

DL/10040175

19 September 2005

Ben Bailey Homes Ltd.
Elizabeth House
Cliff Street
Mexborough
South Yorkshire
S64 9HQ

For the attention of Mr. Martin White

Dear Sirs,

Re: Flood Risk Statement For The Proposed Residential Development At The Foundry, Wombwell.

Further to your instruction received on 19th September 2005, please find below our comments with regard to the above flood risk assessment.

Site Description

JPA undertook a site visit in February 2004.

The site is located off Hough Lane to the North of Wombwell Town Centre, Nr Barnsley and is bounded by Hough Lane residential and commercial development to the north, the existing railway line to the southwest and open grounds. The site area is approximately 5.0 Ha and is currently occupied by the derelict buildings and hardstanding areas associated with the sites former use.

The site slopes to the south east and varies in altitude from 72.5-82.0m approximately.

Water Courses Description

A culverted watercourse outfall was observed at the south east boundary of the site. The outfall was submerged at the time of site visit. A number of manholes were lifted on site and these appeared to demonstrate the surface water from the site draining toward the existing culverted watercourse, which passes through the site. The watercourse is up to 9m below the current ground level and is culverted for approximately 500m upstream of the site.

The River Dearne runs approximately 2 miles to the east of the site. It flows roughly east for more than thirty kilometres, from its source just inside West Yorkshire, through Denby Dale, Clayton West, Darton, Barnsley, Darfield, Wath upon Dearne and Bolton upon Dearne, to its confluence with the River Don at Conisbrough.

The EA's flood map shows defences to be constructed at several locations at the area protecting developments from flooding from the River Dearne. (Appendix 3)

Flood Risk

The location is in an area which fell outside the extent of the extreme flood, at the time of EA's assessment of the likelihood of flooding. Generally this means that the chance of flooding each year from rivers or the sea is 0.1% (1 in 1000) or less. The Environment Agency Flood Map is shown in Appendix 3.

There is no available flood data for the culverted watercourse that crosses the site; however, there will be a requirement to provide an easement to this culverted watercourse of approx 4m from each side of the culvert. This may be relaxed subject to agreement with the EA. It is not thought that this culvert will cause any flooding within the site due to the depth of the culvert below the site.

The submerged outfall may require replacing as part of the development. If the condition of the outfall is inadequate, or the issues that cause the outfall to become submerged cannot be addressed, there may be a need to construct new outfall structure at a higher level than existing.

Run off Assessment

The proposed development will reduce the impermeable area provision to approx 50% with gardens etc offering an improvement over the existing situation.

Due to the contaminated nature of the site substrata and the need for a 750mm capping layer to facilitate the development, it is not recommended that soakaways would be suitable at this site.

The combined sewer passing along the north east boundary of the site is unlikely to have spare capacity for an unrestricted discharge from the site. Yorkshire Water state that no connection from the site will be accepted to this combined sewer.

The site could connect to the existing culverted watercourse subject to approval from the Environment Agency and the Local Land Drainage Authority. If the condition of the existing outfall was inadequate, then a new outfall could be constructed in its place. The Environment Agency's development control office for this area stated that although attenuation would be preferred, the fact that we are significantly reducing the impermeable area draining to the watercourse, attenuation may not be required. Barnsley MBC confirmed this view, stating that provided that 25-50% reduction was made, then they would raise no objection.

Conclusions and Recommendations

In accordance with the PPG25 document, and the classification of this particular site as within Flood Zone 1, areas with little or no potential risk of flooding (annual probability less than 0.1%), it is recommended that the site is suitable for the proposed residential development.

The surface water from the development could be drained into to the existing culverted watercourse subject to approval from the Environment Agency and the Local Land Drainage Authority. Based on the discussions with the EA and BMBC, attenuation would not be required at this site due to the reduction in impermeable areas provided due to the nature of the proposed development.

A 4m easement from each side of the culvert may be required, however the required easements must be agreed with the Environment Agency.

We would note that all comments stated in this report are based on responses received from the consultees and the observations made on site. This report and its recommendations are intended for the use of Ben Bailey Homes Limited in support of their planning application for the above site only.

