

Be Proactive

- Do not wait for a flood – be proactive and consider what can be permanently moved to a safer higher level. Produce a checklist of remaining items that must be moved if there is a flood event. E.g. important documents, IT or vehicles.
- Check your insurance policy covers flooding.
- Look at the best way of stopping floodwater entering your property. There are a range of flood protection products on the market, a directory of these is available from the National Flood Forum at www.bluepages.org.uk
- Find out where you can get gel bags if you are in a fresh water area.
- Identify who can help you and who you can help.
- Understand the different flood warning levels.
- Make sure you keep an up to date contact list for all staff/residents
- Produce a Business Continuity Plan – part could relate to how to continue at times of flood.

Familiarisation

- Emphasise the need for all who work/live at your site to be familiar and comfortable with the Plan and its contents. You may wish to hold staff awareness briefings or add flood risk to the staff induction.
- Consider practicing your response to warnings and how to evacuate.
- Become familiar with the safest route from the property to any local evacuation centre. Get to know your local volunteer Emergency Co-ordinator. Ask the Emergency Planning Team at your local District Council for details.

Actions to consider (to identify at each stage of warning)

The plan should identify which actions will be undertaken when a flood alert is issued, which will be done when a flood warning is issued, etc.

- Check at what time the flooding is expected. If the site is vulnerable to tidal flooding, there can be 6 to 12-hour warning.
- Stay calm and tune in to BBC Radio Norfolk/Suffolk for weather forecasts and local information.
- Fasten your outer doors and fix any flood protection devices.
- Shut off your gas/electric supplies – show on a plan where this is as well as give details of how to do this. Do not touch electrics if already wet.
- Fill bath and buckets with water in case supply is shut off. Drinking water should be stored in clean containers.
- Move any important documents, valuables and sentimental items above the flood level or protect them by placing them in sealed plastic bags.
- Move furniture and electrical items if possible. Roll up carpets and rugs. Remove curtains, or hang them over rods.
- Consider moving vehicles to higher ground and make safe or secure any large or loose items outside that could cause damage if moved by floodwater. Pay particular attention to how boats

are moored – if too tightly, they could list. If too loose they could cast adrift or float onto the landside of the quay heading.

- Ensure any hazardous materials are safe and secure and do not create any additional risks by coming in contact with flood waters
- Tie or anchor down equipment that could potentially float and cause an additional hazard (e.g. containers used for storage).
- Tell your neighbours about the warning, especially if they are elderly or vulnerable. Consider coordinating plans with neighbours/neighbouring organisations.
- If advised to do so, move to an identified Evacuation Centre or other safe place (such as a friend or relative). If it is not possible to evacuate, move to a safe refuge. If the property is single storey, move to an identified refuge place with nearby neighbours with safe, higher level accommodation.
- Take essential medicines, infant care items, personal documents/identification for each member of the family when you evacuate.
- Take food, clothes, blankets, candles/torches with you when you evacuate.
- Remember any pets (and their needs such as food, cages and litter trays).
- Notify visitors to the site that it is not safe.
- How will you shut down the site in an orderly fashion so people and assets can be protected?

Flood Kit

The flood kit should include essential items, be stored in the refuge area and be as easily accessible as possible. The flood kit could contain:

- Copies of insurance documents
- A torch with spare batteries (or a wind-up torch)
- Portable radio (wind-up preferred or store spare batteries)
- Warm, waterproof clothing.
- Rubber gloves
- Wellingtons
- Blankets
- First aid kit with essential prescription medication/repeat prescription form
- Bottled water and high energy food snacks (non-perishable and check use by dates)
- A copy of the Flood response plan
- List of important contact numbers
- Wash kit and essential toiletries (such as toilet paper and wet wipes)
- Children's essentials (such as milk, baby food, sterilised bottles, wipes, nappies, nappy bags, clothing, comforter, teddy or favourite toy)
- Food and cages for pets
- Laminated copy of the emergency card from the FRP
- Plus, anything else you consider important.

Dangers of flood water

Include the dangers associated with flooding in your FEP. Do not assume that every flood event will be the same; just because flood water hasn't been deep or flowed fast in the past, it doesn't mean it won't in future. A brief guide is given below:

REMEMBER!

- **Don't walk through flowing water –** currents can be deceptive. Shallow and fast-moving water can knock you off your feet!
- **Don't swim through fast flowing water** – you may get swept away or struck by an object in the water.
- If you ***have*** to walk in standing water, **use a pole or stick** to ensure that you do not step into deep water, open manholes or ditches. Use the stick to 'feel' your way.
- **Don't drive through a flooded area**. You may not be able to see obstacles under the water or abrupt drop-offs. Even half a meter of flood water can carry a car away.
- **Avoid contact with water** as it may be contaminated with sewerage, chemicals, oil or other substances.

Re-occupation after a flood

Re-occupation of flooded premises should only be carried out following consultation with the emergency services and appropriate authorities. This is because of any residual hazards. A statement to this effect could usefully be included in the response plan.

When you can reoccupy, you shall need to:

- Safely throw away food that has been in contact with flood water – it could be contaminated.
- Open doors and windows to ventilate your property.
- Call your insurance company Emergency Helpline as soon as possible. Makes notes of what the insurers say and keep correspondence with the insurers.
- Keep a record of the flood damage (use photographs or videos).
- Commission immediate emergency pumping/repair work if necessary, to protect your property from further damage. Check that you can do this without your insurance company's approval.
- Keep receipts of work paid for.
- Where detailed or lengthy repairs needed, get advice. Your insurer or loss adjuster can give advice on reputable contractors/tradesmen. Always check references of tradesmen.
- Check with your insurer regarding cost of alternative accommodation, if you need to move out. Make sure the insurer knows where to contact you.

Cleaning up…

- Find out where you can get help to clean up. Look on the internet for suppliers of cleaning materials and equipment to dry out your property. As a guide, it can take a brick house one month per inch to dry out.
- Don't attempt to dry out photos or papers – place in a plastic bag and if possible store in a fridge
- The Citizens Advice Bureau may be able to help.
- **Don't think flooding will not happen again – restock supplies and review your plan!**

Advice and information

- List useful telephone numbers and website - including responsible persons, emergency contacts, utilities providers, insurance companies and sources of information such as the local radio station. A copy could be included in the flood kit.
- Provide residents/tenants with information on how to register with the Environment Agency's Floodline Warnings Direct service.

- Display notices within properties (translated where foreign visitors may be present), outlining procedures to be followed, escape routes and evacuation plans.
- Review your FRP regularly.

