



Our ref: Your ref:

PCS/135894 14/01773/APP

If telephoning ask for: Clare Pritchett

3 October 2014

Iain Drummond
The Moray Council
Development Services
Environmental Services Dept.
Council Office, High Street
Elgin
IV30 1BX

By email only to: consultation.planning@moray.gov.uk

Dear Mr Drummond

Town and Country Planning (Scotland) Acts
Planning application: 14/01773/APP
Erection of a house
Site South East Of Orchard House, Spey Street, Garmouth, Moray

Thank you for your consultation email of 18 September 2014 specifically seeking our advice on flood risk.

We **object** to the proposed development on the grounds that it is development within the undeveloped/sparsely developed functional flood plain contrary to Scottish Planning Policy and PAN69. Please note the advice provided below.

In the event that the planning authority proposes to grant planning permission contrary to this advice on flood risk, the Town and Country Planning (Notification of Applications) (Scotland) Direction 2009 provides criteria for the referral to the Scottish Ministers of such cases. You may therefore wish to consider if this proposal falls within the scope of this Direction.

Advice for the planning authority

1. Flood Risk

- 1.1 Given the location of the proposed development within the undeveloped/sparsely developed functional floodplain we do not consider that it meets with the requirements of Scottish Planning Policy. We have a shared duty with Scottish Ministers and other responsible authorities under the Flood Risk Management (Scotland) Act 2009 to reduce overall flood risk and promote sustainable flood risk management. The cornerstone of sustainable flood risk management is the avoidance of flood risk in the first instance.
- 1.2 Notwithstanding the above position, we have included our review of the information supplied. Provision of this review does not imply that we consider there to be a technical solution to managing flood risk at this site which meets with Scottish Planning Policy and our current position is unlikely to change.



ins (1995) Pend Signworth Colonies Signary Signers Signary nounteenthale inverdee House, Baxter Street Tony, Aberdeen AB11 9QA tel 01224 266600 fax 01224 896657 www.sepa.org.ok

- 1.3 We were previously consulted on planning application numbers 11/01961/APP and 14/00747/APP for the same site. Our position regarding the suitability of the proposed site for residential development has not changed and we remain of the view that the site, which forms part of the functional flood plain of the River Spey, is not suitable for development. Based on the information available at present, the development would be 'additional development in an undeveloped or sparsely developed area' which areas at risk of flooding are generally not suitable for as outlined in paragraph 263 of SPP.
- 1.4 We hold photographic evidence of flooding at the site during a flood event much more common that the 1 in 200 year event which is the definition of the functional floodplain in Scottish Planning Policy. However, no detailed Flood Risk Assessment (FRA) for the proposed site has been provided to us in support of this planning application. A detailed and robust FRA would identify whether there are any parts of the site which are outwith the functional flood plain, and would also determine the 1 in 200 year flood level for the site along with information on flood depths and velocities. However, such an assessment may well confirm that the whole site is at risk of flooding and so is not suitable for development. Any FRA which is carried out must be undertaken in line with the guidance available in SEPA's *Technical Flood Risk Guidance for Stakeholders* which is referenced below and a full report made available outlining the methods and calculations undertaken.
- During consultation on the previous planning applications, we clearly stated that we objected to development on the site. Notwithstanding that position, we highlighted that, should the Planning Authority be minded to approve the application, we would have concerns with the impact of any landraising on the functional flood plain, particularly given that there was no adequate compensatory storage scheme being proposed.
- 1.6 The applicant has now submitted a revised development design which potentially overcomes the issue regarding loss of floodplain capacity by using a 'floating' home design which rests on the ground but is designed to rise should the site become flooded.
- 1.7 For clarification, as we have previously outlined, we are of the view that there is no technical solution to the development of the site which complies with Scottish Planning Policy and this also applies to the new house design now proposed. The loss of floodplain storage is a secondary issue to the principle position that land in the functional floodplain is not suitable for new development and should be avoided in the first instance.
- 1.8 We are aware that similar designs have been used for properties in other countries. The policy framework elsewhere is different based on issues of national importance and strategic approaches to managing flood risk. The approach currently underpinned by national policy in Scotland is for the avoidance of flood risk in the first instance as the most sustainable approach to flood risk management. There are no overriding reasons for developing in the floodplain in Scotland where the availability of lower-risk land is much greater than in countries such as the Netherlands.
- 1.9 We would also highlight that the River Spey is a dynamic river, geomorphologically active and a high energy environment. Even if the policy supported such an approach to development in the floodplain we would have technical concerns regarding the suitability of this particular location for such a design, particularly given that detailed information regarding flood levels and velocities are not known.