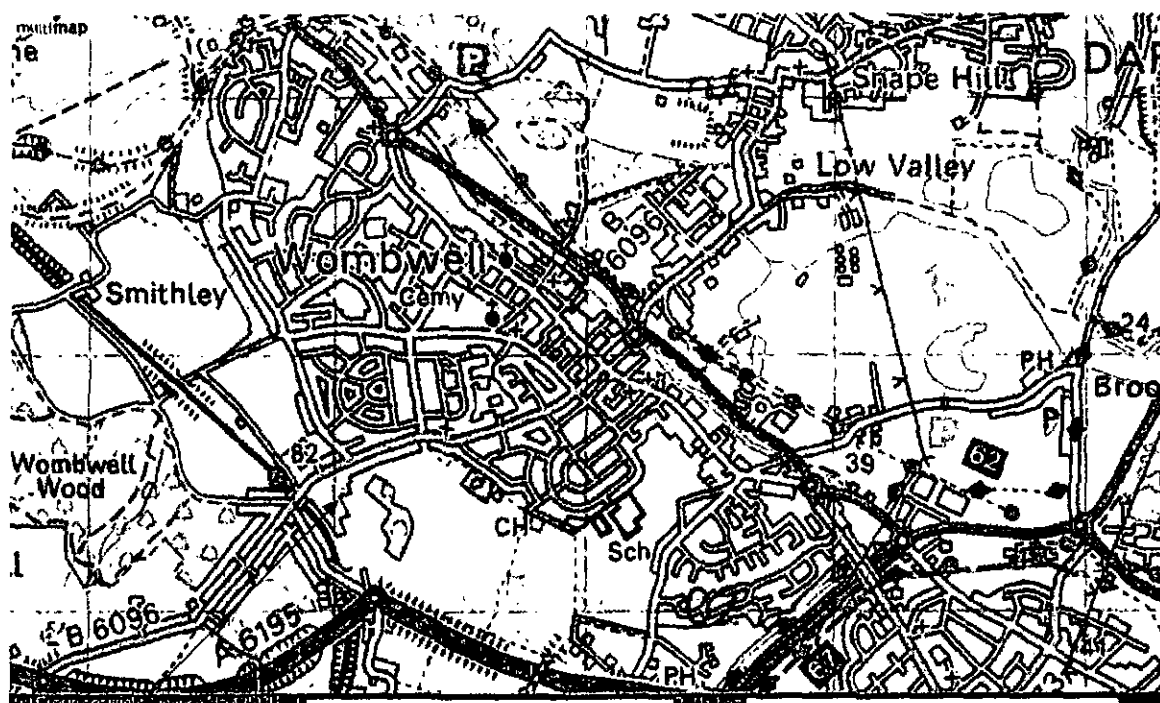
Yours sincerely

For and on behalf of Joynes Pike & Associates Limited

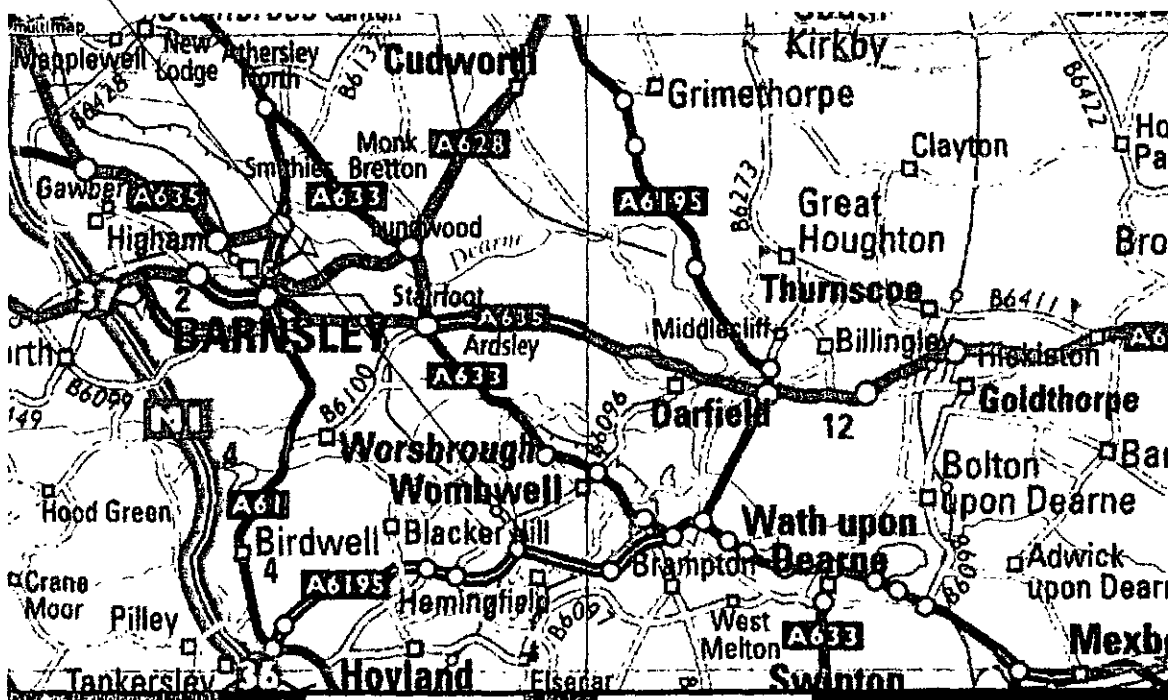
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Appendix 1. Site Location