Chapter 4: Flood Response plan checklist

The following table is a summary of this FRP. Please use it as a checklist for when you produce your FRP. Include this checklist as part of your FRP, perhaps as an appendix. Please complete it with details such as page number or explanatory text. This checklist does not constitute your FRP – it is a summary and simply a checklist to help you produce a robust FRP.

Have you done these things?	
Liaised with neighbours about responding to flood event	
Registered for flood warnings	
Identified anyone who will need extra assistance	
Identified a safe refuge	
Identified a safe escape route	
Made a flood kit	
Does your FRP address these things?	
Description and location of site	
Date FRP produced	
Warning arrangements	
How instructions will be given	
What you can do to be pro-active	
Identify escape routes, local evacuation centre and local emergency coordinator	
How tenants/occupiers will be made aware of the FRP including the safe refuge, escape route and flood kit	
Actions at each level of flood alert	
What will be in your flood kit	
Dangers of flood water	
Re-occupation procedure	
List useful telephone numbers and website	
Review after a flood event	
Other things to address:	
How often will you review the FRP?	
How will you tell your tenants/occupiers about the FRP and escape routes?	
Where will important information be displayed?	
Have you put your flood kit together?	
Where is the flood kit stored?	

Appendix E: Climate smart planning cycle

It may be sensible to keep an accurate record of your options and decisions, so you can go back to the assumptions made if the adaptation choice is not working. The changes in the weather and climate can be recorded to give an accurate picture of any changes. Keep informed of changing predictions for climate change and monitor what happens to your development over the years. Different results to what was expected may suggest it would be sensible to go through the steps again to see what

Climate change predictions are based on what could happen, rather than knowing precisely what will happen. As such, do you want to consider the most likely changes, or be prepared for the most extreme conditions just in case? You probably need to understand the lifetime of your development and how things could change over that timescale.

Make the choice about which option to follow. This may be immediate action, or you can identify 'triggers' as to when you are going to act (e.g. you are willing to live with the driveway being flooded a few times a year at very high tides, but when it's happening monthly it will be time to act).

Taking the preferred projections (See the Met Office/UKCIP09 projections website for details) consider what the climate differences are likely to be and how they may impact on the proposed development. List, and possibly rank, the likely things that could create an adverse impact, as well as any opportunities a changing climate might offer for your development and how it is used.

Are there actions you can implement now that would help you cope with a new climate regime? Can you alter construction or management choices that minimise any risks? Can what you construct be altered easily in the future if predictions and/or on site experience is worse than you planned for? Are there different technologies that could be applied to lessen risks? If no options seem possible, you may wish to go back through the steps and modify your goals or objectives.

What do you want to achieve? What will you have at the end of the timescale being considered? For example, how often will you use the development and at what time of year? Perhaps the flood impacts will be negligible or not manifesting themselves in the short-term. Be clear about what you would prefer to have in the future – for example, a development that never floods or one that floods a few times a year.

Appendix F: Flood Risk Assessment Tick Sheet

Flood Risk Assessments for Householder and other minor extensions in Flood Zones 2 & 3

Applications for planning permission within either Flood Zones 2 & 3 should be accompanied by a flood risk assessment. This guidance is for domestic applications and non-domestic extensions where the additional footprint created by the development does not exceed 250 sq. metres (minor development[66]). It does NOT apply if an additional dwelling is being created e.g. a self-contained annex. This Tick Sheet is consistent with the Environment Agency's Standing Advice. It is a pragmatic and proportionate response to low risk developments in order to reduce the burden on applicants, the LPA and consultees.

Make sure that **floor levels are either no lower than existing floor levels** or **300 millimetres (mm) above the estimated flood level**. If your floor levels aren't going to be 300mm above existing flood levels, you will need to consider appropriate flood resistance and resilience measures. If floor levels are proposed to be set lower than existing floor levels they should be above the known or modelled 1 in 100 annual probability river flood (1%) or 1 in 200 annual probability sea flood (0.5%) in any year.

Further information and guidance on flood resistance and resilience measures is available in the Flood Risk SPD and here https://www.gov.uk/guidance/flood-risk-assessment-in-flood-zones-2-and-3#extra-flood-resistance-and-resilience-measures & https://www.gov.uk/government/publications/flood-resilient-construction-of-new-buildings

State in your Flood Risk Assessment all levels in relation to Ordnance Datum (the height above average sea level). You may be able to get this information from the Ordnance Survey[67]. If not, you'll need to get a land survey carried out by a qualified surveyor.

Applicants/Agents: Please complete the table overleaf and include it with the planning application submission. The table, together with a plan showing the finished floor levels and estimated flood levels, will form the Flood Risk Assessment (FRA) and will act as an assurance to the Local Planning Authority that flood risk issues have been adequately addressed.

You may be able to get the estimated flood level from the Environment Agency. Please contact ensenquiries@environment-agency.gov.uk. If not, you'll need a flood risk specialist to calculate this for you.

You can use the Tick Sheet over page or provide your written flood risk assessment in another format but it must include the relevant plans, surveys and assessments.

Any proposed works or structures, in, under, over or within 8m of the top of the bank of a main river, or 16m of a tidal main river, may require a permit under the Environmental Permitting (England and Wales) Regulations 2010 from the Environment Agency. This was formerly called a Flood Defence Consent. Some activities[68] are also now excluded or exempt. A permit is separate to and in addition to any planning permission granted. Also note that a Marine Management Organisation Marine Licence may be required for works that are carried out on tidal rivers.

Further details and guidance are available at: https://www.gov.uk/guidance/flood-risk-activities-environmental-permits. Or by contacting: floodriskpermit@environment-agency.gov.uk

[66] Minor development in relation to flood risk: http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/what-is-meant-by-minor-development-in-relation-to-flood-risk/
[67] OS MAPS https://www.ordnancesurvey.co.uk/
[68] Flood risk activities: environmental permits https://www.gov.uk/guidance/flood-risk-activities-environmental-permits#check-if-what-you-are-doing-is-an-excluded-activity

Flood Risk Assessment

Flood Risk Assessments for Householder and other minor extensions in Flood Zones 2 & 3

Applicant to choose one or other of the flood mitigation measures below	Applicant to indicate their choice in the box below. Enter 'yes' or 'no'
Either; Floor levels within the proposed development will be set no lower than existing levels AND, flood resilient and/or flood resistant measures have been incorporated in the proposed development where appropriate	
Or; Floor levels within the proposed development will be set 300mm above the known or modelled 1 in 100 annual probability river flood (1%) or 1 in 200 annual probability sea flood (0.5%) in any year. This flood level is the extent of the Flood Zones. Please remember to include a plan showing the finished floor levels and the estimated flood levels.	