If you have any queries relating to this letter, please contact me by telephone on 01224 266609 or e-mail at planning.aberdeen@sepa.org.uk

Yours sincerely

Clare Pritchett Senior Planning Officer Planning Service

eCopy to: Agent - Future Plans Ltd ask@futureplans.co.uk

Disclaimer

This advice is given without prejudice to any decision made on elements of the proposal regulated by us, as such a decision may take into account factors not considered at the planning stage. We prefer all the technical information required for any SEPA consents to be submitted at the same time as the planning application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue

Caveats

The advice contained in this letter is supplied to you by SEPA in terms of Section 72 (1) of the Flood Risk Management (Scotland) Act 2009 on the basis of information held by SEPA as at the date hereof. It is intended as advice solely to Moray Council as Planning Authority in terms of the said Section 72 (1). Our briefing note entitled: "Flood Risk Management (Scotland) Act 2009: Flood risk advice to planning authorities" outlines the transitional changes to the basis of our advice inline with the phases of this legislation.





FAO Clare Pritchett SEPA Inverdee House Baxter Street Torry ABERDEEN AB11 90A

SEPA Ref: PCS/135894 Our Ref: CAS/EWS

14 October 2014

Town and Country Planning (Scotland) Acts
Planning Application: 14/01773/APP
Erection of a house
Site South East of Orchard House, Spey Street, Garmouth, Moray

1. Flood Risk

At a meeting on the 11th July 2014 with Rebecca Raine of SEPA and Graham Dunlop of MFRM, we agreed that part of the site was within the functional flood plain and should be classed as a "Medium Risk" area, not low and not high. Segun Oke of MFRM last year considered that "the site in question is at the edge of the functional flood plain" which correlates with the Chairman of the Garmouth and Kingston Amenities Association's (Community Representation) statement of 28th December 2011 that "the actual site of the proposed dwelling, whether on stilts or not does not actually flood". I would qualify this by saying it's been my experience that the area where the proposed house footprint is located generally does not flood with active flowing water. Any ingress is largely static puddling or ponding rather than erosive flows and this is probably why my father adopted this corner for a stack yard.

The immediate environs of the proposed house site consist of contemporary and historical private and public properties. The site is located within the settlement boundary of the functionally developed village, and its neighbour just over thirty metres distant is a three storey urban town house – hardly an "undeveloped/ sparsely developed" situation as suggested by SEPA. Indeed, it can be seen from dated OS maps that there were a range of buildings, cottages and a two and a half storey Corff House, which accommodated both domestic and commercial accommodation and existed beyond the mid twentieth century.

1.2 The duty to reduce overall flood risk and promote sustainable flood risk management should have been exercised over thirty years ago when the Crown Estate created an erosion time bomb by their revetment works upstream of Essil, which protected their property but deflected the issues catastrophically downstream. Their hard banking of the river has speeded up its kinetic velocity, increasing its debris conveyance and downstream deposition, which has raised the river Spey bed level so significantly to the detriment of lower Garmouth and Kingston.

2

I agree that "the cornerstone of sustainable flood risk management is the avoidance of flood risk in the first instance". Front line or "first instance" management has to be in terms of the source of the fluvial risk – ie at the river itself.

Not withstanding these local circumstances, the general indications are that extreme weather events are going to increase in coming years, particularly those which result in excessive inundations of surface water, even in hitherto "dry areas", which would make nonsense of any flood prediction maps.

Amphibious buildings can overcome these uncertainties, and this is the principle that has motivated the National Building Research Establishment into supporting the concept by setting a demonstration dwelling available for guidance. BACA and the Environment Agency have Planning Permission for an amphibious house, and are trialling the concept of an amphibious community.

Innovation as well as legislation is the key to sustainable flood risk management. If it wasn't for innovation indoor bathrooms wouldn't have superseded pre-war statutory outside toilets.

