Tonbridge & Malling Borough Council	Our ref:	KT/2011/113113/03-L01
Development Control	Your ref:	TM/11/01191
Gibson Building		
Gibson Drive	Date:	22 June 2012
Kings Hill, West Malling		
ME19 4LZ		

## Dear Sir/Madam

## Proposal: ERECTION OF 177 DWELLINGS, CREATION OF 6.82 HA OF PUBLIC OPEN SPACE INCLUDING LOCAL AREA OF EQUIPPED PLAY (LEAP), NEW VEHICULAR ACCESS ONTO HAUL ROAD AND MODIFIED VEHICULAR ACCESS ONTO QUARRY HILL ROUNDABOUT. PROVISION OF ACCESS ROADS, FOOTPATHS, LANDSCAPING AND ALL ASSOCIATED INFRASTRUCTURE, REMOVAL OF BRIDGE DECK TO ISLES QUARRY EAST Location: ISLES QUARRY, QUARRY HILL ROAD, BOROUGH GREEN, SEVENOAKS, KENT

Thank you for your letter which we received on 31 May 2012.

We note that due to the Source Protection Zone (SPZ) status, infiltration leading to runoff into the underlying soils is not acceptable at this location. Section 2.6.2 confirms that under the existing situation, the majority of rainfall would drain via infiltration with overland flows being directed to the River Bourne.

Regarding the use of SuDs for infiltration, if groundwater conditions preclude the ability to infiltrate to underlying soils, consideration should be given to use of lined systems – swales/filter strips/ponds for the conveyance and storage of surface flows. Section 3.3.1.4 states that 1250m<sup>3</sup> storage will be provided in the form of oversized pipes and storage tanks. Section 3.3.1.7 references the use of lined permeable paving which may be suitable and provides water quality benefits over the use of attenuation tanks. Attenuation tanks are not acceptable as the sole means of storage on a development site as large as this.

The Micro Drainage (MD) outputs including within the submitted Flood Risk Assessment (FRA) include pipe runs for the proposed system under various storm conditions and appear to be based on the 360 minute winter storm. It is assumed that this storm has been found to be the critical event which has informed the storage requirement of 1250m<sup>3</sup> but no information has been submitted to substantiate that. The FRA should include the MD analysis for the critical storm.

Section 3.2.3 proposes a cut off drain, running along the boundary of the site which will capture overland flows from the area of public open space, and connect into the main drainage outfall downstream. Section 3.3.1.3 confirms that the allowable discharge from

this area based on Greenfield runoff rates is 9.5l/s. It is not clear how the runoff from this area will be attenuated before it is discharged to the River Bourne (other than the attenuating effects of the ditch). This should be quantified to ensure there is no net increase in runoff.

To summarise, we require the following;

- A review of the current techniques for the capture, conveyance and attenuation of surface water with a view to providing a suite of SuDs techniques.
- Confirmation of the critical storm and subsequent storage requirements.
- Confirmation that proposed land drain will provide appropriate attenuation of surface water flows from the public open space area.

## Informatives

Section 3.3.1.4 states that the drainage under the adoptable roads will be designed to ensure that there is no surcharging under the 1 in 1 year storm. This is likely a typing error but to clarify, there should be no surcharging under a 1 in 2 year storm.

The River Bourne is a designated 'main river' under our jurisdiction for the purposes of its land drainage functions. Written consent is required under the Water Resources Act 1991 and associated Byelaws prior to the carrying out of any works in, over, or under the channel of the watercourse or on the banks within eight metres of the top of the bank, or within eight metres of the landward toe of any flood defence, where one exists. For maintenance reasons, we will not normally consent works which obstruct the eight metre Byelaw Margin.

Although we have a right to enter onto the land within the 8 metre Margin to carry out maintenance and repairs, we are not under any obligation to do such work. In the absence of any express agreement to the contrary, maintenance or repair of the riverbank and any structure affecting the channel is the responsibility of the riparian owner. We are aware that works are required to upstream sections of the River Bourne to the east and on the outside of the site boundary (but within the curtilage of land ownership). Specifically, desilting is required within the open section of watercourse and possible renewal/repair of the culverted section. Both of these remedial actions will restore/improve the hydraulic capacity of the river, and reduce flood risk to nearby receptors. We advise that these works are undertaken as soon as possible in order to reduce flood risk within the overall area.

If you have any further queries, please do not hesitate to contact me.

Yours faithfully

## Miss Michelle Waterman Planning Liaison Officer

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cc Barton Willmore LLP