Site Address	
Proposal Description	
Estimated flood level (i.e. The 1 in 100 year flood level)	
Details of flood resilience and resistance measures	

Appendix G: Privacy notice

Personal data

The following is to explain your rights and give you the information you are entitled to under the Data Protection Act 2018. Our Data Protection Policy can be found here: http://www.broads-authority.gov.uk/__data/assets/pdf_file/0003/1111485/Data-Protection-Policy-2018.pdf.

The Broads Authority will process your personal data in accordance with the law and in the majority of circumstances this will mean that your personal data will be made publicly available as part of the process. It will not however be sold or transferred to third parties other than for the purposes of the consultation.

1. The identity of the data controller and contact details of our Data Protection Officer

The Broads Authority is the data controller. The Data Protection Officer can be contacted at dpo@broads-authority.gov.uk or (01603) 610734.

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters. We will also contact you about later stages of the Local Plan process.

3. Our legal basis for processing your personal data

The Data Protection Act 2018 states that, as a Local Planning Authority, the Broads Authority may process personal data as necessary for the effective performance of a task carried out in the public interest, i.e. a consultation.

4. With whom we will be sharing your personal data

Your personal data will not be shared with any organisation outside of MHCLG. Only your name and organisation will be made public alongside your response to this consultation. Your personal data will not be transferred outside the EU.

5. For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will be held for 16 years from the closure of the consultation in accordance with our Data and Information Retention Policy. A copy can be found here http://www.broads-authority.gov.uk/about-us/privacy.

6. Your rights, e.g. access, rectification, erasure

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right:

a) to see what data we have about you
b) to ask us to stop using your data, but keep it on record
c) to ask to have all or some of your data deleted or corrected
d) to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at ttps://ico.org.uk/, or telephone 0303 123 1113.

7. Your personal data will not be used for any automated decision making.

Appendix H: SEA Screening

The Strategic Environmental Assessment (SEA) Directive is a European Union requirement that seeks to provide a high level of protection of the environment by integrating environmental considerations into the process of preparing certain plans and programmes. Its aim is "to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuing that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment."

With regards to a SPD requiring a SEA, the NPPG says:

> Supplementary planning documents do not require a sustainability appraisal but may in exceptional circumstances require a strategic environmental assessment if they are likely to have significant environmental effects that have not already have been assessed during the preparation of the Local Plan.
>
> A strategic environmental assessment is unlikely to be required where a supplementary planning document deals only with a small area at a local level (see regulation 5(6) of the Environmental Assessment of Plans and Programmes Regulations 2004), unless it is considered that there are likely to be significant environmental effects.
>
> Before deciding whether significant environment effects are likely, the local planning authority should take into account the criteria specified in Schedule 1 to the Environmental Assessment of Plans and Programmes Regulations 2004 and consult the consultation bodies.

The following is an internal assessment relating to the requirement of the Flood Risk SPD to undergo a Strategic Environmental Assessment.

The Environmental Assessment of Plans and Programmes Regulations 2004 requirement	Assessment of the Flood Risk SPD
Environmental assessment for plans and programmes: first formal preparatory act on or after 21st July 2004	
Is on or after 21st July 2004.	Yes. The SPD will be completed in 2019.
The plan or programme sets the framework for future development consent of projects.	No. It elaborates on already adopted policy.
The plan or programme is the subject of a determination under regulation 9(1) or a direction under regulation 10(3) that it is likely to have significant environmental effects.	See assessment in this table.
CRITERIA FOR DETERMINING THE LIKELY SIGNIFICANCE OF EFFECTS ON THE ENVIRONMENT	
1. The characteristics of plans and programmes, having regard, in particular, to	
The degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources.	The SPD expands on adopted policy. It will be a material consideration in determining planning applications. The SPD does relate to location (in referring to flood zones 3a and 3b) and size (of replacement dwellings) as well as operating conditions (in relation to resilience and guidance for flood evacuation plans).
the degree to which the plan or programme influences other plans and programmes including those in a hierarchy	The SPD does not influence other plans, rather expands on adopted policy. That is to say, it has been influenced by other plans or programmes.
the relevance of the plan or programme for the integration of environmental considerations in	The adopted policy and the SPD (which expands on adopted policy) seek to promote sustainable development.

particular with a view to promoting sustainable development	
environmental problems relevant to the plan or programme	The SPD relates to adopted policies on flood risk. The environmental problem is flood risk.
the relevance of the plan or programme for the implementation of Community legislation on the environment (for example, plans and programmes linked to waste management or water protection).	The SPD relates to adopted policies on flood risk. The environmental problem is flood risk.
2. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to	
the probability, duration, frequency and reversibility of the effects	The SPD will not affect the probability, duration or frequency of the causes of flood events. That is down to the weather or tide in the main. The impact of flooding on development (and people) already in place is not likely to be affected by this SPD (unless an application is submitted to change the existing development in some form). The adopted policy (on which this SPD expands) could affect the scale of flooding and impact on flooding although the development in the Broads tends to be minor in scale. If the SPD is followed, this could be a positive effect when compared to a development that does not follow a revised SPD.
the cumulative nature of the effects	Flood risk can be increased because of other developments. The SPD refers to the issue of increasing flood risk elsewhere which is linked to cumulative effects.
the transboundary nature of the effects	The Broads Authority sits within six districts so by its very nature there are transboundary considerations, in relation to administrative boundaries. Flood plains are identified for watercourses so to some extent, the transboundary nature of fluvial flooding is known. The transboundary nature of surface water flooding is an area of work which the Lead Local Flood Authorities either have or are working on.
the risks to human health or the environment (for example, due to accidents)	The SPD seeks to elaborate on adopted policies relating to flood risk. Flood risk can affect human health and the environment. The contents of the SPD seek to reduce flood risk and therefore reduce impacts on human health and the environment.
the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected)	The SPD will cover the Broads Authority which includes 6,000 permanent residents. There are also visitors throughout the year.
the value and vulnerability of the area likely to be affected due to— • special natural characteristics or cultural heritage;	The Broads is special in its natural characteristics and cultural heritage.

• exceeded environmental quality standards or limit values; or • intensive land-use;	Unsure if standards or limits have been exceeded in the Broads Not relevant
The effects on areas or landscapes which have a recognised national, Community or international protection status.	The area to which the SPD applies is the Broads with an equivalent status to that of a National Park.

