

WHITE LODGE

Land Drainage Consultancy

- 4.11 Owing to the many inherent vagaries within the drainage systems, there is no definitive standard adopted for their design, but this said, the empirically derived criterion employed by the industry over many years has proven to work well.
- 4.12 Micro Drainage software used by the IDB to model the peak flow water level along Edward Dyke indicates that for a 1 in 30-year event that incorporates a 20% allowance for increased run-off to account for climate change and expanding development, a level of 2.37m ODN is predicted at the northern boundary of the site. However, the output data does show a steep rise of water-slope through the piped system crossing the site to Pennygate where it attains an elevation of 2.80m ODN. Given that the topographical survey reveals nearby site levels to be typically, 3.00m ODN and 3.30m ODN there is clearly an acceptable freeboard to the area but it is of note that the elevation of Pennygate in proximity to the site entrance is around 2.90m ODN. It is therefore evident that under such potential conditions the predicted peak level would be very close to flooding the road.



**Edward Road Dyke – Viewed toward the
Site's North-western Corner**

- 4.13 From correspondence with the IDB that is copied and included at page no.20 it is clear that the condition of the culverted length of watercourse crossing the site is