

Attn. Mrs A Gardner
Planning Department
Arun District Council
The Arun Civic Centre
Maltravers Road
Littlehampton
West Sussex
BN17 5LF

02 June 2020
Ref: RH/Let/P1483i

Dear Mrs A Gardner,

Discharge of Conditions 14, 15, 16 and 18 pursuant to Application Reference A/74/18/OUT (Outline Planning Permission with all matters reserved, except access, for the demolition of existing outbuildings and the erection of 9No. two storey dwellings consisting of 2No. two bedroom dwellings, 3No. three bedroom dwellings and 4No. four bedroom dwellings) at The Laurels, Dappers Lane, Angmering, BN16 4EN.

This application has been submitted online via the Planning Portal under reference **PP-08642567** and includes the application form, relevant documentation, and this covering letter.

This application follows the refusal of Conditions 14, 15, 16 and 18 which were refused on 16 December 2019 under reference A/165/19/DOC for the following reason:

"The applicant appears unaware that a culverted watercourse runs along the western boundary. The following details should be provided so further comments can be made;

1: a) A plan showing its location.

b) Position/photos of any existing manholes on the culvert adjacent the site including immediately upstream/downstream.

c) Manhole/culvert invert levels/cover levels.

d) Pipe diameter/material.

e) An internal CCTV survey inspection.

f) Proposed finished levels above the culvert.

Directors

Chris Barker MATP MRTPI Managing Director
Huw James MRTPI
Adam King RIBA

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g) No new tree planting to be undertaken in the vicinity of the culvert - this needs to be made clear on the drawings.

2. Provide a fully detailed foul drainage proposals plan.

3. In terms of groundwater monitoring, there appears to be a lack of data for a site of this size ie. WS04 was the only borehole monitored. I would like to see further winter monitoring carried out in WS01 which is the lower section of the site. It is suggested this is implemented immediately and monitored accordingly. The extent of monitoring will need to be agreed.

4. The percolation testing was carried out in October 2018 which does not fulfil our requirements in terms of winter testing. Therefore, further infiltration testing will be required, in say January, at the location and depth of the proposed infiltration structures. These must be in strict accordance with BRE365.

Undertaking testing within boreholes does not meet this criteria. It is noted that TP02 failed to infiltrate sufficiently, so more detailed investigations/testing will be required in that area. It is strongly recommended that the applicant agrees the location/depth of the test holes, before actioning.

Until such time that items 3 and 4 have been resolved, it is not possible to comment in any great detail on the proposals. Some suggested requirements below need to be considered;

5. Whilst permeable paving is likely to be the way forward, due to the lie of the land, the design will need to ensure that water does not all run to the lower end of the site via the sub base, so the paving will need to be compartmented to ensure that water is contained within each structure. This arrangement will need to be fully detailed in terms of construction details and proposed finished/bed levels and supported by storage/infiltration calculations for each section. Please note that on the example calculation sheets, a porosity value of 0.95 has been used. Whilst this is acceptable for permavoid blocks, granular stone should be 30%, so the calculations will need to reflect the construction of each specific section of permeable paving. Where stone is to be used, this is to be type 3 material (of specified grading/no fines) wrapped in a permeable membrane."

Since the refusal of the condition applications (reference A/165/19/DOC), further testing has been carried out which has been compiled into 2 new reports are detailed below. The following details are submitted in support of this application:

- Application Form;
- Covering Letter;
- Technical Note - Discharge of Surface Water Management Planning Conditions – Dated 1 June 2020;
- Drainage Maintenance Manual – Dated 1 June 2020;
- Proposed Ownership Plan (reference 102 C);
- Proposed Impermeable Areas Plan (reference 103 C);
- Existing Site Layout Plan (reference 106);
- Proposed Drainage Layout and Levels Plan (reference 201 A);
- Proposed Levels Plan (reference 401 A);
- Construction Details (reference 501 A).

Correspondence has been carried out with Arun's Drainage Engineer, Paul Cann, ahead of this condition submission. Answers to queries previously raised by Paul in an email dated 24 April 2020 can be found at Appendix A of this letter.

Condition 14

Development shall not commence, other than works of site survey and investigation, until full details of the proposed surface water drainage scheme have been submitted to and approved in writing by the Local Planning Authority. The design should follow the hierarchy of preference for different types of surface water drainage disposal systems as set out in Approved Document H of the Building Regulations, and the recommendations of the SuDs Manual produced by CIRIA. Winter groundwater monitoring to establish highest annual ground water levels and Percolation testing to BRE 365, or similar approved, will be required to support the design of any Infiltration drainage. No building shall be occupied until the complete surface water drainage system serving the property has been implemented in accordance with the agreed details and the details so agreed shall be adhered to and maintained in good working order in perpetuity.

Condition 14 requires a surface water drainage scheme to be submitted and approved in writing by the LPA.

The accompanying Drainage Technical Note, accompanying drawings and the Discharge of Surface Water Management Planning Conditions Technical Note (dated 1 June 2020) which have been prepared by The Civil Engineering Practice are considered to fully address this condition.

Condition 15

The development shall not proceed until formal consent has been approved in writing from the Lead Local Flood Authority (WSCC) or its agent (ADC) for the discharge of any flows to watercourses, or the culverting, diversion, infilling or obstruction of any watercourse on the site.

Any discharge to a watercourse must be at a rate no greater than the predevelopment run off values.

Condition 15 requires formal consent from the Lead Local Flood Authority (WSCC) or its agent (ADC) for the discharge of any flows to watercourses, or the culverting, diversion, infilling or obstruction of any watercourse on the site.