Planning Committee

10 January 2020
Agenda item number 11

Climate Change – Planning

Report by Planning Policy Officer and Head of Planning

Summary

This report outlines the planning policy response to climate change mitigation and adaptation, following the Broads Authority's resolution to adopt the Climate Change Emergency Statement for the Broads.

Recommendation

To note the report.

Contents

1. Introduction

1.1. In September 2019, the Broads Authority resolved to adopt the Climate Change Emergency Statement for the Broads.

1.2. This report summarises how planning policy is seeking to drive changes to help reduce emissions (mitigation) and adapt to a changing climate. It outlines policy in the Local Plan for the Broads, recent Government consultations on changes to building regulations, and how we are working with Local Planning Authorities in Norfolk and Suffolk to address climate change. This is a cross-boundary strategic issue that needs to be included in the Norfolk Strategic Planning Framework. We are also working with Suffolk County Council and East Suffolk Council on strategic and local approaches to climate change.

2. The Role of Planning

2.1. The purpose and role of planning is to manage land use in the public interest. In recent years this has been interpreted relatively narrowly, with the focus on facilitating the development necessary for economic growth within sustainable limits. However, there has increasingly been an understanding of the wider contribution that planning can make to societal change through the creation of strong and vibrant sustainable communities. The National Planning Policy Framework (NPPF) (July 2018) clearly identifies this social objective alongside the economic imperative.

2.2. The third objective identified in the NPPF is the environmental objective, which is described as:

"to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy."

2.3. This third objective is an important one for the Broads and the Broads Authority, particularly in relation to the biodiversity duties and climate change. There are likely to be opportunities for the Broads to contribute significantly to the nature recovery agenda and work is underway to explore these areas, including working with partners and through offsetting. Planning has an important role to play in mitigation for and adaption to climate change, and the consistent application of established planning principles around sustainable development will support this. Due to the type of development that comes forward in the Broads, which is typically small scale, there will be limited opportunities for a significant or major contribution to driving sectoral change. However, the cumulative impact of a number of small changes can be effective locally and these opportunities will be taken. It is also useful to note that the Authority will continue to comment on the policies and plans of the neighbouring LPAs and will continue to raise the issues of sustainability and climate change, as the allocations and developments they propose have the potential to have a significant impact.

3. Local Plan for the Broads

3.1. The Local Plan for the Broads was adopted in May 2019. It contains detailed development management (DM) policies that relate to the mitigation of, and adaptation to, climate change, including:

a) The SWOT analysis on page 18 identifies climate change as both a threat and an opportunity.

b) Objective 7 on page 22 refers specifically to climate change. Other objectives in general relate to climate change.

c) DM4 requires new dwellings to be built to 110 litres/head/day rather than the standard 125 litres/head/day. Less water usage means less energy required.

d) SP2, DM5 and DM6 and the Flood Risk Supplementary Planning Document seek to address flood risk.

e) DM7 relates to open space, and DM8 relates to green infrastructure.

f) SP3 and DM9 relate to climate change, with DM9 requiring all applications to complete a climate change checklist.

g) DM10 is about peat soils. It seeks their protection in situ, but if they are required to be excavated, requires the material to be disposed of in a manner that keeps it wet.

h) DM14 sets energy requirements for new developments and DM15 sets criteria relating to larger scale renewable or low carbon energy projects.

i) DM21 has aspects relating to emissions.

j) DM22 seeks to address light pollution – the less or more efficient lighting, the less energy required.

k) DP8, SP9, DM23 are transport policies and generally seek active travel or public transport use.

l) DM25 directs new employment to areas with development boundaries.

m) SP12, DM29, DM30 address sustainable tourism, including the location of tourism development.

n) SP15, DM35, DM36, DM37 and DM41 direct residential development to areas with good access to key services and facilities.

o) DM43 is a general design policy with elements relating to climate change.

4. Building regulations – potential future changes

4.1. Recently, the Government consulted on two changes to Building Regulations. Most development requires approval through Building Regulations, so this can be a powerful tool. No matter what Local Planning Authority area a scheme is in, or what local plan policies are in place, these standards will need to be met for a scheme to pass building regulations.

4.2. The Future Homes Standard: Changes to Part L and Part F of the Building Regulations for new dwellings consultation sets out plans for the Future Homes Standard, including proposed options to increase the energy efficiency requirements for new homes in 2020. The Future Homes Standard will require new build homes to be future-proofed with low carbon heating and world-leading levels of energy efficiency. It will be introduced by 2025.

4.3. This document is the first stage of a two-part consultation about proposed changes to the Building Regulations. It also covers the wider impacts of Part L for new homes, including changes to Part F (ventilation), its associated Approved Document guidance, airtightness and improving as-built performance of the constructed home.

4.4. In Electric vehicle charge-points in residential and non-residential buildings, the Government is proposing to alter building regulations for new residential buildings to include requirements for electric vehicle charge-points, and new non-residential buildings to include requirements for electric vehicle charge-point infrastructure. It is also proposing to introduce requirement for existing non-residential buildings to have electric vehicle charge-points.

5. Norfolk Strategic Planning Framework – climate change sub-group

5.1. The Norfolk Strategic Planning Framework (NSPF) discusses and sets out agreements relating to strategic and cross-boundary issues in Norfolk. It is produced and endorsed by all Norfolk Local Planning Authorities. Version 2 of the NSPF was recently endorsed, but as the Duty to Cooperate is an ongoing requirement, Version 3 is in preparation.

5.2. Numerous groups have been formed to investigate various topics. This includes the climate change sub-group, whose main focus is to research what Local Plans already do in relation to climate change, and what they can do. There will be recommendations that each Local Plan can incorporate, and there may also be model policies that the Local Plans in Norfolk could include.

5.3. The high-level approach, with related topics, is shown below.

- Tackling the causes of climate change - mitigation
    - Design of new build – water and energy
    - Energy production
    - Location of development
    - Movement
    - Parking standards
    - Food production
    - Peat soils
    - Broadband and telecommunications
    - Light pollution
    - Emissions
    - Waste
    - Construction methods
    - Build materials
    - Embodied energy in existing buildings
    - Local Energy Area plans
    - Air pollution
    - Addressing existing dwellings
    - Strong Sustainability Appraisal and Local Plan Objectives

- Tackling the impacts of climate change – adaptation
    - Flood risk
    - Coastal erosion
    - Biodiversity
    - Change in weather patterns
    - Seas and water bodies
    - Health
    - Design
    - Green Infrastructure and open space
- Sequestering greenhouse gases
    - Trees and hedges
    - Green Infrastructure and open space
    - Design
    - Peat soils – protecting, management and creation of carbon sinks
    - Carbon off-setting

5.4. This is ongoing work, and we will keep the Planning Committee informed of progress.

6. Next steps

6.1. With a new Government in place, any substantial changes relating to climate change and the planning system are yet to be identified, but it is anticipated that this will be an important policy area. We will continue to monitor the policy approaches, and we will keep the Planning Committee informed of any changes and ways to address them as required.