- 1.3 I would refer to my comments on your 1.1 paragraph regarding the understanding from my meeting with your colleague that only part of the site is within the functional flood plain with that part is at the "edge" and at medium risk from static or low velocity water. Whatever/ whoever's stance on this, the design as proposed will enable the house to rise and fall in response to any variations in the aquatic environment, which is something that none of the neighbouring dwellings can do.
- 1.4 I agree that part of the application site floods more often than once in two hundred years but the 1:200 scenario is the bench mark set in the legislation you refer to. I too have photographs of flooding events from 1990 onwards. I also have hard evidence of the extent of the worst Spey flood event ever recorded in 1829, long before river levels were first gauged at the nearest monitoring point and only one kilometre distant rather than 13 at Boat 'o Brig. This level, as stated in my supporting statement, which is attached, is 5.876 and is factual, there to see as of 185 years ago rather than the potential conjecture of a desk top 1:200 year risk assessment. This sequential evidence approach has previously been accepted by SEPA as an alternative to a consultant's flood risk assessment for a multiple housing development also in the locality. In any event, the amphibious house design I am proposing can rise to twice the flood depth of the Muckle Spate I in 185 year event without any of the occupants getting wet, and more importantly providing a safe, familiar, at home environment where the traditional concepts of flood evacuation need not apply.
- I fail to understand why SEPA consider that there is "no adequate compensatory storage scheme being proposed" when two 990mm deep swales are being provided even although the access driveway is not now going to be raised above existing ground level, as agreed with SEPA and MFRM, and the proposed house will float above any flood water rather than displace flood water.



3

1.6 Agreed

1.7 I have correspondence from a senior planner of the Scottish Government's Directorate of Local Government and Communities, which clarifies SPP paragraph 263 and I quote:

"Please note that paragraph 263 states that generally elevated buildings etc are unlikely to be acceptable. This does not necessarily mean therefore that stilted construction would be unacceptable in every circumstance. The inclusion of the reference to stilts comes from a concern over the ability of such construction to withstand flood events. There is a recognition however that within this general reference there may be construction techniques that a planning authority may find acceptable."

The concept of rising above flood level with a stilted construction can clearly be approved on the basis of construction techniques being satisfactory. In addition to the "stilts" in this application, a flotation type of construction is being proposed, which rises and falls with water levels leaving the "stilts" as location restraints rather than load bearing. The flotation deck will be a proprietary system but the location restraint circular columns and their foundations will be a site specific structure to be calculated, designed and approved at Building Warrant stage.

- 1.8 I would refer to my response to your 1.2 in relation to flooding being a general problem now, and more in the future in the UK.
- 1.9 I would again refer to my response to your 1.2, and to the previous technical information submitted in support of the preceding application sourced from Aberdeen University and Grampian Regional Council/ Babtie, Shaw and Morton in addition to my response to your 1.4 regarding the Muckle Spate, which all document the flood levels, flows and directions in the area around the proposed site.

At this point there needs to be clarity that there is a difference between flood water and seepage water. The former is aggressive where as the later is sedentary. Surface water accumulations can affect parts of the site outwith the functional flood plain as shallow overburden or simply puddling of the static water. This is confirmed by an investigation and report by the SAC in 1990, which charts the impact of the food water flows in the locality. The mapping identifies that there was no erosion or deposition over the footprint of the proposed house despite there having been significant damage elsewhere in the surrounding haugh land which was freshly ploughed, as was the site at the time. Indeed, it is interesting to note that the westerly limits of the erosion align with the westerly limits of the functional flood plain as shown on SEPA's Flood Map.

Grampian Regional Council's subsequent 1995 study of *The River Spey Flooding at Garmouth* indicates flow velocities of 0.6 cumecs at the village hall in the 1993 flood, which recorded a peak flow of 690 cumecs at the nearest gauging station at Boat 'o Brig. This again quantifies the observation that the application site is not a mainstream flood flow zone.



4

I feel this gives adequate justification to support these innovative proposals; there are precedents and I hope that SEPA will want to be in the forefront of this sustainable, low energy and high safety project, which could be the catalyst for meaningful flood protection solutions throughout Scotland.

Innovation has delivered so many iconic developments on flood prone locations such as the city of Venice and the London Olympics, managing risks to the enrichment of the environment. In Scotland too, we have the future V&A building at Dundee's waterfront. Barr Construction have constructed thirteen stilted supermarkets on functional flood plains with a recent one in Scotland at Galston, East Ayrshire on a site shown by SEPA to be as a medium to high flood risk with active river flows.

Yours sincerely.

Cyril A Smith

Attachments:

Supporting Statement by Future Plans Flood proof architecture by Dura Vermeer

ce to Iain Drummond, Moray Council





Our ref: Your ref:

PCS/136437 14/01773/APP

If telephoning ask for: Clare Pritchett

28 October 2014

lain Drummond
The Moray Council
Development Services
Environmental Services Dept.
Council Office, High Street
Elgin
IV30 1BX

By email only to: consultation.planning@moray.gov.uk

Dear Mr Drummond

Town and Country Planning (Scotland) Acts
Planning application: 14/01773/APP
Erection of a house
Site South East Of Orchard House, Spey Street, Garmouth, Moray

Further to our response to you of 3 October 2014 (PCS135894), we have been consulted on further information from the applicant by email on 14 October 2014.

