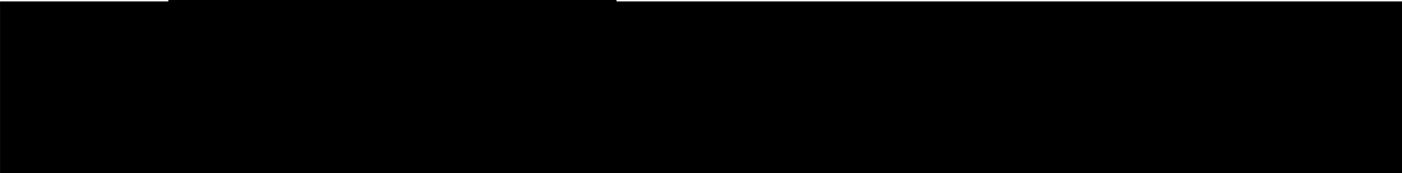


From: Laura Gibbons <laura.gibbons@arun.gov.uk>

Sent: 09 July 2019 14:25

To: Luke Hart 



Subject: RE: Y/9818/RES and Y/97/18/DOC

Luke,

Thank you for supplying the revised information. I have the following comments:

1. The calculations for flotation of the pond are based on the liner being at 0.6m depth below ground water level. We agreed to assume ground water level at the surface in this area, i.e. 6.8mAOD. The invert level of the pond is 6.2mAOD, and there is 0.41m depth of top soil above the liner. The liner is therefore actually 1.01m below ground water level. The calculations need to be adjusted to account for this and more stabilising forces will be required.
2. The flotation calculations for tank 3 assume that wet sand is being used as ballast. Yet stone is specified within the drawings.
3. The constructability, design life, and maintenance of the arrangement proposed for tank 3 are a significant concern. Please re-consider providing counterbalance outside of the impermeable membrane (then you're also displacing less groundwater) and above the tank.
4. There are discrepancies between cover levels and invert levels of tanks in flotation calculations and on drawings.
5. Please update the construction detail drawings to show permeable geotextile wrap fully around the sub-base.
6. Please provide a schedule of permeable paving subbase depths and orifice diameters.
7. Please provide finish and formation levels of permeable paving on plan.
8. In some locations there are significant drops between orifice invert level and the invert level of the main surface water pipe. Please provide a detail that accurately represents this.
9. There appear to be some discrepancies between tank dimensions (area and invert levels) shown on plan and those in calculations. Please check and update.
10. Please include reference to the covenants that will be imposed within the maintenance manual. (I have not found the example I was looking for, and cannot recall which case it was for, apologies).

11. Please update the maintenance manual to include replacement of geomembrane within the corrective maintenance for attenuation tanks.

Kind Regards,

Laura Gibbons, MEng, GMICE
Engineer (Drainage & Coastal)

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