

GMS/LEM/JP/01/30463

11 October 2007  
Revision 0

## FLOOD RISK ASSESSMENT

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**Client:** Claycliffe Property Developments Ltd  
**Site:** Former Garden Centre, Claycliffe Road  
Barugh Green, Barnsley  
**OS Grid Reference:** SE 319 079  
**Planning Authority:** Barnsley Metropolitan Borough Council

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### Introduction

The proposed development is located 3.5 km to the north west of Barnsley town centre in an area of commercial development between Claycliffe Road and Barugh Green Road.

The proposed development consists of retail and office units with associated car parking, access roads and landscaping.

### Enclosures

The following information is enclosed:

- Site location plan.
- Environment Agency flood zone map.
- Copy of topographical survey of the site with levels highlighted.
- Extract of the site plan showing the location of the culverted watercourses and 3m easements.

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### **The Site**

The site is approximately 1.0 ha.

The site was formerly used as a garden centre. It is currently unoccupied and overgrown.

Two culverted watercourses cross under the southern half of the site. These connect into an open watercourse that forms a section of the site's western boundary.

The northern part of the site slopes downwards northeast to southwest towards the open watercourse. The watercourse lies at the bottom of an embankment. The top of the embankment, site side, is some 1.5m to 2.0m above the watercourse. The southern part of the site slopes east to west towards the watercourse. It is some 1.0m to 2.5m above the watercourse.

### **Flood Risk**

The Environment Agency (EA) map shows the site to lie in flood risk Zone 1. It is to be noted that the flood map does not show areas at risk of localised flooding from minor watercourses. Hence, it is necessary to consider site levels and possible flood routes in detail to assess the risk.

Discussion with the EA confirms that there is no flood level information for the watercourse bounding the site. Furthermore, due to the elevated position of the site in relation to the watercourse the EA do not consider the site to be at risk from flooding.

Discussion with Barnsley MBC confirms that they have no record of flooding on the site.

### **Surface Water Disposal**

In principle it is to be accepted that the effect of the new development may result in an increased risk of flooding to others if increased surface water run-off results. Current planning policy guidance, as contained in PPS25, is for the disposal of surface water to be dealt with in a sustainable way and to be such that volumes and peak flows are no greater than the rates prior to development. The EA have informed us that they wish to see surface water run-off reduced by at least 20% of existing on the site.

It is thought that the current site is likely to drain to the existing watercourse, although it is possible there may be a connection to the public sewers.



The proposed development will drain directly to the open watercourse or via existing connections to the public sewer should subsequent site development work show such connections to exist.

Permission should be sought from Yorkshire Water for connection to the sewer. There are likely to be a number of conditions, principally that the rate of discharge should be restricted to the same as existing and at similar points of discharge. Yorkshire Water should be consulted before any work proceeds on site.

Barnsley MBC have informed us that there has been no incident of flooding on the site. However, there has been an incident of flooding downstream of the site where the watercourse bounding the site crosses Claycliffe Road near Redbrook Industrial Estate, at OS grid reference SE 317 082.

Barnsley MBC have, therefore, requested surface water discharge to the watercourse be restricted to 6 l/s for a 1 in 30 year flood event. It is a recommendation of this report that this restriction be provided. It is anticipated that flow attenuation will be required.