6.2. The Authority continues to take a proactive role in producing the NSPF. NSPF3 is due to be ready for endorsement later in 2020 and, as discussed above, will include a climate change agreement and potentially model policies. As we prepare the next Local Plan for the Broads, we will respond to Government directions, NSPF agreements and model policies, any relevant data or evidence, and our corporate approach to addressing climate change. This may see some different approaches and policies in our next Local Plan. In the meantime, we will apply the policies of our adopted Local Plan.

7. Financial implications

7.1. The review of the Local Plan for the Broads is set to start towards the end of 2020. There will be a budget in place for this review. The Authority also contributes £5,000 each year to the NSPF, which is budgeted.

7.2. The financial burden on applicants in meeting the requirements of the adopted Local Plan is deemed acceptable and has been assessed through a viability appraisal.

7.3. Any policy requirement in the next Local Plan will have its impact on the viability of a scheme assessed in the same way as in the current Local Plan.

Author: Natalie Beal and Cally Smith

Date of report: 17 December 2019

Planning Committee

10 January 2020
Agenda item number 12

Suffolk Design – briefing

Report by Planning Policy Officer

Summary

Suffolk Local Planning Authorities have been working together to address good functional design of developments in Suffolk. This report outlines progress to date.

Recommendation

To note the work going on in Suffolk in relation to design.

1. Introduction

1.1. Suffolk Local Planning Authorities have been working together to address good functional design of developments in Suffolk. This report details work to date.

1.2. A small part of the Broads Authority's area falls in the former Waveney area of East Suffolk. Officers have therefore taken part in Suffolk Design meetings and workshops.

2. Suffolk Design

2.1. Suffolk Design is a long-term approach to embedding quality design into future developments. It is about shaping Suffolk. The consultants are keen to emphasise that it is about the function of a place or development.

2.2. The project was launched in July 2018. Since then events, workshops and research have been undertaken with the aid of design consultants. A website has also been set up and more can be seen at www.suffolkdesign.uk.

2.3. The aim is to deliver a Suffolk Design Charter as well as an effective and consistent design management process. There will be an online resource managed on a Suffolk-wide basis, and further detailed design guidance.

2.4. Suffolk Design fits well with the national design guidance, especially the reference in the national design guidance to the need for local design guides[1].

2.5. The intention is that the Suffolk Design Charter is agreed as a corporate commitment in the short term. Similarly, the Design Management Process will be considered by each

[1] National Design Guide: https://www.gov.uk/government/publications/national-design-guide

Suffolk Local Planning Authority, and as work progresses discussion will be had on whether it moves towards a Supplementary Planning Document.

2.6. It will be up to the Broads Authority to determine whether it wishes to agree the Charter and the Design Management Process.

2.7. Across the Suffolk Local Planning Authorities there is a commitment to improve the approach to design, and to use design criteria to improve the way future developments work. It is important to consider how this will translate on the ground through the planning process and delivery of Suffolk's wider growth agenda.

3. Financial implications

3.1. The Authority has not contributed financially to this work. Officers have attended meetings and workshops, and will continue to do so in the first half of 2020.

3.2. Another issue to consider is any increase in cost of schemes in Suffolk so they are designed in a way that meets the objectives and criteria of the design work. The emerging Suffolk Design work discusses principles rather than specific requirements. Such principles can be designed in from the start and it is not considered that there will be significant impacts on scheme costs and therefore viability.

4. Next steps

4.1. The Charter and Development Management processes are being produced, together with the more detailed design guidance. This project is being driven by Chief Executives of Suffolk Local Planning Authorities as well as Heads of Planning, and it is anticipated that the documents will be circulated to officers in the next few months.

4.2. Once we see the documents, we will have to take a view on how they are to be applied in the Broads, a nationally protected landscape where design is already an important factor in determining planning applications.

Author: Natalie Beal

Date of report: 16 December 2019

Planning Committee, 10 January 2020

Heritage Asset Review Group (HARG) Minutes of the meeting held on 06 December 2019

Contents

The meeting commenced at 13.00 following the Planning Committee meeting.

Present

Harry Blathwayt, Bill Dickson, Tim Jickells, Bruce Keith and Melanie Vigo di Gallidoro

In attendance

Sandra Beckett – Administrative Officer (Governance), Kayleigh Judson – Heritage Planning Officer, Cally Smith – Head of Planning, Marie-Pierre Tighe – Director of Strategic Services.

1. Apologies and welcome

The Head of Planning welcomed everyone to the meeting.

Apologies were received from Julie Brociek-Coulton.

2. Appointment of Chair

The Head of Planning invited nominations for Chair of the Group. Melanie Vigo di Gallidoro commented that the Group was a very loose collective and said she was happy to continue in the role of Chair. There being no other nominations,

It was resolved to appoint Melanie Vigo di Gallidoro as Chair of the Group.

Melanie Vigo di Gallidoro in the Chair.

3. Appointment of Vice-Chair

The Chair invited nominations for Vice-Chair. Bruce Keith proposed, seconded by Melanie Vigo di Gallidoro and there being no other nominations

It was resolved to appoint Harry Blathwayt as Vice-Chair of the Group.

4. Declarations of interest and introductions

Members commented that they had no other declarations of interest other than those already disclosed.

5. Minutes of HARG meeting held on 7 December 2018

The minutes of the meeting held on 7 December 2018 were received. These had been submitted to the Planning Committee 11 January 2019.

6. Points of information arising from the minutes

Cultural Heritage staffing - The Head of Planning reported that there had been a number of changes since the last meeting of the Group, with Ben Hogg as Historic Environment Manager leaving the Authority in November to work with English Heritage. He would be replaced by Kate Knights in January 2020. Formerly heritage advice had been undertaken by a heritage consultant – Conservation Adviser, Prue Smith but the work was now being brought in-house and a new part time post of Heritage Planning Officer had been filled by Kayleigh Judson. Prue

Smith (Conservation Adviser) would still assist with the conservation area reappraisals that had been approved by the Planning Committee for consultation, since she had been involved with drafting them.