The accompanying Technical Notes state that all surface water is to be discharged to the ground and therefore will not be discharging any flows to watercourses. Furthermore, the Note states that details of any protection that is required for the culvert will be agreed with West Sussex County Council Highways as part of the S278 works for the site entrance.

The proposals are therefore considered to fully address this condition.

Condition 16

Development shall not commence until full details of the maintenance and management of the SuDS system is set out in a site-specific maintenance manual and submitted to, and approved in writing, by the Local Planning Authority. The manual is to include (a) details of financial management of the site including arrangements made in the event that the management company (or any subsequent management company) is no longer able to fulfil its duties; and (b) arrangements for the replacement of major components at the end of the manufacturers recommended design life.

Condition 16 requires full details of the maintenance and management of the SuDS system to be set out in a site-specific maintenance manual. The accompanying Technical Notes set out the details and is considered sufficient to fully address condition 16.

Condition 18

The development layout shall not be agreed 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. The details thereby agreed shall be adhered to at all times thereafter.

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.

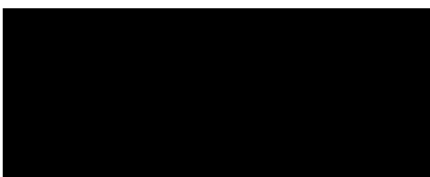
Please refer to the accompanying Technical Notes which are considered to fully address Condition 18.

Conclusion

It is considered that based on the enclosed information, Arun District Council can confirm that Planning Conditions 14, 15, 16 and 18, as listed above and pursuant to the planning application **A/74/18/OUT** at **The Laurels, Dappers Lane, Angmering, BN16 4EN** has been successfully met in full.

If you have any further queries or require further information please contact me on 

Yours sincerely
ECE Planning



Sam Sykes MRTPI
Associate Planner

Appendix A – Answers to Arun’s Drainage Engineer’s Queries in email dated 24 April 2020 (in red)

1. *CCTV survey noted. The section of pipeline adjacent the site appears in good condition, with some minor root intrusion to the south of the site, but not your clients responsibility.*

Noted.

2. *Culverts 1.6m cover noted at proposed entrance. No requirements for additional protection unless WSCC require this under the S278.*

Noted.

3. *Item 3.2.5 of report refers to drg. 101C, I believe the current version is D.*

The report has been updated to reflect the wider updates to the design.

4. *The good infiltration rates are noted, although 3 test fillings were not performed. The tests were also not carried out at the proposed depth of the permeable paving construction. However, based upon the ground conditions and the fact that you will be over designing the sub base thickness (ie.350mm as opposed to 58-185mm required) then in this instance, we would consider this mitigated for.*

Noted.

5. *Provide Microdrainage calculations for the ‘no dig’ area of highway. Also, include these in the maintenance manual.*

Calculations have been included and the maintenance manual has been updated.

6. *Include the ‘no dig’ area on drg. 103B.*

This has now been added to all drawings.

7. *Permeable paving sub base – specify type 3 stone or 4-20mm clean stone.*

This is a design preference and the specification of the original stone used is widely recognised and acceptable, however on this occasion we have changed it to 4/20 stone

8. *Provide baffle construction details.*

Baffle construction detail is now provided on Drawing 501.

9. *Silt traps are required immediately upstream of all connections to the permeable pavement. Alter plan and provide construction detail (300mm sumps).*

This has been updated and reflected on drainage Drawing 201 with detail added to drawing 501.

10. Show RWP's on plan.

These have now been included.

11. Show invert levels for rodding eyes.

These have been added to the construction drawings.

12. Drain serving garage block – reduce extent to which the drain extends into the permeable pavement.

Updated on the latest drawings.

13. Specify all pipe diameters and gradients.

Now added to all pipework.

14. Pipe bedding – specify class S and Class Z only.

This is a design preference and is only a requirement where drainage is to be adopted. We have now included class S and Z pipe bedding on the construction details.

15. Permeable paving construction detail – show permeable membrane fully wrapped around the sub base and also around the distribution crate.

This is a design preference. We have added this in light of a change to the subbase design of the permeable paving. Distribution crates typically do not require to be wrapped, the outer layer is typically a 2mm mesh fabric as per the permavoid diffuser units.

16. Show additional finished surface levels on the permeable paving. There seems to be good coverage at the eastern end (except a few driveways need levels), but more required between there and Dappers Lane. I appreciate foul cover levels provide some indications but more levels are required.

Levels drawing has now been provided.

17. Due to the varying finished levels of the permeable paving, I would like to see more baffles introduced.

Additional baffles have been included as part of the new drainage catchments.

18. Is the foul drainage to be adopted. If so, Southern Water are likely to require a service trench through the permeable paving areas. Provide details if this is the case.

Foul drainage is not part of the condition, however there is no plans for Southern Water to adopt the drainage and this will remain private or be adopted by a private infrastructure company as there is no obligation to use Southern Water. A services corridor has been added beneath an impermeable paving area of the site for all other site services with calculations updated to reflect this.

19. *Maintenance manual;*

- a) *Remove references to components that are not relevant ie. channel drains, infiltration basin, oil interceptor, etc.*
- b) *Items 1.1.3 and 2.1.1 – to include driveways?*
- c) *Approved drawings will need to be attached once available.*
- d) *Include entire length of culvert on drg. 102B where within red line (as per key) but also include culvert outside of responsibility including the manhole location (for access).*
- e) *Drawing 102B needs a specific table for the culvert maintenance/inspection, also referencing the point of access for CCTV, etc.*

Maintenance Manual has been updated and all above details have been added, or removed as required.