

Application Reference: Y/70/22/DOC Site Name: Land at Blisham Road, Yapton	Initial Issue Date: 04/10/2022 Issue Date: 01/02/2024 Reviewer Reference:
---	---

Summary and Recommendation: There have 2 previous surface water drainage review before the adoption of this comment tracker sheet.

	ADC Drainage Comments	Designer Response	Outstanding / Closed		
Date		11/07/2023			
Condition Number:					
1.	Please provide a layout plan showing the locations and results of groundwater monitoring and infiltration testing.	Thank you received.	Closed		
2.	Please provide greenfield runoff rate calculations for the proposed impermeable area which is positively drained.- Calculations noted on Bright Plan Civils Calculation Sheet D1956 but Greenfield run calculations are based on a contributing area of 5.47ha impermeable; however, this includes the 10% allowance for Urban creep. The 10% allowance for urban is to ensure the below ground network and attenuation system has sufficient capacity in the event of urban creep in the future. This should not be added in the assessment of the proposed greenfield rates. The greenfield assessment and hence peak restriction should be calculated on the contributing impermeable areas without the future allowance of urban creep otherwise this could result in increased discharge from the site greater than the annual average greenfield rates	08/02/2023 - The updated greenfield calculations have now been received and confirm are acceptable.	Closed		
3.	Please provide catchment impermeable areas diagrams. No further comments on proposed impermeable areas layouts D1956-18-100-102.	08/02/2023 - the impermeable area drawings do not correspond with the updated hydraulic calculations provided dated October 2022. These along with the calculations need to be reviewed and co-ordinated to ensure the calculations co-ordinate with the corresponding contributing impermeable areas.	Outstanding. Please see comment 6.		
4.	Please provide exceedance flow drawings. Exceedance flow layouts D1956-19-100-102 needs more information as unclear what the finished levels are in relation to the proposed exceeds flow directions. Road contours and proposed finished levels need to be added to this drawing and resubmitted for review and approval.	08/2/2023 - This has now been received and we have no further comments.	Closed		
5.	Please detail hydrobrake unit references on layout and details. –noted and accepted, but its note clear whether these hydrobrakes form part of the adoptable drainage network or not since they appear on the “private drainage” construction details. Applicant to	08/2/2023 - This has now been received and we have no further comments.	Closed		

	confirm. It should also be noted that these some or all of these hydrobrakes may require updating to suit the correct greenfield run-off restriction.				
6.	Please provide calculation printouts of inputs to calculations which include pipes and manholes. Updated calculations need to be provided to account for correct greenfield runoff rate.	08/02/2023 as noted in point 3, the updated calculations do not appear to coordinate with the actual impermeable contributing areas. As an example. Pipe 1.000 in the calcs has an input area of 0.038ha whilst the catchment plan indicates this should be 0.042ha. There is also no evidence that the 10% urban creep has been applied. Please provide updated calculations. 09/07/2023. We note the response provided by the applicant we would request a clear breakdown (suggest this provided as a spreadsheet) on all the areas clearly showing all the application of the 10% to the plot areas and 5% to the hardstanding areas with resultant sum so it can clearly demonstrate the correlation to the figures used in the hydraulic calculations.	Outstanding. Whilst we are not disputing that urban creep has been applied, it is not recorded on either the drawings or calculations on how the designer has applied the urban creep, it is only clarified within the response dated March 2023 where it is stated that the catchment drawings already include for 10% for the roof areas and 5% for hardstanding. Taking into considering that these drawings and calculations are passed onto a ManCO in the future, I think in the least, please reissue the catchment plans with reference in the key of the drawing on what urban creep factors have been applied to the areas shown i.e. “10% to roof areas & 5% to impermeable areas”		
7.	Please ensure consistency between calculations and layouts. – to be reviewed further upon receipt of updated calculations	08/02/2023 - There is still inconsistencies between the layouts and calculations these need to be revised and amended. 09/07/2023 – as per our response to item 6 please provide a clear breakdown of areas and application of urban creep as a schedule.	Outstanding. Refer to point 6. If catchment plans can please be reissued with key added, we can then close out this item		
8.	Please clearly label finish and formation level of all permeable paving areas. – Layout D1965- 13-300-302 have been reviewed and are unacceptable. Note 7 advises “levels are subject to detailed design and can change by + or - 300mm.”.	04/10/2022 - The information provided by the applicant should be detailed design. Detailed design drawings and information must be provided. In addition to this note 7 should be removed or amended to suit. These drawings do not contain any key, and whilst its evident through the exchange of correspondence in the intent of the information provided on this drawing in terms of formation level information and invert level of the diffuser units, this would not be clear to a groundworker constructing the works. A drawing key providing information and cross reference the other construction details and drainage drawings should be provided. 08/02/2023- there appears to be co-ordination issues with the design of the permeable paving and location of diffusers etc.. example – plot 72, the diffuser appears to lie outside of permeable paving; similar to 70. These design and drawings need to be reviewed and surface water drainage corrected to suit the permeable paving	Outstanding. (The Landscape drawings provided show numerous conflicts) Resolved by new drawings and designer explanation. – Noted Closed		