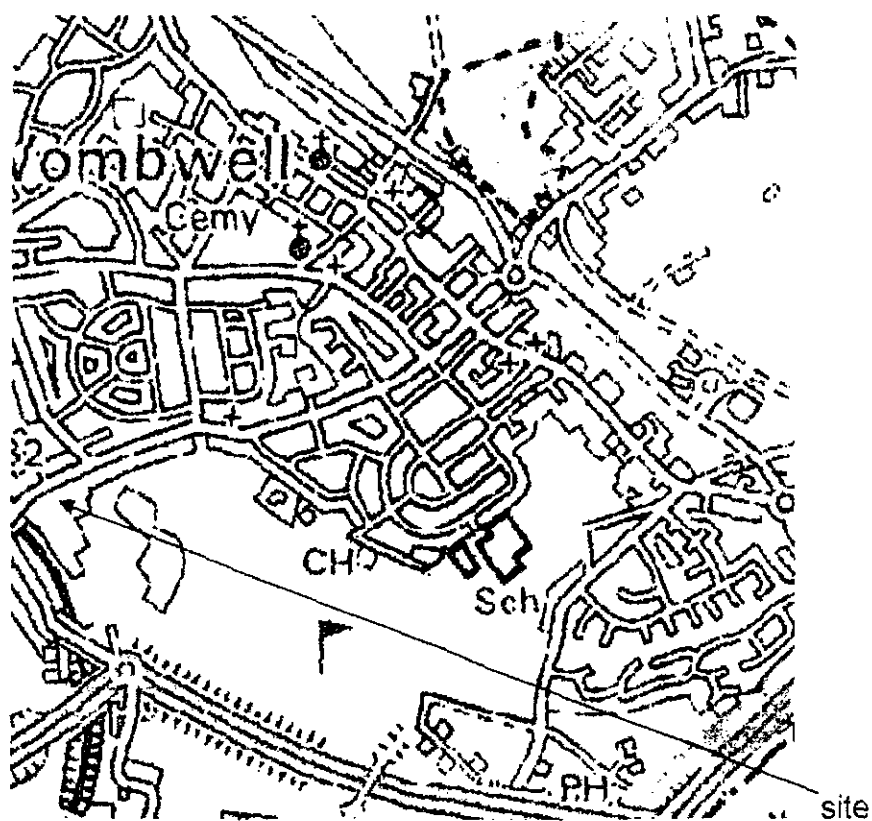
Site



Appendix 2. Topographical Survey

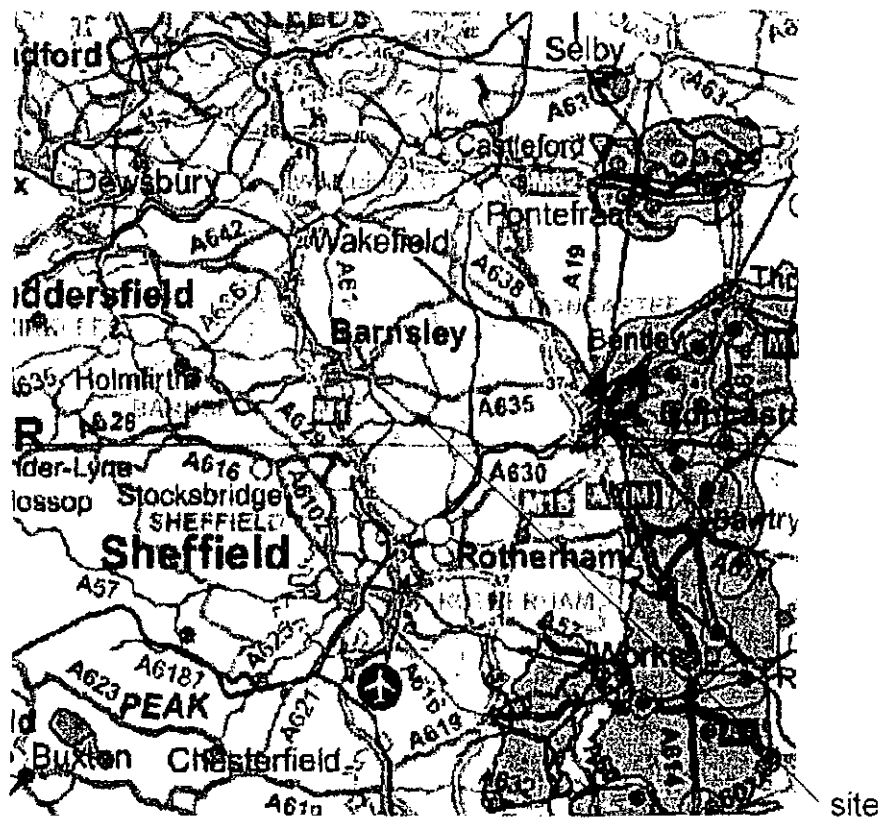
See plan no. BBH05/20

Appendix 3. Environment Agency Floodplain Map



- — Flooding from rivers or sea without defences
- — Extent of extreme flood
- ■ Flood defences
- ▨ Areas benefiting from flood defences

Appendix 4. Environment Agency Groundwater Map



- Borehole
- Inner zone
- Outer zone
- Total catchment
- Special interest

Appendix 5. Proposed Development Layout

See plan no. 2461/01