

Report to Cairngorms National Park about residential capacity and density matters

Site H1 Ballater

May 2009



Andrew McCafferty Associates
PLANNING AND DEVELOPMENT CONSULTANTS

The Old Barn, 38 Cupar Road ,Auchtermuchty Fife,
KY14 7DJ
Tel. No: 01337 827888

Instructions

We have been asked by the Cairngorms National Park Authority to give our views about :

- (1) whether site H1 at Ballater in the Draft Cairngorms Local Plan (1st Modifications) June 2008 can accommodate 250 units
and
- (2) an appropriate density for the allocated site.

Appendix 1 contains an extract from the Proposals Map of the Draft Local Plan showing the extent of the proposed allocation H1 at Ballater.

We have been asked to take into account the extent of the 200 Year Floodplain set out by engineers WSP and the comments of SEPA about the WSP modelling information given to the Park Authority in April 2009. (Copies of these documents are attached in Appendix 2). We have also been asked to exclude an area of approximately 1.28 ha (3.16 acres) adjacent to Monaltrie Avenue which is covered by the allocated area H1.

Assumptions

We assume that this is a Greenfield site, free of any abnormal development constraint or ground condition problems other than flood risk over part of the area as set out in the map prepared by WSP.

We also assume that this is relatively level ground which is straightforward to develop and there are no parts which cannot be developed because of contamination or poor ground conditions. We also make the assumption that there are no significant areas of woodland or vegetation on the allocated area which should be retained and would consequently reduce the extent of developable area.

Area of site and Draft Local Plan allocation

The allocated site has a total area of 16.41 ha (40.56 acres) and this area should include housing and mixed use and has a capacity for around 250 units.

The Deposit Local Plan does not contain any dedicated policies or guidance about density, character zones, house types or mixes but instead refers to a requirement to reinforce and enhance existing character of settlements. Text accompanying the Inset Map for Ballater refers specifically to the Enquiry by Design Process and supports provision of a variety of densities and designs and pockets of mixed uses on the allocated site, H1. The text also refers to the need to protect listed buildings and their settings.

Residential Density

In this report, we refer to density of units per ha/acre i.e. the total area of the allocation as shown on the Proposals Map. This of course, is a gross area and is commonly used by planning authorities in stipulating densities for sites. The following elements, whilst being necessary to support/deliver residential units would be deducted by a housebuilder from the area which is *actually* developed and sold/occupied for residential purposes:

- Spine/internal distributor roads
- Structural landscaping
- Play areas/open space
- SUDS's areas
- Land for commercial uses other than residential e.g. shop/community use plots or other mixed use
- Areas to remain undeveloped because of flood risk

It is helpful to set out broad definitions of residential density currently used by developers and housebuilders in Scotland. Our main experience is from working with housebuilders such as CALA, Stewart Milne and Highmore Homes and whilst this experience is predominantly in the Central Belt it provides a context for the conventional approaches to residential density used by housebuilders:

	Units per ha	Units per acre
Lower density	10-25	4-10
Medium density	30-45	12-18
Higher density	50+	20+

Clearly, these are broad ranges and represent an *average* density across a site. Affordable housing and flats on a site would tend to be built at higher density and hence their presence would allow building at a lower density across the balance of sites, thereby increasing the possibility of higher total numbers of units.

To put the above broad ranges into perspective, the table below sets out comparisons of density for various *urban* locations:

Location	Dwellings		Source
	ha	acre	
Central Edinburgh	135	55	CB Richard Ellis
Glasgow Homes for the Future	165	67	AT 107
Typical British inner-urban	75	30	Urban Taskforce
Bloomsbury/Islington	100-200	40-80	Urban Taskforce
Barcelona (inner city)	400	160	Urban Taskforce
Forth Quarter, Edinburgh (proposed as at 2003)	148	60	Foster & Partners

Land in urban areas for residential use tends to be developed at higher density than in rural areas because of competition by alternative uses. The absence of such pressure in rural areas means that densities can be lower although this can present threats to layout quality and a tendency of the market to demand uniform density across sites. The planning system can prevent these problems by managing the masterplanning process and insisting upon variations of density and built form.

Testing the 250 indicative capacity for Ballater H1

We need to make broad assumptions about the proportion of the gross site area which will not be developed with residential units. Without detailed layouts being available this exercise is not 'scientific' but will give a reasonable idea as to whether the indicative capacity of 250 units can be achieved on the net developable area.