		designs. There is also conflict between surface water drainage and proposed tree planting, this needs to be reviewed and corrected across the site, an example of this is the run draining parking bay for plot 69 which clashes with a new tree location. 09/07/2023- we note that the applicants response to this issue is to remove the trees and landscaping information from the drainage drawings. This is unacceptable, we advise the updated landscaping information be shown on the drainage drawings to clearly demonstrate that this does not clash with the proposals.			
9.	Please label cover levels of gullies	The applicant has advised that this information is presented on drawings D1956-13-201A-D1956-13-202A. Gullies and cover levels of gullies are not shown on these drawings. Please provide this information as requested. 08/2/2023- This has now been received and we have no further comments.	Closed		
10.	Please detail proposed outfall inverts, along with invert of culvert at the proposed points of connection. Connection should be made soffit to soffit	Currently not shown on the drawings. ARUN DISTRICT COUNCIL Y/70/22/DOC The covering letter highlights that this is provided on the details drawing D1956-15-100 which formed part of the previous application, in which case this should be resubmitted with this current application as well for review 08/2/2023- This has now been received and we have no further comments	Closed		
11.	Please provide cranked grilles at a 45 degree angle.	Cranked grilles required on heads – S104 Construction details sheet 1 of 2 D1956-15-100 needs to be updated to suit ADC requirement. Pipe beddings details on this drawing are illegible in parts. Information needs to be clearly presented. We note that applicant’s response that this is not “DSG compliant” however the drawings refer to Sewers for Adoption 7th Edition. As such the applicant needs to be clear which edition of Sewer for Adoption the adoptable drainage is being designed to. In addition they should confirm who the adopting authority will be as well as confirmation from the adopting authority on whether they will or will not accept cranked grilles. 08/02/2023- Whilst is noted that the Technical Approval certificate has been provided for information, this doesn’t clarify whether the adopting authority has	Accepted by the LPA as designers risk,– Now closed		

		considered a request to use cranked grilles. This needs to be confirmed by the adopting authority otherwise cranked grilles should be used. 09/07/2023 – We await your submission of the confirmation from the adopting authority or as previously advised this should be amended to meet the requirements of Arun District Council.			
12.	Please detail invert levels of hydrobrakes and invert levels of overflows for each flow control device on the detail drawing	Noted and accepted, but its note clear whether these hydrobrakes form part of the adoptable drainage network or not since they appear on the “private drainage” construction details. Applicant to confirm. It should also be noted that these some or all of these hydrobrakes may require updating to suit the correct greenfield run-off restriction . 08/2/2023- This has now been received and we have no further comments.	Closed		
13.	There are inconsistencies between layout and details for the attenuation tank. Layout states a depth of tank of 1.5m but detail states a depth of 1.6m. Please ensure consistency.	The calculations still state 1.5m . Please also resubmit the construction details for this tank as part of this discharge application 08/2/2023- This has now been received and we have no further comments.	Closed		
14.	Please provide catchpits upstream of attenuation tanks and basins (unless basins are to have sediment forebays).	We note that applicant’s response that this is not “DSG compliant” however this is not acceptable. The drawings refer to Sewers for Adoption 7th Edition. As such the applicant needs to be clear which edition of Sewer for Adoption the adoptable drainage is being designed to. In addition, they should confirm who the adopting authority will be as well as confirmation from the adopting authority on whether they will or will not accept catchpit manholes upstream of the basin or attenuation features. Furthermore, it is evident that the incoming pipe to these basins are at or near the invert of the base of the basin. This means that the inlet pipes will be surcharge for lower storm return periods. The applicant needs to provide confirmation on whether this has been accepted by the adopting authority as well as confirmation on whether the basins are being offered for adoption as well since these are online. 08/2/2023- This is still outstanding. 09/07/2023 – this comment ARUN DISTRICT COUNCIL Y/70/22/DOC has not been	Closed (Designers risk) – Noted Closed		

