

NYM / 2010 / 0 1 0 1 / F L Environmental Planning & Consultancy Services (Part of East Yorkshire Farm Services)

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NYMNPA 8 FEB 2010

FLOOD RISK ASSESSMENT

RE

PROPOSED EXTENSION TO NO. 111 HACKNESS ROAD, SCALBY SCARBOROUGH, NORTH YORKSHIRE

FOR

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August 2009

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INTRODUCTION

This report has been prepared by Environmental Planning and Consultancy Services at the request of Mr & Mrs J Bingham and their agent/architect Mr P Markham. The report relates to proposals for an extension to the existing bungalow at 111 Hackness Road, Scalby.

SITE

The site of the bungalow at 111 Hackness Road, Scalby is on the southern fringe of Scalby village and on the south side of Hackness Road approximately 50 metres north west of the bridge over the Sea Cut. The site itself sits between Hackness Road and the north side flood bank of the Sea Cut. Church Beck runs along the north side of Hackness Road.

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DEVELOPMENT PROPOSALS

The proposed extension works to No 111 Hackness Road effectively converts a three bedroomed ground floor bungalow to a four bedroomed two floored property. The ground floor is extended both to the north and south.

FLOODING HISTORY

In recent years there have been a number of flooding incidents in the Scalby area, these occurring after spells of extremely heavy rainfall. These flooding incidents have been predominantly in the vicinity of Cow Wath Beck on the eastern fringe of the village. In the worst of the recent flood events, when the Sea Cut has been running at full capacity, there has been flooding of Hackness Road near Scalby Bridge. This, however, has been minimal with the majority of the floodwater overtopping Church Beck moving into the low lying field area to the north and east of the beck. The land here is substantially lower than Hackness Road.

CHURCH BECK

This watercourse discharges into the Sea Cut at Scalby Bridge. The beck extends in a northerly direction past the western fringe of the village where it is called Foulsyke Beck. It then extends further north over Barmoor Road and past Foulsyke Farm towards Swarthlands Lane and a property known as The Pines. A tributary ditch, Washy Cote Beck, joins up to Foulsyke Beck midway

between Foulsyke Farm and The Pines. This beck extends in a north westerly direction to the north west fringe of Burniston village.

A further watercourse joins up to Church Beck approximately 150 metres north of the application site. This extends in a westerly direction for approximately 2 kilometres towards Cockham Gill. Further watercourses extend northwards in the valley areas around Coomboots and Wreahead Rigg.

In total, the catchment area of Church Beck extends to approximately 350-400 hectares (865-1000 acres).

Where the Beck runs past the development site the channel is 1.10 metres deep with a top width of approximately 3 metres and a bottom width of approximately 1.20 metres. The beck has a stone/gravel bed which, even in times of low rainfall, maintains a relatively fast, self cleansing velocity. Machine maintenance to remove siltation is not necessary. The only likely restrictions to the flow are weed growth during summer and tree branches which can easily be removed by hand.

A plan showing the network of watercourses is annexed to the report.

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TOPOGRAPHIC SURVEY DETAILS

The topographic survey shows the floor level of the existing bungalow, and also levels in the surrounding garden area, the north side flood bank adjacent to the Sea Cut, Hackness Road and in Church Beck and the low lying field area adjacent to Church Beck. All of the levels are related to Ordnance Datum with the datum point being a Bench Mark – value 49.32m on Low Hall Miners Convalescent Home (approximately 300 metres north west of the application site)

SITE FLOOD RISK POTENTIAL

The Environment Agency Flood Map, copies of which are annexed to this report, shows the site of the bungalow at 111 Hackness Road to be in the Zone 1, "Low Probability" area. Nearby areas are, however, in the Zone 3 "High Probability" area. This area extends to the eastern and southern fringes of the garden of the property.



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FLOOD RISK VULNERABILITY CLASSIFICATION SEQUENTIAL/EXCEPTION TEST

The risk-based sequential test should be applied at all stages of planning. Its aim is to steer new development to areas of lowest probability of flooding (Zone 1).