We calculate that the part of the allocated area subject to a 1 in 200 year flood risk is 1.28 ha (3.16 acres) and also deduct the area adjacent to Monaltrie House (1.28 ha/ 3.16 acres). We then take this area and deduct a proportion to reflect the other elements that have to be delivered (see comments above) which then provides a guide as to whether 250 units can be accommodated and an indication of the average density:

	Gross* site Area (ha)	Indicative Local Plan Allocation	Net** Site Area (ha)	Based on net site area – 13.85 ha			
				Units/ha @ 80%	Units/acre @60%	Units/ha @80%	Units/acre @60%
Ballater H1	16.41	250	13.85	23	9	30	12

* Area of H1 allocation

** Excluding part of site subject to flood risk (1.28 ha/3.16 acres) and part adjacent to Monaltrie House (1.28 ha/3.16 acres) producing a combined deduction of 2.56 ha/6.32 acres

Conclusions

We have tested in a broad way the notional capacity of 250 units for site H1 at Ballater to see whether this number of units can be accommodated, deducting part of the site subject to flood risk and also non-development of part adjacent to Monaltrie House.

Under two separate coverage assumptions of 80% and 60% of the net site area, we consider that the allocated area is large enough to accommodate 250 residential units. These ratios produce

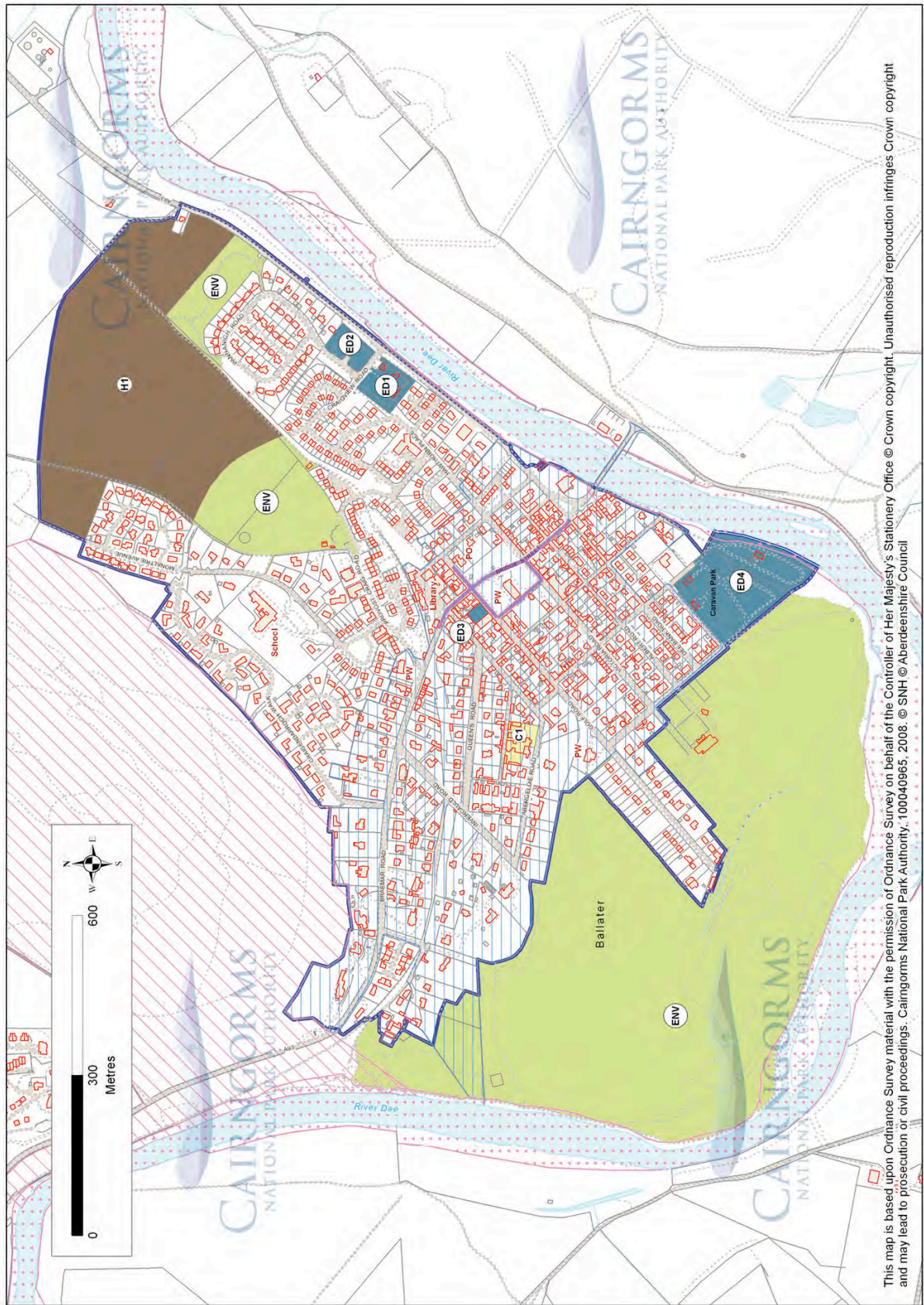
potential average densities respectively of 23/ha (9/acre) and 30/ha(12/acre). Neither of these potential densities are excessive and can be described as low to medium.

