GHB Civil and Traffic Engineering Consultants
G. H. BULLARD AND ASSOCIATES
Hollow Road Farm, Hollow Road, Fornham St Martin, Bury St Edmunds, IP31 1SJ
Tel: (01284) 767411
Fax : (01284) 706911
E-mail: gerry@ghbullard.co.uk
E-mail: dan@ghbullard.co.uk

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26 May 2006

Director of Planning and Transportation
St Edmundsbury Borough Council
St Edmundsbury House
PO Box 122
Western Way
Bury St Edmunds
Suffolk
IP33 3YS

For the attention of Mr Chris Rand

Dear Mr Rand

Re: Residential Development – Ironworks Site, Hamlet Road, Haverhill, Suffolk.

We have received a copy of the Environments Agency's letter to you dated 12 May 2006 and our Clients have asked us to comment upon the points raised.

Please find enclosed 4 copies of the revised site survey with levels related to Ordnance Survey Datum. Stability checks using the following OS benchmarks has confirmed that datum point used; on the old railway viaduct nearby; remains stable with virtually no differences to the compared benchmarks: -

TL 6797 6478 Butt Viaduct = 62.392m. TL 6776 4487 Hamlet Road = 63.142m.
TL 6825 4465 Sturmer Road = 62.73m. TL 6833 4495 Chalkstone Way = 67.60m.
TL 6762 4457 Hollands Road = 80.89m. TL 6762 4501 Hamlet Road = 64.77m.

The FRA recommended floor level, to local datum, becomes 62.73m Ordnance Datum Newlyn (ODN)

With regard to paragraph eight *"The FRA states that we maintain the Stour Brook, however the residual risk of blockages in the channel needs to be addressed. The likelihood of a blockage at the A143 road bridge adjacent to the downstream boundary of the site will therefore need to be assessed as part of the FRA."* Your attention is drawn to paragraphs 4.3, 4.5 and 4.7 of the FRA. The downstream capacity of the amenity weir is the capacity of the A143 road bridge and is 1.75 greater than the capacity of the upstream channel and is formed with smooth, concrete faces. It is difficult to imagine that material, sufficient to block the bridge, could be transported via the relevant upstream channel. The Flood Defence Engineer for the Environment Agency has advised that a monthly walk-through inspection is

carried out along the Haverhill reach of the River Stour and detritus and vegetation is removed as appropriate. Neuroses aside, with such a high level of maintenance allied to the much greater cross-sectional area of the A143 Bridge, it is considered that the bridge is very unlikely to be markedly restricted by blockages. Furthermore, the A143 locally is virtually level and even if the improbable were to happen and the bridge did become totally blocked, the predicted 1:100 year flows plus 20% to allow for potential climate changes, could not develop sufficient weir-flow depths to threaten the minimum proposed finished floor levels at 62.73m ODN.

With regard to paragraph nine, please note that the soils underlying the site are unlikely to offer infiltration rates suitable for a prudent soakaway system. It is very unlikely that our Clients will view the construction of underground storage tanks; or the like, to reduce established discharge rates, as an 'opportunity'.

With regard to paragraph ten, the design of the surface water drainage system will be under the approval of your Council's Building Control Section and the design will be as per the Colebrook-White calculation method. This method ensures that sufficient capacity will exist for short, high intensity rainfalls. Accordingly, the per hour rainfall comparison is FEH = 90.5mm for a catchment rainfall duration of 25 hours or 3.62mm/hour. Colebrook-White = T_c 3mins with rainfall at normal design standards giving a rainfall rate of 78mm/hour. The comparison demonstrates that the standard of design required by Building Control will not allow flow accumulations from the rainfall events referred to by the Environment Agency and potential material impacts or nuisances remain flights of fancy in this respect.

We trust we have provided sufficient information for your needs.

Yours sincerely

Alan Rich Associate
for G H Bullard & Associates

Enc.