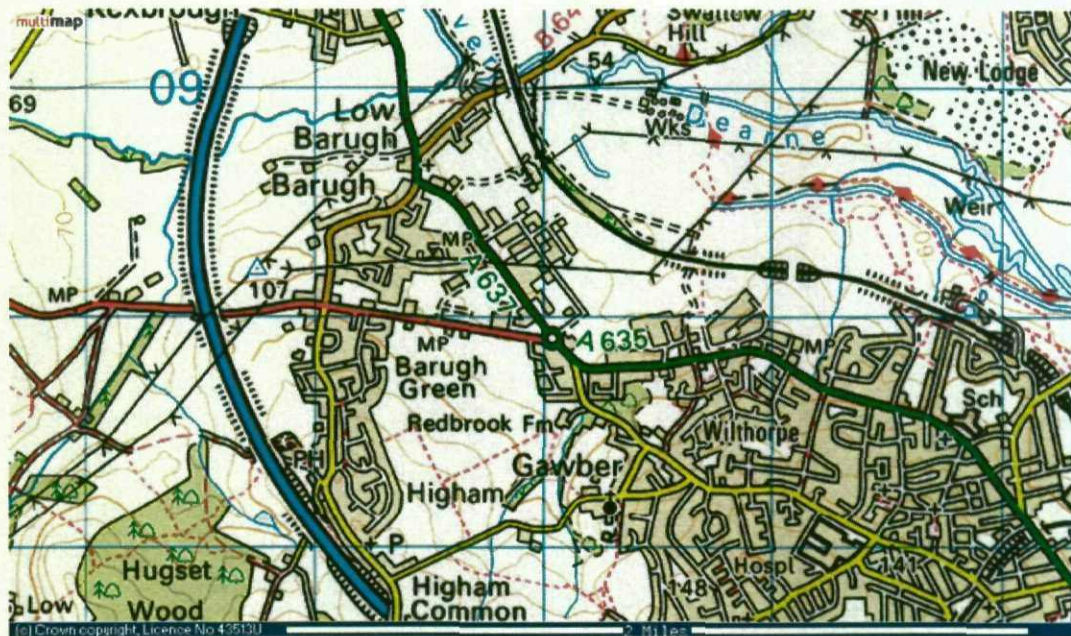
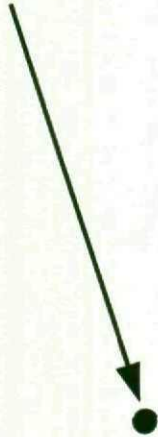
### **Conclusions**

1. The site falls outside an area designated as liable to flooding.
2. Flood risk to others as a consequence of surface water drainage from the site should not be increased.
3. A surface water discharge of 6 l/s should be provided and flow attenuation is likely to be required.
4. The level of risk and safeguards available are considered appropriate to this class of development.

