From: Amanda Scholes on behalf of Planning.Responses
Sent: 11 March 2020 11:04
To: Planning Scanning
Subject: FW: Pound Place A/18/20/DOC

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From: Sarah Burrow <Sarah.Burrow@arun.gov.uk>
Sent: 06 March 2020 16:58
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Anita Gardner <Anita.Gardner@arun.gov.uk>; Tracey Headley-Smith <Tracey.Headley-Smith@arun.gov.uk>; Paul Cann <Paul.Cann@arun.gov.uk>
Subject: FW: Pound Place A/18/20/DOC

Engineers Comments Regarding Surface Water Drainage

At present we are not able to recommend that condition 3 is discharged. Please address the following points, the majority of which will enable a contractor to be able to construct the scheme from the plans with confidence. Points 1 and 2 may influence the nature of the design and require immediate attention if work is due to or has already commenced on site (bearing in mind that this is a pre-commencement condition).

1. We are concerned that the calculations show flooding on every catchment in the 1 in 100 year +40% event. Given the excellent infiltration rates on the site we would be keen to see all surface water kept underground and infiltrating, particularly given that there is not a constraint on space. If the applicant is insistent about allowing flooding in the 1 in 100 year +40%, then they must show that the flood water can be contained on site without detriment to access and the building and show clearly at which points the system will flood.
2. We question why there is no permeable paving to the parking at the south of the site? We would be keen to see this for water treatment.
3. Please check that the impermeable areas correlate between the calculations and the plans.
4. On Drwg3000 the foul and surface water pipes are mis-labelled on the key.
5. Need construction detail drawings for permeable paving.
6. Need construction detail drawings for diffuser units.
7. The ACO Channel construction detail requires dimensions.
8. Need a silt trap detail drawing for the ACO Channel.
9. Need road gully details (these should be trapped).

10. All non-manhole junctions to be oblique.
11. Need a construction detail for an oblique junction.
12. Soakaway detail shows pipes at the top of the soakaway, which we agree with. However on the plan the invert levels are the same as the base level, implying that they come in at the base. Please adjust.
13. Manholes S2.04, S1.04 and S1.3 are assumed to be rectangular brick construction. A detail is shown for the backdrop but no the manhole itself. Please clarify and/or show a detail to illustrate this.
14. Please make it clear that the Catch Pit construction detail is a modification of "Type 2 Manhole" and increase the concrete thickness at the base to 225mm.
15. Remove Class B bedding.
16. Specify when Class Z or Class S should be used (depth of cover) on the detail drawing.
17. Please show cover levels and base levels of permeable paving on the plan.
18. Please show outlet invert level from the diffuser units.
19. Please show pipe diameters from diffuser units.
20. Please show cover levels for all soakaways.
21. Please make it clearer which dimension is the depth for the soakaway (eg "@0.8m depth").
22. Make it clear that all pipes are to connect soffit to soffit.
23. Please make it clear what each of the manhole types are on the key.
24. Amend invert level IL(x) for S4.03(CATCHPIT), this is currently the same as invert level of Soakaway CS4 (zero gradient) – shown on calcs as 11.970.
25. S1.07 IL(x) is 12.4 on drawing but 12.450 on calcs. Please correct.
26. Two manholes are identical (S1.23), it is assumed that one is in fact S1.15 with CL14.670 and IL13.1. Please correct.
27. Junction directly south of S3.12 is not appropriate (all should be oblique). Please insert manhole here.
28. Manhole S1.06 is incorrectly labelled, assumed to be S3.05, please correct.
29. Fall between S2.07 and pipe to S2.04 is too steep. Please insert a manhole with backdrop at the pipes' connection.

Kind Regards

Sarah Burrow
Engineering Assistant

and

Paul Cann
Principle Drainage Engineer