PPS25 provides the most up to date guidance in respect of flood risk, particularly in relation to new development proposals. Within PPS25, Table D1 (pages 22, 23 and 24) provides advice in respect of the defined flood zones and the type of development that is, or is not, acceptable within these zones. Table D2 (pages 25 and 26) identifies flood risk vulnerability classifications i.e., the type of uses considered to be appropriate within the defined flood zones.

There are three different defined flood zones - these being as follows:-

Zone 1 "Low Probability"- this is defined as having less than 1 in 1000 annual probability of flooding in any year. Within this zone PPS25 accepts that all uses of land are appropriate.

Zone 2 "Medium Probability" – is defined as having between a 1 in 100 and 1 in 1000 annual probability of flooding. Less vulnerable and more vulnerable uses of land and essential infrastructure detailed in Table D2 are appropriate in this zone. Subject to the Sequential Test being applied, highly vulnerable uses shown in Table D2 are only appropriate if the Exception Test is passed.

Zone 3 "High Probability" – is defined as having a 1 in 100 or greater annual probability of flooding. Less vulnerable uses of land shown in Table D2 are appropriate in this zone but not highly vulnerable uses. More vulnerable and essential infrastructure uses in Table D2 should only be permitted in this zone if the Exception Test is passed.

The proposed development for this application is located in the Zone 1 (Low Probability) area.

Table D2 of Planning Policy Statement 25 classifies development into degrees of flood risk vulnerability. Buildings used for dwelling houses are classified as "More Vulnerable".

From Table D3 (page 27) of Planning Policy Statement 25, the construction of "More Vulnerable" development within an area of Flood Risk Vulnerability Classification Zone 1 is considered to be an appropriate type of development.

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CONCLUSIONS/RECOMMENDATIONS

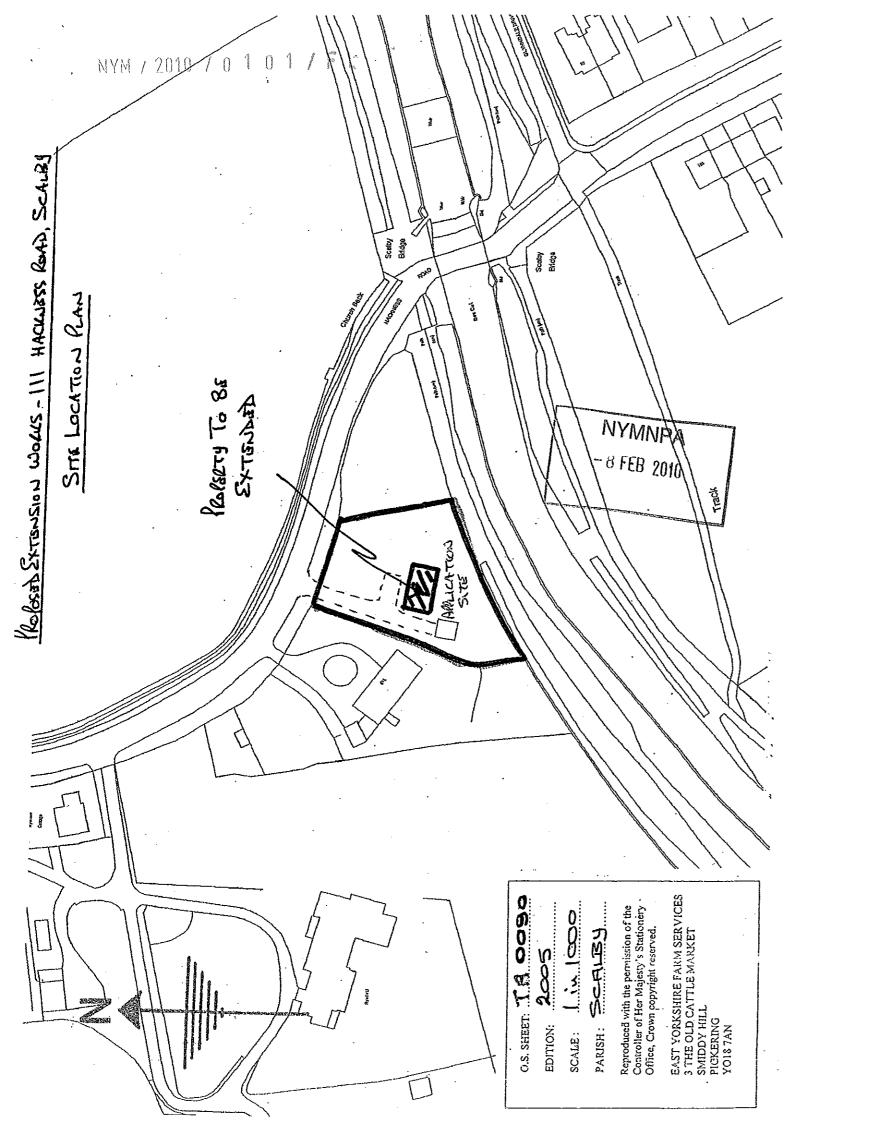
In view of the fact that the property is situated outside both the Medium and High Probability flood zones, it is considered that there is no risk of the development being affected by any future flood event. Nevertheless, the low lying areas of the garden – which are in the High Probability flood zone may well be affected by flooding.