As you know, we have previously objected to this proposed development on the grounds that it is development within the undeveloped/sparsely developed functional flood plain contrary to Scottish Planning Policy and PAN 69. We have carefully considered the material submitted by Mr Smith, but there is no relevant technical information within it that would allow us to change our position, and hence we maintain our **objection**. Much of the information submitted relates to the development of innovative design to manage flood risk in this location, when the overriding principle is to avoid flood risk by not selecting a site in the floodplain in the first instance. Even if the proposal were to accord with policy, there would still be residual risk to people which is inappropriate as a long-term sustainable approach to flood risk.

We have now been consulted on this application site numerous times over the past three years and have made our position very clear in all of the advice we have provided. While we are sympathetic with the applicant regarding the challenges presented by the site, our advice that the site is not suitable for development of a new residential property remains the same and more detailed information is included in our previous responses.

In the event that the planning authority proposes to grant planning permission contrary to this advice on flood risk, the Town and Country Planning (Notification of Applications) (Scotland) Direction 2009 provides criteria for the referral to the Scottish Ministers of such cases. You may therefore wish to consider if this proposal falls within the scope of this Direction.







Advice for the planning authority

1. Flood Risk

- 1.1 We consider that there is no new information provided in this most recent submission dated 14 October 2014 which enables us to reconsider the previous advice we have given.
- 1.2 Whilst we note Mr Smith's comments regarding seepage and flooding of low velocities at the site, the definition of 'flood' (as given in SPP) is "The temporary covering by water from any source of land not normally covered by water but not including the overflow of a sewage system." We therefore consider that "flood" is the appropriate term for use in this situation.
- 1.3 Whilst we note Mr Smith's 'factual research' on levels, unfortunately we do not consider this a Flood Risk Assessment or an accurate assessment of the 1:200 year flood level. It should be noted that a robust and detailed Flood Risk Assessment has not been submitted for the site which defines the extent of the functional floodplain in line with our Technical Flood Risk Guidance for Stakeholders.
- 1.4 We note Mr Smith's description of adjoining development but we continue to consider that the proposal involves 'additional development in an undeveloped or sparsely developed area'.
- 1.5 We previously stated that we would have concerns with the impact of any landraising on the functional flood plain, particularly given that there was no adequate compensatory storage scheme being proposed. We note that no landraising and loss of floodplain capacity is now proposed.
- 1.6 We note Mr Smith's points regarding innovation however, we remain of the view that the proposals are not in accordance with Scottish Planning Policy. Even if the proposal were to accord with policy, there would still be residual risk to people which is inappropriate as a long-term sustainable approach to flood risk.
- 1.7 Whilst we note Mr Smith's points regarding interpretation of SPP paragraph 263 and examples of development on sites at risk of flooding, in our view we do not consider that the proposed development is an acceptable exception to paragraph 263.
- 1.8 We highlight that the planning authority has the responsibility to determine this application. It could approve the application against our advice if it is of the view that there is an overriding need to develop the property at this location, that this is an exceptional case permitting the use of flood risk management measures to enable the site to be developed and it is satisfied that the proposals address all of the technical issues regarding flooding in perpetuity. We do not consider this to be the case, but it is the planning authority's decision whether or not to approve the application.

If you have any queries relating to this letter, please contact me by telephone on 01224 266609 or e-mail at planning.aberdeen@sepa.org.uk

Yours sincerely

Clare Pritchett Senior Planning Officer Planning Service eCopy to: Agent - Future Plans Ltd <u>ask@futureplans.co.uk</u>

Disclaimer

This advice is given without prejudice to any decision made on elements of the proposal regulated by us, as such a decision may take into account factors not considered at the planning stage. We prefer all the technical information required for any SEPA consents to be submitted at the same time as the planning application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue

Caveat

The advice contained in this letter is supplied to you by SEPA in terms of Section 72 (1) of the Flood Risk Management (Scotland) Act 2009 on the basis of information held by SEPA as at the date hereof. It is intended as advice solely to Moray Council as Planning Authority in terms of the said Section 72 (1). Our briefing note entitled: "Flood Risk Management (Scotland) Act 2009: Flood risk advice to planning authorities" outlines the transitional changes to the basis of our advice inline with the phases of this legislation.