In addition, Will Burchnall, Project Manager for the Heritage Lottery Funded Landscape Partnership Project: Water Mills and Marshes (WMM) had left the Authority for a new post with the National Trust. The role of Project Manager was being advertised. There had also been changes internally with Heritage Management coming within the planning section and the WMM project under the Operations Directorate. Kayleigh Judson would also be working with the WMM project and therefore there would be continuity.

The Chairman took the opportunity to thank Prue Smith for her contribution to the heritage work of the Authority.

7. Conservation Area Re-appraisals Update: Horning and Ludham

The Planning Committee had considered the Draft Horning and Ludham Conservation Area Re-Appraisals at its meeting today, 6 December 2019 and approved them for public consultation. The Heritage Planning Officer reported that it was anticipated that the consultation would start in the new year. The Group noted that it was intended that the responses to the consultation and appraisal for Horning would be brought to the HARG meeting in March 2020 for consideration and a report to Planning Committee in May 2020 for adoption by the Authority. The responses from the Ludham Conservation Area re-appraisal consultation were due to be submitted to the June HARG meeting and reported to the Planning Committee in August 2020 for adoption.

The group noted the proposed timetable.

8. Conservation Areas: review programme for 2020

The Group noted that the Authority had a statutory duty to review its Conservation Areas periodically and from time to time consider the designation of new ones. There were 25 Conservation Areas within the Broads and since the programme started in 2010 the review of all of these was nearing completion, (Horning and Ludham being the final two), it was now time to begin the review programme again. It was noted that informal agreement had been reached with the District Councils' Conservation Officers whereby if most of the area came within the Broads Authority's boundary, the appraisal review would be undertaken by the Authority. Where the area fell mainly outside the Broads Authority's boundary, the work would be carried out by the relevant district.

The Heritage Planning Officer showed a schedule of the proposed review programme of the Conservation Areas for 2020. Those areas that had initially been reviewed were highlighted and these would be the first ones to be re-appraised. Officers would be discussing the programme with the Districts, being aware of resource constraints. Members requested a copy of the slide. (Attached at Appendix 1)

It was noted that one of the lessons learnt from carrying out the re-appraisals was that as well as considering the old heritage, it was also important to consider potential new heritage. New legislation and regulations relating to this were forthcoming. Members considered that it would be challenging to balance heritage preservation and the need to take account of climate change, reduction in carbon emissions and new materials to mitigate such effects.

The Group noted the Conservation Area Re-Appraisal process and Review Programme for 2020. (Appendix 1).

9. New assets: War memorials at Buckenham, Thorpe St Andrew and Thurne

The Heritage Planning Officer reported that in line with the centenary of the first World War, Heritage England in partnership with the Heritage Trust had run a project in 2018 to include War Memorials for listing. 645 were now added to the list, 3 of which were in the Broads Authority area. The Group were given illustrations of these proposed new assets for inclusion on the Listed Buildings register, the war memorials at Buckenham erected in 1920, Thorpe St Andrew erected in 1919 and at Thurne.

A member commented that the Parish Council were currently in negotiations as to a proposal to erect a new war memorial at Hickling to include commemoration of those who had flown the flying boats.

Members queried whether there was any particular occupation or innovative development intrinsic to the Broads area that might warrant a form of commemoration. It was noted that the Wherrymen were recognised in the Wherryman's Way. This included a commemoration to Billy Blue Light and this was such an example. One of the projects within the Water Mills and Marshes Project included a trail of pill boxes. The role of the east coast defences with gun batteries was also such a project.

The Group noted the listing of the War memorials and it was agreed suggestions of commemorative features be investigated to identify a theme for the Local List.

10. Quinquennial survey: review programme for 2020 Heritage at Risk

The Heritage Planning Officer reported that it was now appropriate to undertake a review of the 269 Listed Buildings in the Broads Executive Area. It was intended to survey 54 per year on a 5-yearly rotation, with the survey of the first batch being started early in 2020. Those at risk would be prioritised and included in the Buildings at Risk (BAR) Schedule.

The Group agreed that it would be helpful for HARG to have a view of the survey sheets.

The Group also suggested that it would be worth including Listed Buildings and/or buildings at risk in a Members site visit to raise awareness of the area's heritage assets among all Members.

11. Listed building applications and other issues: Ashby with Oby, Heronby and Raven's Hall

The Group were informed of issues relating to the following Listed Buildings:

Ravens Hall – a Listed Building application had been received for this recently purchased property on Haddiscoe Island. This involved a 2-storey side extension to accommodate a stairwell, a new front porch, alterations to the outbuilding and internal alterations. The environmental heritage service at Norfolk County Council had indicated that the property was in an unusual location for its size and age, having some suggestions as to its history and function and recommended that an archaeological condition be attached to any planning permission.

Heronby, Wroxham – Officers welcomed the support from the Planning Committee at its earlier meeting for the submission of an application to List the building. The Heritage Planning Officer provided more details of the material that would be included in the application to the Secretary of State. This included details on the history and people involved as well as the pioneering development of an innovative foundation system. There were a number of properties in the area which had been included in the Local List of riverside chalets. The relevant dissertation would be included with the application.

Ashby with Oby – Manor Farm House was referred to in the Enforcement Update at Item 15.

12. Red Telephone Box Removal consultation by BT

The Group were informed of the consultation by BT for the removal of two telephone boxes within the Broads Area at Hickling and Potter Heigham. The Authority had consulted the relevant parish councils and both, particularly Hickling Parish wished to retain the telephone service on these premises for safety reasons, given that they were by the water and mobile phone signals were not always reliable.

It was noted that if BT did not wish to retain its services there was an option to adopt/adapt the telephone box. A number of parishes were using them to house defibrillators. It was noted that the red telephone box at Belaugh had recently been removed since there had not been a local community group willing to take on responsibility for it.

The Group agreed that the Authority should support the parish council in its view that the red telephone service and box be retained, particularly at Hickling.

13. Water Mills and Marshes – update on the HLF Landscape Partnership project.

The Head of Planning provided the Group with an update on the HLF landscape partnership project, Water Millls and Marshes (WMM). One of the main projects of the 38 involved in the WMM programme related to heritage and learning, the most relevant to this Group being the restoration of listed mills. This involved partnership working with Norwich City College and the development of a specific heritage skills course. Those on the course had been

undertaking the practical work of restoration. Members noted the quote from the Ofsted monitoring visit report. “The whole course had enabled students to gain valuable experience with historic windmills and pumps in the Broads and significantly boosted their expertise in a highly specialised area of construction.”

