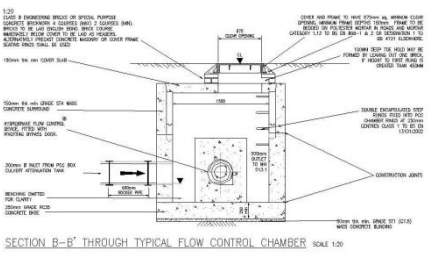
Flood Risk Assessment

Kernick, Penryn
Nr Falmouth, Cornwall

Project: Development of 104 Residential Homes, open space areas and associated car parking.
Client: Walker Developments
Date: 2008 - Present

H2Ok were invited to provide a Flood Risk Assessment (FRA) in support of the planning application for this residential development. As the site is over 1 Hectare in size any planning application to develop the site will be required to provide a FRA report which demonstrates that surface water running off the proposed development will not cause flood risk to third party sites downstream.

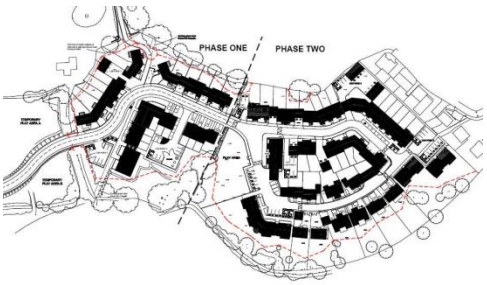


SECTION B–B' THROUGH TYPICAL FLOW CONTROL CHAMBER SCALE 1:20

To safely dispose of surface water runoff from the development a Sustainable Urban Drainage Scheme (SUDS) was designed by H2OK's consultancy division. In accordance with best practice, percolation rates of the site were tested and where possible infiltration soakaways were specified.

In some parts of the site it was not possible to drain the site via soakaways and an attenuation system discharging to the College Stream which is classed by the Environment Agency as a critical drainage catchment.

The attenuation system has been designed to take the surface water runoff from the estate roads and a proportion of the impermeable roofed areas.

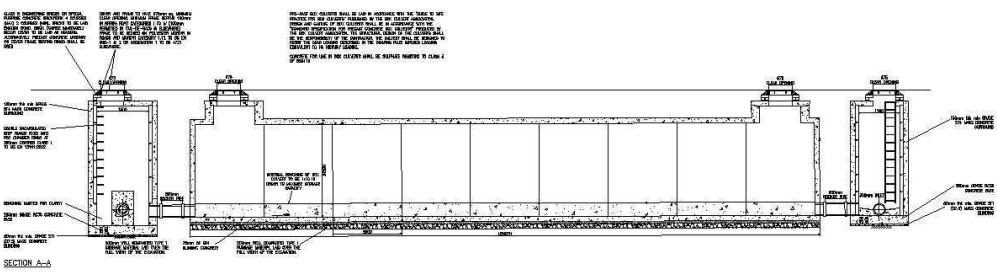


The drainage system was designed in such a manner to ensure that the site could be developed in two phases and that the future drainage infrastructure would suitable for adoption by South West Water.

The FRA report and accompanying SUDS design was submitted to the Environment Agency for pre-planning liaison where H2OK negotiated the suitability of the system and ultimately resulted receiving an approval from the Environment Agency.

The application went to committee in Spring 2009 and the site was granted conditional approval.

H2OK are happy to consider any size development. If you would like further information on Flood Risk Assessments please contact floodrisk@h2ok.co.uk or call the telephone number below.



SECTION A–A

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