

The calculations are not as accessible to the lay-reader as I had hoped, and I had expected the document to represent the pile calculations and not the structural member specification. The Calc document indicates that foundations design is to be undertaken 'by others', and refers the reader to column loadings contained within the structural calculation.

Whilst the calculation document is not quite what I expected, the critical element for me is the bearing capacity of the strata underlying the site (indicated on the Static-Pile design sheet), relative to the loading capacity of the selected 250mm pre-cast driven piles. Taking the maximum pile load of 323 kN as a given (value taken from the email chain - I assume that the design parameter refers to the total design column load for node 66 of 646 kN, halved to give the per-pile loading for paired installation beneath each pile cap), the submission confirms that piles are unlikely to exceed 13m maximum depth and so are extremely unlikely to penetrate the London Clay unit. This essentially rules-out significant pathway creation to the principal aquifer.

The submitted documents are sufficient to enable fully informed comments to be made by consultees. Comments made previously about the relative risks of different piling methods are considered to remain applicable, and I am comfortable to rationalise the approach as previously indicated, taking the baseline water quality and aggregate risk into consideration. I would reiterate a 'raise no objection' response from Environmental Health on that basis, subject to the opinion of the EA on risks to the secondary aquifer & riders lane stream.

Best Regards,

Jon

Jonathan Driver
Environmental Control Officer