		addressed, provide confirmation from IWNL as to whether or not they would accept catchpits as required by ADC.			
15.	Please clearly show location of diffuser tanks in permeable paving, and connections of these to the drainage network. Please label diffusers with invert level.	as noted in our response to item 8, this is still not clearly shown on the drawings. 08/2/2023- This has now been received and we have no further comments.	Closed		
16.	Please provide a construction detail of permeable paving which clearly defines the construction, i.e. blocks, bedding, membranes, sub-base, tanking membrane. Materials and depths should be clearly defined.	The construction detail shown on drawing D1956-15.2 conflicts with that shown on D1956-15-3A. These need to be updated to ensure there is no conflicting information. In addition to this its not clear why part infiltration has not been sought in areas where the infiltration has demonstrated that this is achievable. The applicant should clarify clear reasons as to why infiltration techniques have not been used for the permeable paving in the areas within the vicinity of the following test locations: TP05; TP04; TP01. 08/2/2023- This has now been received and we have no further comments.	Closed		
17.	Please provide a buffer plan showing a 3m buffer around basins and around watercourses	It is noted that this is now shown on the drainage layouts; however, it is also noted that proposed tree planting is proposed within this buffer. This is unacceptable as it will impede future maintenance access around the basin. 08/2/2023- This has now been received and we have no further comments.	Closed		
18.	Please provide evidence of land drainage consent for the proposed road crossings	The applicant's response in their covering letter is unacceptable. This is a planning matter as details for the road crossing has not been provided with the application. This information is required as it forms part of the onsite surface water drainage construction. The planning condition clearly states details are required for "...Details of any discharge of any flows to watercourses, the culverting or diversion, infilling or obstruction of any watercourses on the site.." 08/2/2023 - No further comment as it is noted that this OWC has now been granted	Closed		
19.	Please provide evidence of a flood risk activity permit for the proposed discharge to main river culvert. This information is required as the final details of this arrangement will be subject to the issue of the permit by the EA. The planning condition requires details for "...Details of any discharge of any flows to watercourses, the	08/2/2023- This has now been received and we have no further comments.	Closed		

	culverting or diversion, infilling or obstruction of any watercourses on the site.." in addition "...Arrangements for future access and maintenance of any watercourse or culvert (piped watercourse) crossing or abutting the site.."				
20.	Please provide details of proposed improvements to the main river culvert near the Millers as previously discussed.	08/2/2023- This is still outstanding. 09/07/2023 – This is information is still outstanding and request information is submitted as previously requested.	If offsite works are necessary for the design to be successfully implemented then this work must be carried out, otherwise the development will increase flood risk. The LPA accept that this issue is to be resolved outside of the planning system. – Noted and closed		
21.	The pipe between S75a and S75 appears to be within the profile of the watercourse, this is not acceptable. A minimum of 150mm concrete surround to the pipe will be required, and the ARUN DISTRICT COUNCIL Y/70/22/DOC top of this must be below hard bed level. It may be multiple smaller diameter pipes are required. Please adjust proposals and provide hard bed watercourse levels so that this can be further reviewed.	The levels of the pipe provided are noted on the drainage layout and is acceptable. 08/2/2023- No further comments	Closed		
22.	Please provide flotation calculations for cellular storage. It's noted that the buoyancy calculations require the basins to be lined with backfilled which varies across the basins. Specific construction details for each basin clearly providing this corresponding depth of backfill information needs to be provided in the basin construction details.	08/2/2023- No further comment as it is noted that this OWC has now been granted	Closed		
23.	Please apply a factor of safety of 0.9 to stabilising forces in buoyancy calculation (as per Eurocode 7). The FOS used in the upward force is inconsistent. Apply a consistent FOS to the basins and cellular storage calculations.	08/2/2023- No further comment as it is noted that this OWC has now been granted	Closed		
24.	Please provide construction detail drawings of basins which clearly show required depths of topsoil and clay over liner which tally with flotation calculations. These details should show invert level, peak water level, and top of bank level of each basin, along with bank slope. Two perpendicular details per basin should be provided. Appreciate cross-sections are provided on drawing D1956-15.22 but these do not clearly define the depths of clay, topsoil make up over the liner. A construction level of detail is being requested.	08/2/2023- No further comment as it is noted that this OWC has now been granted	Closed		
25.	please provide details of proposed landscaping evidencing that tree root potential areas of new and existing trees do	08/2/2023- This is still outstanding. 09/07/2023- noted, we have no further comments relating to this.	Closed		