The Group noted that the work on the Strumpshaw Steam engine house had now been completed. Some members had had the opportunity to visit the site while work was ongoing as part of the Members Site Visit in March 2019. The Group was shown slides of the work in progress as well as the work being done on the North Mill at Reedham. Work on the next mill on the schedule, Six Mile House, Halvergate was due to start in December. Dutch specialist engineers had been contracted to produce a piling and stabilisation engineering solution for Muttons Mill and Herringfleet and work on Muttons Mill was due to start mid-2020. The WMM project had recruited 2 Heritage Skills apprentices.

The Group noted that there was now a Centre for Heritage Skills Training on the Norwich City College Campus. This included a 1300^2 metre Workshop providing space to produce drainage mill sails, caps, windows and doors as well as a space for additional heritage skills training courses out of college hours.

The project had won the Preservation and Rejuvenation category and Overall Winner of the Norfolk Constructing Excellence Awards 2019 and had also received Highly Commended at the National Constructing Excellence Awards.

The Group welcomed the progress on the project.

14. Heritage at Risk – Buildings at Risk 2019 Schedule

The Group received a schedule providing an update on the Buildings at Risk in 2019. It was noted that a number of those listed were drainage mills or pumps, which fortunately were included in the WMM project. It was clarified that most of the mills were in private ownership.

15. Heritage at Risk – Enforcement 2019 Schedule

The Group received an update on the issues relating to the two cases on the Enforcement update on historic buildings:

Manor Farm House, Ashby with Oby – Unauthorised replacement windows with upvc. Approval for an enforcement notice had been given and Listed Building consent had been granted to replace the upvc windows with timber frames with a 10-year compliance period. Five of the windows had been replaced. It was noted that any potential buyers of the property would be made aware of the situation.

8 Pirnhow Street, Ditchingham - The owner of the property intended to insert a glazed link to the side extension. Officers were in contact with the owner and any prospective buyer would be made aware of the need to regularise the development.

16. Any other business

No further business to report.

17. Date of next meeting

The next meeting of HARG would be held on Friday 6 March 2020 following the Planning Committee meeting at Yare House, 62- 64 Thorpe Road, Norwich.

The meeting ended at 14.10 pm

Signed by

Chairman

Appendix 1 – Conservation Areas Review Programme for 2020

No.	Conservation Area	Authority	Status	Notes	Last appraised
1*	Beccles	Waveney	Re-appraised 2014	BA - adopted Aug 2014	2014
2	Belaugh	Broads Authority Broadland	Re-appraisal complete – public consultation 2010	BA – adopted 2011	2011 BA led
3*	Bungay	Waveney	Re-appraised 2007 By Waveney DC	Adopted 2007	2007
4*	Coltishall & Horstead	Broadland	Re-appraisal complete – public consultation to be undertaken by BDC	With BDC	On going
5	Ditchingham Dam	South Norfolk	Re-appraisal complete – public consultation April 2012	BA – consultation 2012, adopted March 2013	2013 BA led
6*	Ellingham Mill	South Norfolk	Re-appraisal in complete – public consultation April 2012		2013 BA led
7*	Geldeston	South Norfolk	Re-appraisal in complete – public consultation April 2012		2013 BA led
8	Halvergate Marshes (Haddiscoe)	Broads Authority (Great Yarmouth/Broadland/SNDC)	Re-appraisal complete adopted 2015	Re-appraisal adopted 2015	2015 BA led

No.	Conservation Area	Authority	Status	Notes	Last appraised
9*	Halvergate & Tunstall	Broadland	Designated July 2007	B A – adopted 2007	2007
10*	Horning	North Norfolk	Draft re-appraisal complete HARG Dec 2018		On going BA led
11*	Langley Abbey	South Norfolk	Reappraised Summer 2013	Adopted 28TH February 2014	2014 BA led
12*	Loddon & Chedgrave	South Norfolk	Re-appraised By SNDC adopted	Adopted Jan 2017	2017
13*	Ludham	North Norfolk	Draft re-appraisal complete HARG Dec 2018		On going BA led
14*	Neatishead	North Norfolk	Re-appraisal complete – public consultation 2011	BA –adopted 2011	2011 BA led
15*	Norwich: Bracondale	Norwich	Re-appraisal complete – adopted 2007	NCC adopted 2007	2007
16*	Norwich: St Matthews	Norwich	Re-appraisal complete – adopted 2007	NCC adopted 2007	2007
17*	Norwich: City Centre	Norwich	Re-appraisal complete – adopted 2007	NCC adopted 2007	2007
18*	Oulton Broad	Waveney	Re-appraisal complete - adopted 2015	Reappraisal complete adopted 2015	2015 BA led

No.	Conservation Area	Authority	Status	Notes	Last appraised
19*	Salhouse	Broadland	Designated 2003 reappraised 2009 Consultation 2013 – With BDC.	Consultation Summer 2013.	2013
20*	Somerleyton	Waveney	Adopted 2011	BA - Adopted 2011	2011
21*	Stalham Staithe	North Norfolk	Re-appriasal complete adopted 20	March 2017	2017 BA led
22*	Thorpe St Andrew incl Thorpe Island	Broadland	Re-appraised, June 2007	BDC adopted 2007	2007
23	Trowse	South Norfolk	Re-appraisal complete 2009 SNDC	adopted 2012	2012
24*	West Somerton	Great Yarmouth	Re-appraisal complete adopt Dec 2018	Adopt 2018	2018 BA led
25*	Wroxham	Broadland	adopted 2010	BA-adopted 2010	2010

*** partly in Broads Authority area - shared with neighbouring authority**

Planning Committee

10 January 2020
Agenda item number 14

Appeals to the Secretary of State Update for PC10-01-20

Report by Senior Planning Officer

Summary

This report sets out the position regarding appeals against the Authority since April 2019.

Recommendation

To note the report.