**G M Seaman**  
**Director**

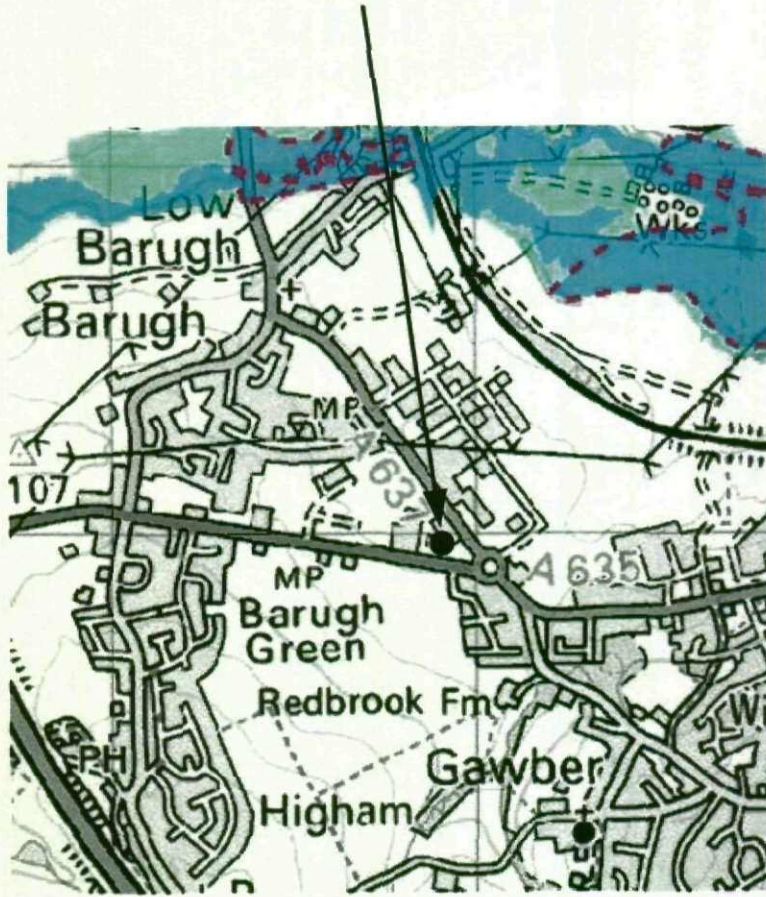
## Location Plan

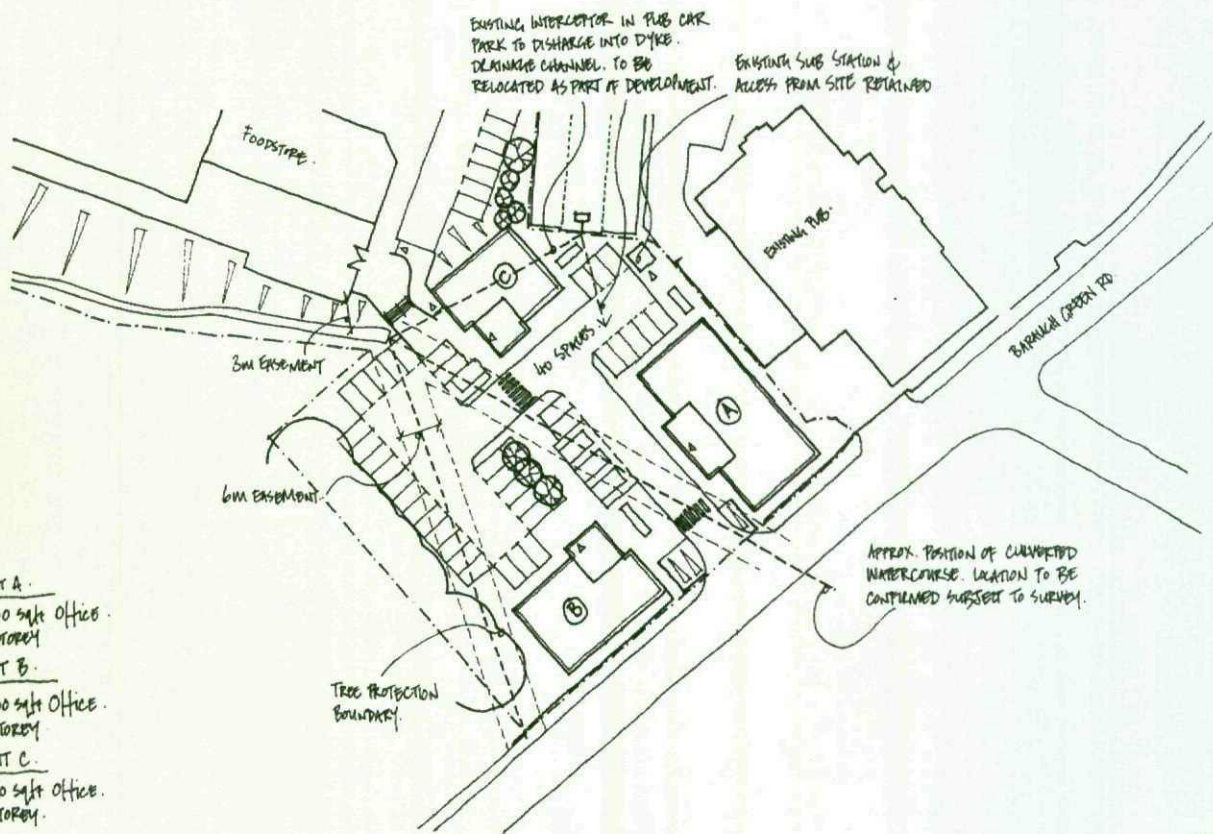
Former Garden Centre, Claycliffe Road, Barugh Green, Barnsley



**Environment Agency flood zone map**

Former Garden Centre, Claycliffe Road, Barugh Green, Barnsley





- UNIT A.  
6000 sqft Office.  
2 STOREY
- UNIT B.  
4000 sqft Office.  
2 STOREY
- UNIT C.  
3000 sqft Office.  
2 STOREY.

MIXED USE DEVELOPMENT

BARAUGH GREEN RD < BARNSLEY

Client: JOHN RADCLIFFE AND SONS

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SEP 2007  
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