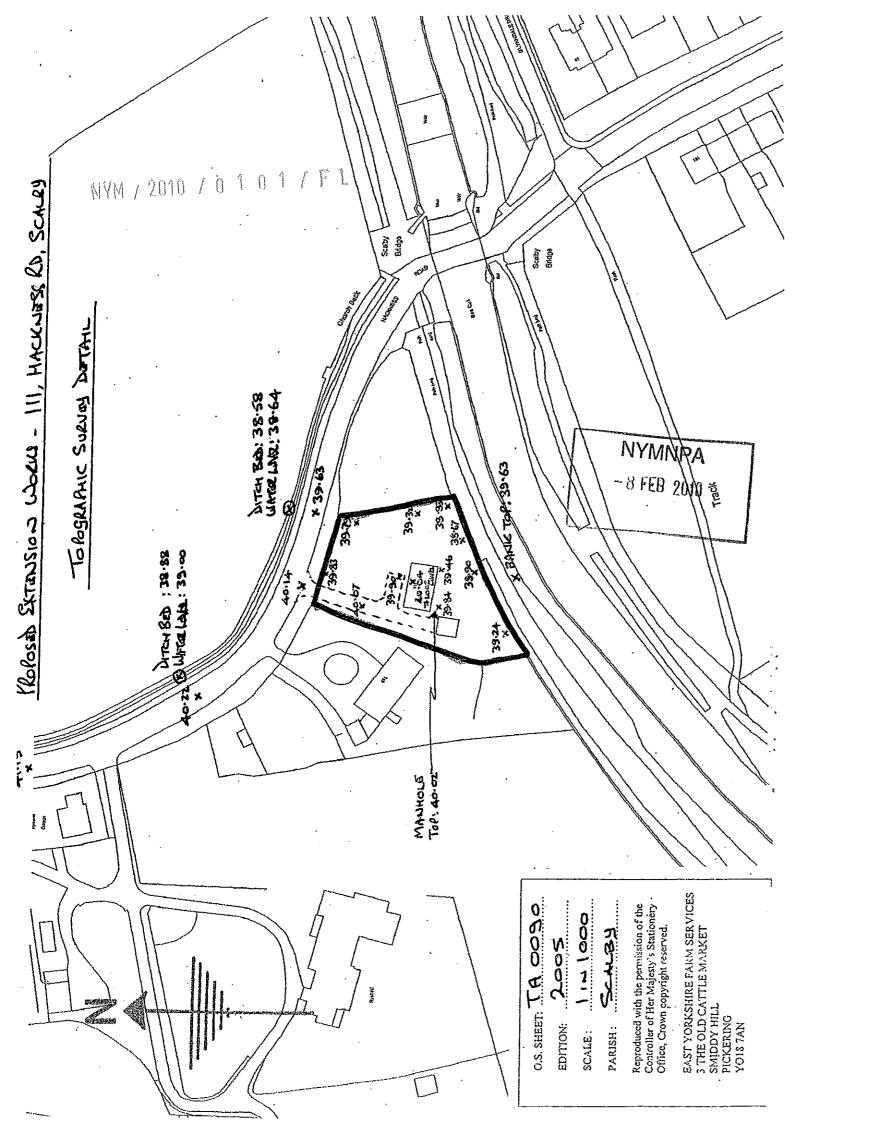
The sequential test clearly shows that development in the Low Probability area is appropriate. It is, however, recommended that when the property is extended, all electrical wiring and sockets are at least 600mm above the finished ground floor level. Due to the close proximity of the Zone 3 High Probability area, it is also suggested that the property is linked to the Environment Agency Flood Warning System so as to ensure that the occupants are aware of any future flood event.

