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16 July 2012

Strata Homes Yorkshire Limited
Quay point
Lakeside
Doncaster DN4 5PL

Dear Sir
RE: STRATA HOMES DEVELOPMENT, CHAMPANY FIELDS, DODWORTH

Further to our telephone conversation I would clarify the drainage principles behind the proposed engineering design.

FOUL WATER DRAINAGE.
In line with Yorkshire Water response 22 February 2012 (reference N001382) foul water is permitted to discharge to the public sewer located in Haddon Close approximately 100m from the site.

SURFACE WATER DRAINAGE
We understand from the client that the sub-strata for the site does not permit standalone infiltration drainage. Yorkshire Water will not permit overflows from overflows from SUDS structure due to the possibility of land drainage entering the public sewer system. Our next consideration is discharge to a watercourse, the route through to the watercourse to the south passes through a graveyard and it is considered unacceptable to carry out excavation in such ground. To the north in Baslow Crescent is a 450mm diameter culverted watercourse which would seem the obvious discharge point, it is to this culvert that the existing public surface water sewer located in Haddon Close also discharges to.

In order to proceed we have calculated the greenfield runoff as follows.

1.4Hc x 5lts/sec/Hc x 30% (climate change) = 9.1 lts/sec

Our design incorporates box culvert storage located in the POS in the site entrance off Haddon Close. The discharge rate from the attenuation is as follows (including 30% climate change)

1year = 5 lts/sec **30year = 7 lts/sec** **100year = 9.1 lts/sec**

The levels are such that we are able to connect physically to the surface water manhole at the junction of Eyam Close / Haddon Close and not to the culvert. It would seem farcical to lay a parallel surface water sewer between Eyam Close / Haddon Close and Baslow Crescent. Yorkshire Water guidance for connection at this point is a limit of 7 lts/sec which we assume is the 30year discharge (email 27 June 2012).

Cont

No surface flooding occurs for the 100 year storm, flood routing during more extreme storms is over the graveyard to the nearby watercourse with a secondary flood route down Haddon Close re-entering the surface water sewer via road gullies.

WE trust this brief report is of assistance and meets with your approval

Yours faithfully
R.A.B. ENGINEERING DESIGN



R.BLAND