

Bronte Welham

From: Amanda Scholes on behalf of Planning.Responses
Sent: 07 April 2017 08:29
To: Planning Scanning
Subject: FW: Please find attached amendment on planning application Ref: AL/107/16/RES
Attachments: P.Cann -Comments - Land East of Hook Lane.docx

Consultation response from Drainage & Coastal Engineers.

From: Thomas Callaway
Sent: 06 April 2017 14:14
To: Planning.Responses
Subject: RE: Please find attached amendment on planning application Ref: AL/107/16/RES

With regards to the above application, we would like to raise concern over the development layout, as the surface water drainage proposals shown do not represent an agreed strategy at this time. There are a number of issues with the current drainage design, and one of the most fundamental is that the run-off from the site does not mimic the anticipated green field characteristics. Based upon their 'Drainage Strategy & SUDS statement, a majority of the site falls to the South East corner, where we suspect there is a buried outfall pipe or infilled ditch, heading south towards Hook Lane. The remainder of the site falls to the Eastern outfall and the North Eastern outfall. The current proposal is to only discharge to the Eastern and North Eastern outfalls. This is a concern, as the strategy does not replicate the sites fundamental flow regime, as would have been recognised when the field was properly managed and the off-site land drainage outfalls were fully functioning. It should also be noted that the current discharge to the eastern outfall relies upon the existing ditch being re-graded with no positive gradient (ie. flat) and this is a concern in itself.

We appreciate that a number of the off-site land drainage outfalls/boundary ditches have been neglected by landowners, however, it is imperative that ALL the outfalls are fully investigated before any further comments can be made on the proposed drainage layout. All of the outfalls will ultimately need to be brought back into full working order. I would suggest that a separate condition is applied to deal with this aspect.

We also understand that there is sometimes standing water on the field and suspect that due to the nature of the ground conditions, land drainage piped systems probably exist beneath the field. Due to a lack of maintenance, these pipes are probably no longer functioning.

The protection and future access arrangements to the ditch on the eastern boundary are not acceptable. A three metre maintenance strip is required along the entire western boundary of the ditch ie. measured from the top of the western bank. This is to be free from all obstructions, in order to allow vehicular access for maintenance operations.

Other significant issues;

1. There doesn't appear to have been any investigations into the use of permeable lined pavements for the entire estate road in order to minimise the depth of the drainage infrastructure, and thereby minimise the risk of the effects of groundwater ie. infiltration into pipes, etc, and floatation of structures ie. lined ponds and crated tanks. The design largely relies upon the transportation of water via a conventional piped system with conventional road gullies, which has created a system that is unnecessarily deep.
2. No investigation into the existence/invert level of any existing outfall in the South East corner. This aspect, together with item 1 above, could significantly affect the design.
3. There is no drainage scheme shown for the access road from Hook Lane and this area doesn't appear to be accounted for in the allowable greenfield run off rate. This could therefore potentially increase the agreed rate from the site.
4. Investigating items 1 and 2 above, could impact of the pumping proposal.

Based upon our findings above, the impact on the development layout could be significant.

I also enclose a list of offer issues, just for information, many of which can be dealt with at detailed design stage ie. when the DOC application is received.

Development shall not commence until such time that arrangements for the future access and maintenance of any watercourse or culvert (piped watercourse) crossing or abutting the site has been submitted and approved in writing by the Local Planning Authority.

No construction is permitted, which will restrict current and future land owners from undertaking their riparian maintenance responsibilities of any watercourse on or adjacent to the site.

Reason: To ensure that the duties and responsibilities, as required under the Land Drainage Act 1991, and amended by the Flood and Water Management Act 2010, can be fulfilled without additional impediment following the development completion.

Thomas Callaway | Drainage & Coastal Engineer, Engineering Services, [Arun District Council](#) | Location: Second Floor, Arun Civic Centre, Maltravers Road, Littlehampton, BN17 5LF

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Save the environment - think before you print.