Emergency access and egress to the property is available from both Scalby village (to the north) and Newby/Scarborough (to the south) via Hackness Road.

ANNEXED DETAILS

- i) Site Location Plan (Scale 1 in 1000).
- ii) Topographic Survey Detail (Scale 1 in 1000).
- iii) Environment Agency Flood Risk Area Plan (Scale 1 in 10,000).
- iv) Environment Agency Enlarged Flood Risk Area Plan (Scale 1 in 5000).
- v) Watercourse Network Catchment Area Plan (Scale 1 in 10,000).



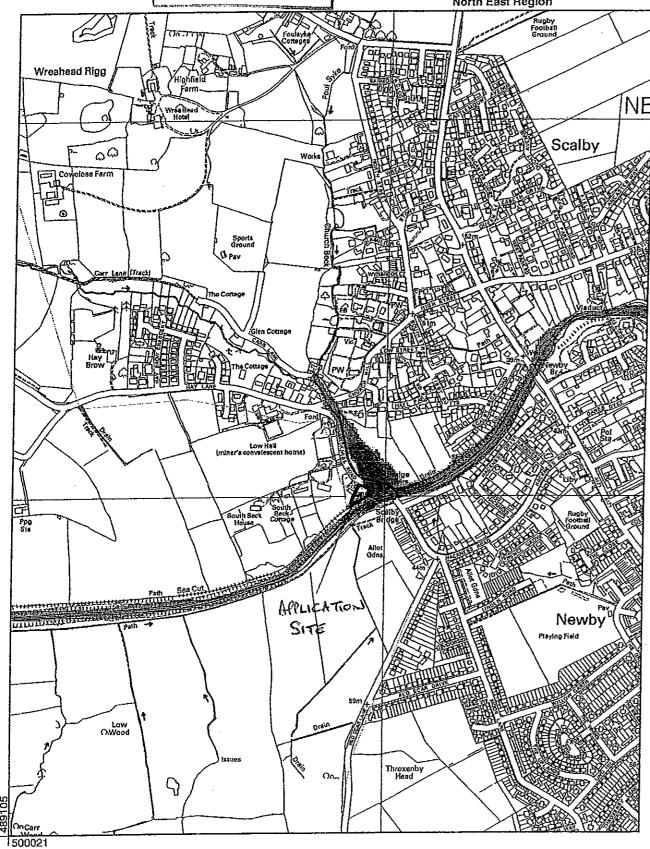


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North East Region



Legend

Flood Zones
Zone 2 Zone 3 Flood Defences — Areas Benefiting From Defences

Flood Storage Areas Main River Centreline

EA Water Management Boundaries Regional Area

County Council Boundary -District Council/Unitary Authority Boundary National Park Boundary

Tile Locator

| SE99SE | TA09SW | |
|--------|--------|--|
| SE98NE | WASOAT | |

Plot to be used in conjunction with the associated information sheet.

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