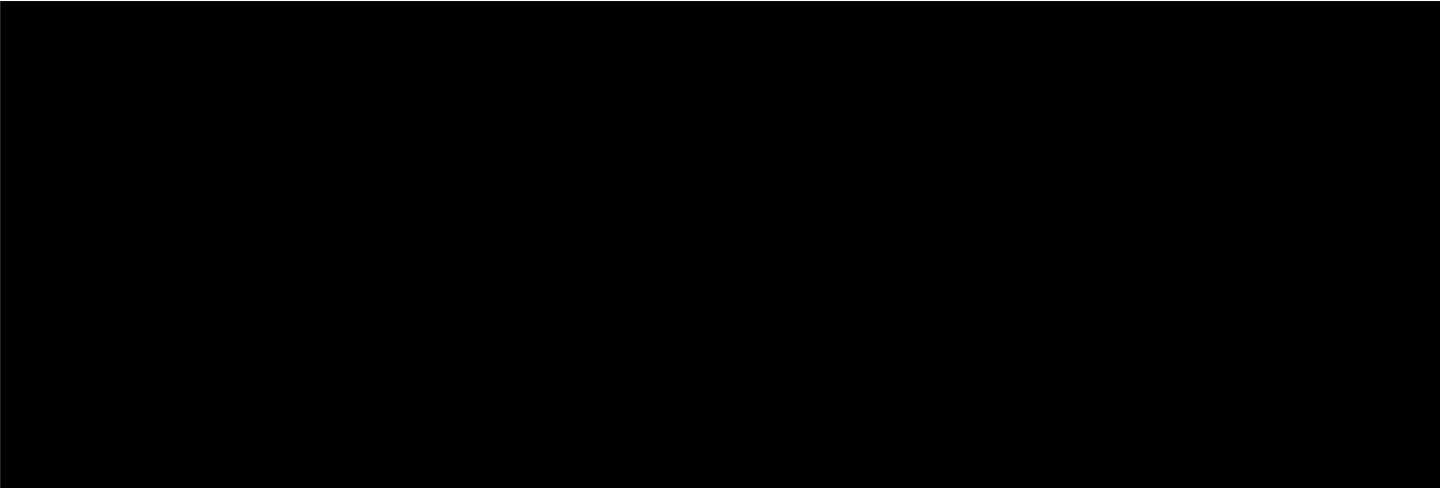



From: Sarah Burrow <Sarah.Burrow@arun.gov.uk>
Sent: 03 November 2020 15:57
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Maria Tomalova <Maria.Tomalova@arun.gov.uk>
Subject: RE: Planning Consultation on: FP/184/20/PL

Further Engineers Comments Regarding Surface Water Drainage

Following my consultation earlier today the applicant has supplied the documents that were referred to in the DAS. As such my consultation should be amended to the following:

The applicant has supplied infiltration testing results and groundwater monitoring data. Both undertaken within the winter period. It is noted that the three repeat infiltration tests were completed on consecutive days rather than in succession as stipulated by BRE 365. A factor of safety of 3 should be used in the calculations to compensate for this. The worst calculated infiltration rate of 1.267×10^{-5} has been used for the calculations which is appropriate.

Whilst calculations, a drainage layout and construction details have been provided, the following points require addressing to avoid the request for pre-commencement condition PCENDG2:

1. No impermeable area plan has been provided. The impermeable area used in the calculations is 80m^2 , it is unclear whether this is per soakaway or for the two combined. According to the proposed floor plans each proposed semi-detached property will be 52.5m^2 internal floor area, totalling 105m^2 not including the garden room which also needs to be accounted for in the design. It is assumed that the 80m^2 is for the single property, however this is unclear and needs to be clearly shown on an impermeable area plan.