This analysis should give sufficient comfort to the National Park Authority that the proposed residential allocation H1 at Ballater is large enough to accommodate the proposed 250 units. It can also be argued that these potential densities at 23 and 30/ha are on the low side and do not make the most efficient use of the land. However, the ideal capacity for any site must result from wider consideration of landscape capacity and design issues. (Analysis section, PAN 44).

Sources/References

- PAN 44: Fitting New Housing Development into the Landscape, March 1994
- SPP3: Planning For Homes (Revised 2008)
- The Forth Quarter, Edinburgh, Western Residential Neighbourhood Masterplan for Plots 13-22, 29 & 30 Foster and partners, May 2003
- Cairngorms National Park Local Plan (Draft)
- PPS 3 Housing November 2006

Appendix 1: Extract from the Draft Local Plan Proposals Map



Our Ref: MI/2008/2092/4
Your Ref: JT/jc/2253

WSP Development and Transportation
Mountbatten House
Basing View
Basingstoke
Hampshire
RG21 4HJ

If telephoning ask for:
Zoe Griffin

16 April 2009

For the attention of: Matthew Quinnell

Dear Sirs,

HYDRAULIC RIVER MODELLING AS PART OF FRA, BALLATER, ABERDEENSHIRE FOR SCOTIA HOMES LTD

With reference to your email dated 19 March 2009 concerning the above, SEPA has reconsidered its response to you dated 2 March 2009. As a result it is willing to remove its objection to this site allocation in the local plan provided that, should the Planning Authority be minded to retain this site allocation in the Local Plan, the following, as an absolute minimum, be imposed:

- No development (including any sustainable urban drainage scheme) shall take place in the area identified at risk of flooding during a 1 in 200 year return period flood event (the area shown in blue on Drawing No: 2253-FLD-04 Rev B).
- SEPA accepts that freeboard exists to provide additional allowance for factors of uncertainty and climate change.

SEPA has just prepared its written submission to the Cairngorms National Park Local Plan and its response to this site is as follows:

BL/H1: SEPA requests that the following text be removed:

~~*v. Part of this site lies within SEPA's indicative 1 in 200 year flood risk area. A detailed flood risk assessment will therefore be required to accompany any development proposals for this site.*~~
and replaced by:

A flood risk assessment has shown the site to be affected by flooding. Any future development proposals will be required to avoid the area identified at flood risk, i.e. no development is to take place below the 193.82m contour and minimum finished floor levels are to be 194.34m or above OD.

The plan states

ii. The site has capacity for around 250 units, with 90 dwellings envisaged during the life of the Plan.

SEPA requests that these figures are reassessed in light of the flood risk assessment to ensure that these are now correct before the final plan is adopted.

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I trust this is acceptable to you and your client. SEPA is satisfied that some allocated green space could be accommodated within the functional floodplain. However, no landraising should take place in this regard. As such it is for the Park authority to decide whether the green space requirement should be allocated within this area or within a revised boundary. It should be noted that the flood plain encroaching into the site boundary, as shown in Figure 2 of the FRA, is a substantial area (shown on drawing 2253-FLD-04).

It should also be noted that SEPA will object if any landraising was to take place in forming any of the access roads which will lie within the flood plain. Although SEPA would rather an approach was taken that no access road used for general public access was located within the flood plain, SEPA is unlikely to object to such a proposal if the road is designed in such a way that it floods and doesn't interfere with flow of water in the functional flood plain.

With reference to proposed signage on the proposed access road from the A93, SEPA cannot comment in detail without having more information on what is actually proposed. However the Agency has reservations about human operated signage warning of imminent flooding unless long-term ownership i.e. by the council is taken. Static signs indicating that it is at risk of flooding, along with limitations of use, e.g. access by the occupants of a particular property only, indication that it is a 'private road' or something such like seems more appropriate. This is essentially an access issue, and as such falls to the responsibility of the Planning Authority for them to deal with (or the Flood Prevention Authority in this case if that is more appropriate).

Please do not hesitate to contact SEPA again should you wish to discuss further.

Yours sincerely,

Zoe Griffin
Senior Planning Officer

Cc: Karen Major, Cairngorms National Park Authority
Don McKee, Cairngorms National Park Authority