Application reference number	Applicant	Start date of appeal	Location	Nature of appeal/ description of development	Decision and dates
APP/E9505/W/19/3226955 BA/2018/0303/FUL	Mr Grant Hardy	Appeal submitted 17 April 2019. Start Date 1 May 2019.	Thatched Cottage Watergate Priory Farm Beccles Road St Olaves Norfolk	Appeal against refusal of planning Permission: Erection of dwelling	Delegated Decision 20 December 2018. Notification Letters by 8 May. Statement by 5 June 2019. Inspector site visit scheduled for 15 July

Application reference number	Applicant	Start date of appeal	Location	Nature of appeal/ description of development	Decision and dates
					2019, but postponed by Planning Inspectorate. Planning Inspectorate have advised the site visit took place w/c 2 December 2019 and so a decision is imminent.
APP/E9505/W/19/3237552 BA/2019/0214/FUL	James Knight LEF Trading Ltd	Appeal submitted 19 September 2019. Start date 13 November 2019	Land off Staitheway Road, Wroxham	Appeal against refusal of planning permission: Erection of two dwellings	Committee decision 16 August 2019 and planning decision issued 21 August 2019. Questionnaire submitted 19 November 2019. LPA Statement by 18 December 2019.

Author: Cheryl Peel

Date of report: 16 December 2019

Background papers: BA appeal and application files

Planning Committee

10 January 2020
Agenda item number 15

Decisions made by Officers under delegated powers

Report by Senior Planning Officer

Summary

This report sets out the delegated decisions made by officers on planning applications from 22 November to 17 December 2019.

Recommendation

That the report be noted.

Parish	Application	Site	Applicant	Proposal	Decision
Acle Parish Council	BA/2019/0389/APPCON	74 Old Road Acle Norwich Norfolk NR13 3QP	Ms Joanne Bridgeland	Application for written confirmation that property has been built in accordance with plans and conditions and therefore no enforcement action based on this topic will be forthcoming	Approve

Parish	Application	Site	Applicant	Proposal	Decision
Bradwell Parish Council	BA/2019/0346/LBC	Bradwell Hall Bradwell Hall Farm Market Road Bradwell Norfolk NR31 9EF	Mr Kevin Claxton	Convert barn to two bedroom holiday let	Approve Subject to Conditions
Bradwell Parish Council	BA/2019/0345/FUL	Bradwell Hall Bradwell Hall Farm Market Road Bradwell Norfolk NR31 9EF	Mr Kevin Claxton	Convert barn to two bedroom holiday let.	Approve Subject to Conditions
Broome Parish Council	BA/2019/0342/LBC	Tuns Barn Pirnhow Street Broome NR35 2RS	Mr Peall	Replace window with door, install glazed light above. Replace cladding north-west elevation.	Approve Subject to Conditions
Broome Parish Council	BA/2019/0341/HOUSEH	Tuns Barn Pirnhow Street Broome NR35 2RS	Mr Peall	Replace window with door, install glazed light above. Replace cladding north-west elevation.	Approve Subject to Conditions
Brundall Parish Council	BA/2019/0328/HOUSEH	5 Riverside Estate Brundall Norwich NR13 5PU	Mr & Mrs Coxhead	Single storey extension & repair quay heading	Approve Subject to Conditions
Horning Parish Council -	BA/2019/0299/HOUSEH	3 Bureside Estate Crabbetts Marsh Horning NR12 8JP	Mr Brian Hutchinson	Extension to west elevation of dwelling	Approve Subject to Conditions

Parish	Application	Site	Applicant	Proposal	Decision
Horning Parish Council -	BA/2019/0267/FUL	Two Gates Norwich Road Falgate Horning NR12 8NH	Mr & Mrs Breary	Erection of field shelter. Replacement, re-sited tractor shed.	Approve Subject to Conditions
Horning Parish Council -	BA/2019/0374/CLEUD	Plot K Bureside Estate Crabbetts Marsh Horning Norfolk NR12 8JP	Mrs Amanda Jeffries	Lawful Development Certificate for more than 4 years as a dwelling house.	CLUED Not Issued
Horning Parish Council -	BA/2019/0306/CLEUD	The Spinney Plot 20 Bureside Estate Crabbetts Marsh Horning Norfolk NR12 8JP	Mrs Susan Bragg	Lawful Development Certificate for 4 years personal holiday use	CLUED Issued
Horning Parish Council -	BA/2019/0368/FUL	Little Birches Crabbetts Marsh Horning Norfolk NR12 8SP	Mr Tony O'Neil	Erection of wet-boathouse. Design amendments to approval BA/2008/0024/FUL; shingle roof instead of thatch, roller shutters in place of hinged doors, two additional apex windows.	Approve Subject to Conditions
Horning Parish Council -	BA/2019/0318/COND	12 Bureside Estate Crabbetts Marsh Horning Norfolk NR12 8JP	Mr Mark Stockley	Extension to boathouse, variation of condition 2 of permission BA/2017/0340/HOUSEH	Approve Subject to Conditions

Parish	Application	Site	Applicant	Proposal	Decision
Horning Parish Council -	BA/2019/0294/FUL	Riverbank Lodge Ferry Cott Lane Horning NR12 8PP	Mr & Mrs Foster	Replacement dwelling	Approve Subject to Conditions
Langley With Hardley PC	BA/2019/0291/HOUSEH	22 Langley Street Langley NR14 6AD	Mr Andrew Larkin	Alterations to dwellinghouse to include: link to garage, new entrance porch, addition of dormers, installation of rooflights and roof lantern, installation of windows, and glazed elements. Retention of existing storage shed.	Approve Subject to Conditions
Oulton Broad Parish Council -	BA/2019/0326/HOUSEH	Broadbank Broadview Road Lowestoft NR32 3PL	Mr & Mrs Kerr and Denise Sinclair	Piling at boat landing	Approve Subject to Conditions
Oulton Broad Parish Council -	BA/2019/0367/APPCON	Broadland Holiday Village Marsh Road Lowestoft Suffolk NR33 9JY	Mr Paul Spriggins	Details of: Condition 5 : Water Vole Protection Plan, 6 : Ecology Construction Safeguards of application BA/2018/0426/FUL.	Approve
Oulton Broad Parish Council -	BA/2019/0309/FUL	Broadlands Park Marsh Road Lowestoft NR33 9JY	Mr Paul Spriggins	Replacement of 9 existing caravans with 10 chalets (5 x twin units) for year	Approve Subject to Conditions

Parish	Application	Site	Applicant	Proposal	Decision
				round holiday occupation, alterations to car parking layout, and associated works.	
South Walsham Parish Council	BA/2019/0278/FUL	Part of Norfolk Wildlife Trust Upton Broad and Marshes Nature Reserve	Mr Hart	Erection of one timber shelter	Approve Subject to Conditions
Stalham Town Council	BA/2019/0378/FUL	Wayford Bridge Inn Wayford Road Wayford Bridge NR12 9LL	Mr K Heavens	Single storey rear extension	Approve Subject to Conditions

Author: Cheryl Peel

Date of report: 18 December 2019