	no conflict with surface water drainage features.- Noted, and we have no further comments.				
26.	In relation to planning condition 27, the current proposed levels drawing D1956-13-200- 202RevA do not indicate the existing levels- please provide the detailed levels design layout with the existing topographic survey levels shown as well in order to review whether any land raising is proposed which could result in unacceptable changes to surface water overland flow routes.	09/07/2023- thank you for providing this, we have not further comments	Closed		

From: Nicola Oktay on behalf of Planning.Responses
Sent: 07 February 2024 10:29
To: Planning Scanning
Subject: FW: Planning Re-Consultation on: Y/70/22/DOC
Attachments: Y_70_22_DOC ADC Comment Tracker Template 24-02-01.docx

Engineers drainage response

Nikki Oktay
Planning Receptionist, Planning Department

T: 01903 737965
E: Nicola.Oktay@arun.gov.uk

Arun District Council, Civic Centre, Maltravers Rd
Littlehampton, West Sussex, BN17 5LF
www.arun.gov.uk

To register to receive notifications of planning applications in your area please go to
<https://www1.arun.gov.uk/planning-application-finder>



From: Paul Cann <Paul.Cann@arun.gov.uk>
Sent: Monday, February 5, 2024 1:15 PM
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Karl McLaughlin <Karl.McLaughlin@arun.gov.uk>; Sarah Burrow <Sarah.Burrow@arun.gov.uk>
Subject: RE: Planning Re-Consultation on: Y/70/22/DOC

Please find enclosed our external engineers comments regarding condition 9. It is not recommended that this condition is discharged at this time as there are outstanding matters.

Comments in respect to condition 27 will be submitted shortly.

Regards

Paul Cann

Principal Drainage Engineer, Coastal Engineers and Flood Prevention

T: 01903 737819

E: paul.cann@arun.gov.uk

Arun District Council, Civic Centre, Maltravers Rd

Littlehampton, West Sussex, BN17 5LF

www.arun.gov.uk



From: Planning.Responses <Planning.Responses@arun.gov.uk>

Sent: Friday, January 26, 2024 11:03:36 AM (UTC+00:00) Monrovia, Reykjavik

To: Land Drainage <Land.Drainage@arun.gov.uk>

Subject: Planning Re-Consultation on: Y/70/22/DOC

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No: Y/70/22/DOC

Registered: 30th May 2022

Site Address: Land at Bilsham Road Yapton

Grid Reference: 497547 102838

Category: Discharge of Condi

Description of Works: Approval of details reserved by condition imposed under ref Y/91/17/OUT relating to Condition Nos 9 - surface water drainage and 27 - levels.

I am able to inform you that I have received an amendment to the above application dated 23rd January 2024 relating to: Response to drainage engineers

[Click here to view the plans and documents](#)

If you should wish to make further representations as a result of this amendment you should click the link below and then click on 'Enter comment'.

[Click here to make further comments](#)

Please make any further comment by **9th February 2024**.

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.

Yours sincerely

Mr D Easton

Planning Case Officer-Arun District Council

Telephone: 01903 737500 ex37361

Email: david.easton@arun.gov.uk

PLP/PCON_DOC (COM) 2020