2. Following on from point 1, the calculations are unclear. The soakaways modelled in the calculations (1 in 10 year and 1 in 100 year storm) are different (2.5m x 3m x 0.4m and 4m x 3m x 0.4m respectively). The 8m x 2m x 0.4m soakaway as shown on the drainage layout is not modelled (which should include the impermeable area of the garden room). Calculations for each different soakaway should be supplied, for both the 1 in 10 and 1 in 100 year +40% event. The inputs should correspond with the drainage layout.
3. Safety factors of 1.5 (1 in 10 year) and 2 (1 in 100 year) have been used in the calculations. A minimum of 2 should be used for this kind of development where CV=1 (as shown in the Factor of Safety Table in our Drainage Checklist – a copy of which the applicant has completed). In this case Cv of 0.75 and 0.84 have been used in the calculations, and as discussed above, the infiltration testing was not completed in quick succession. A safety factor of less than three will not be accepted.
4. The Drainage Plan itself lacks sufficient detail. Guidance note 10 on the Drainage Checklist (as completed by the applicant) details what is required. In this case the following need to be added to the plan:
 - a. All surface water drainage pipes labelled with; diameters, pipe materials, falls and invert levels.
 - b. Soakaways to be labelled with invert and cover levels.
 - c. Manholes/Inspection chambers to be labelled with; cover levels, invert levels and cover types.
 - d. Silt traps clearly labelled with sump depths.
5. Permeable paving is shown on a separate drawing to the drainage layout without consideration of how it will interact with the soakaway below. It may be worth considering a permeable paving solution which the first semi and garden room can drain into via diffuser units. At a minimum the permeable paving should be detailed on the Drainage Plan and 'Clean Crushed Stone' will need to be specified as Type 3 reduced fines or 4/20 or similar to be suitable for the engineered fill. A construction detail will also need to be supplied to show the layers from the block pavers to the bedding layer of the soakaway crates.
6. Linked to point 5; the soakaway construction details show a minimum cover depth of 0.7m, and the crates are 0.4m depth, yet depth of crates is stated on the drainage checklist as 0.9mbgl. With groundwater evidenced at 1m below ground level the crates must be kept at 0.9mbgl as a minimum. The construction detail will need to be amended to reflect this. If necessary the specified crates will need to be changed to ones that are suitable at shallower depths in vehicular areas.

It will be up to the planner to decide how to proceed from this point, and whether or not it will be possible to supply further information and provide a third consultation before the deadline (to avoid pre-commencement conditions). If the planner is minded to approve the application and apply PCENG2 rather than allow further consultations, then please utilise the information above before making a DOC application.

Kind Regards

Sarah Burrow

Engineering Assistant, Engineering Services

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Current working hours: Mon 8:00-2:30, Tues-Thur 8:00-17:30, Fri 8:00-11:30

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From: Planning.Responses <Planning.Responses@arun.gov.uk>
Sent: 05 October 2020 09:49
To: Land Drainage [REDACTED]
Subject: Planning Consultation on: FP/184/20/PL

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

Town & Country Planning Act 1990 (as amended)

Town and Country Planning (Development Management Procedure) (England) Order 2015

Planning Permission

Application No:	FP/184/20/PL
Registered:	2nd October 2020
Site Address:	Rear of 7 Middleton Road Felpham PO22 6BL
Grid Reference:	496183 100310
Description of Works:	Demolition of existing garage/outbuilding & construction of a pair of semi-detached houses & associated works. This site is in CIL Zone 4 & is CIL Liable as new dwellings.

The Council have received the above application.

[Click here to view the application details](#)

This application has been identified as CIL Liable. Therefore please be aware that, in accordance with Appendix 2 of the Arun CIL Charging Schedule, your consultation response should only include requests for Section 106 for onsite mitigation, Pagham Harbour Management Contributions (if applicable) or Affordable Housing. Off Site mitigation measures directly related to this development should be dealt with by condition if possible to ensure the scaling back of Section 106 if possible. CIL contributions will be used for off site infrastructure mitigation schemes. Therefore if this proposal triggers the need for off site mitigation, please ensure that you engage in the CIL Infrastructure List Consultation process upon receipt of a consultation letter.

Should you have any comments to make, these should be sent by replying to this email by 5th November 2020 . You can also monitor the progress of this application through the Council web site:

www.arun.gov.uk/planning.

The application will be determined having regard to the development plan policies (if any are relevant) and other material considerations. The development plan can be accessed via the website <https://www.arun.gov.uk/development-plan> as can the the leaflet how to respond to planning applications <https://www.arun.gov.uk/planning-application-comments> which deals with material planning considerations.

Please be aware that any comments you may make will be available on our website so please do not insert personal details or signatures on your reply.

Should the application go to appeal the Planning Inspectorate will publish any comments made to the Council on their website: <https://www.planningportal.co.uk/info/200207/appeals> but they will protect personal details.

In the absence of a reply within the period stated, I shall assume that you have no observations to make

Yours sincerely

Maria Tomalova

Planning Officer- Arun District Council

Telephone: 01903 737510

Email: maria.tomalova@arun.gov.uk

PLCONSULT (ODS) 2020