Sent: 20 March 2017 12:48

To: Thomas Callaway

Subject: Please find attached amendment on planning application Ref: AL/107/16/RES

To: Engineers (Drainage)

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

APPLICATION NO: AL/107/16/RES

Registered: 03-OCT-16
Site Address: Land West of Westergate Street & East of Hook Lane
Westergate PO20 3TE

Grid Reference:

Category: Plan Applicat'n

Description of Works: Application for Reserved Matters application following Outline Planning Permission AL/39/13 for the demolition of Oakdene and all other structures within the site and the erection of 79 dwellings, public open space, children's play areas, landscaping, drainage measures, sub-station, pumping station and all other associated works.

I am able to inform you that I have received an amendment to the above application dated 13th March 2017 relating to:- Substitute plans and reports

[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 'comment on this application'. Please make any further comment by 10th November 2016.

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.

[Click here to make further comments](#)

The officer dealing with this application is Lucy Harding who can be contacted on telephone number [REDACTED]

Thanking you in anticipation

Planning Case Officer

pmac21_email

Land East of Hook Lane, Aldingbourne (Barratt Homes)

P.Cann comments on current proposals based on Drg. BSO/E4462/031 Rev D.

1. No consideration given to a linked permeable paved roads/swale system, avoiding the need for an extensive piped system and thereby reducing overall fall required.
2. The level of any potential buried existing culvert outfall in the SE corner has not been investigated. This is critical in determining whether a pumped option is required, as well as establishing an outfall from the watercourse which is currently heavily silted.
3. Discharge from the site should mimic the three present points of discharge from the field ie. SE corner, NE corner and Eastern boundary. It is also noted that water stands on various sections of the field. Most greenfield runoff flows to SE corner assumed outfall but this is not being utilised! Significant exceedance flows will travel into SE corner.
4. All existing outfalls need to be fully investigated to identify all the issues. Any remedial works are riparian responsibility; however, it is in the interest of the developer to ensure that the downstream systems are in working order to ensure the free flow of water from the development. This is critical to the design and the avoidance of flooding. ADC can assist the developer in this respect by providing advice and undertaking enforcement where necessary, although the developer should consider undertaking some or all of the necessary remedial works, due to the timescales involved.
5. The ditch between the SE outfall and the existing eastern culvert is flat. No consideration given to item 3 above, or the possible buried outfall in the SE corner. They are trying to force water towards the Eastern outfall.
6. No drainage shown for access road into site.
7. Land drainage consent required for culverting of ditch on western boundary.
8. Why can't crates in SE corner be reverted into a pond?
9. Pond near LEAP – safety issues?
10. NE corner of site (0.5l/s discharge) – how will this be achieved? Drainage arrangements not clear in this area.
11. Crates – no chamber access to inlet/outlet pipes.
12. Calculations for design to be checked.
13. Greenfield run off =6.67ls. Pumping 6.17 + NE outfall 0.5=6.67. Will drainage for access road increase runoff allowance?
14. Restricted future access to eastern boundary ditch.
15. Permeable paving outlet pipes not shown
16. Drainage from roofs not shown.
17. Open space used as flood exceedance area.
18. Erosion control required in respect to pumped discharge, ie. Far bank
19. Install new trash screen on eastern outfall pipe.
20. For the protection of access to existing watercourses, may I suggest applying condition ENG D6A. Vehicular access strip required.
21. Hydrobrake manufacturers technical details
22. Full construction details (specific to each structure) of ponds/tanks/pumping station. Size of pumping station? Access road to pumping station.
23. Concrete bag headwall. All layers to be pinned together – show more clearly on the drawing. Note 5 of drawing noted.

24. Longitudinal sections required & to incorporate all pipelines/storage structures.
25. High level connections to have external backdrops.
26. 100mm freeboard of Eastern outfall above ditch bed is not adequate.
27. Maintenance manual mentions a petrol interceptor – where is it?
28. Include pumping station telemetry/warning system in maintenance manual.
29. Solid wall pipe maintenance not included in the maintenance manual.
30. New planting to avoid pipelines/structures.
31. Floatation issues? Lined tanks/lined ponds?
32. Permeable paving detail – not a conventional method i.e. drilled holes, in new development construction and against manufacturers recommendations.
33. Petrol interceptor upstream of pumping station could be drowned out and therefore will not operate correctly. Why is it needed? Permeable paving/trapped gullies and no large parking areas.
34. Consider land drainage in gardens due to poor soil conditions?
35. Specific condition required to ensure the three off-site outfalls are brought back into full working order.