

[REDACTED]

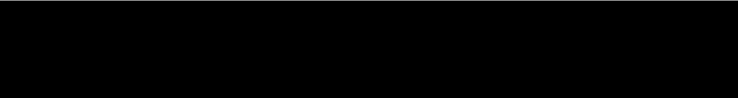
From: Chris Wigley [REDACTED]
Sent: 05 February 2018 13:56
To: Ryan Hofman
Cc: [REDACTED]
Subject: Re: Building Control at 1-4 Holm Oaks, BN18 OGB [Filed 05 Feb 2018 13:57]

Yes I have been in discussion with the LA engineer and believe this is the best way forward.

Chris Wigley FBEng MRICS MIFireE
Managing Director



South Office: 01243 780779
Theatre House, Theatre Lane, Chichester W.Sussex, PO19 1SS



International House 1-6 Yarmouth Place, London W1J 7BU



Disclaimer: This email is confidential and may contain information that is legally privileged. It is prohibited to disclose, copy or distribute any information contained in it if you are not the intended recipient. Please delete it immediately and inform the sender.
Please consider the environment before printing.

From: "Ryan Hofman"
To: "Chris Wigley"
Cc: "Jeremy Napthine | Edge BP", [REDACTED]
Sent: Monday, 5 February, 2018 13:22:35
Subject: FW: Building Control at 1-4 Holm Oaks, BN18 OGB

Chris,

I have been passed on your details from Martin King regarding the site above for which I understand LBC where the BCO overseeing the project. I understand the site was signoff circa 2 months, however the LLFA has requested some amendments to the surface water drainage given the highly variable groundwater table. Basically, the LLFA has request an overflow is provided from the soakaways to the front and rear of the properties in order to provide redundancy should a large storm event coincides with a high ground water table. The original design showed the soakaways located over 5m from the building, however the permeable paving does run up to the building edge. We are proposing to provide an overflow from the soakaways into the permeable paving, discharging into the permeable paving 5m from the building edge. Before the LLFA will sign off on this final condition, they require confirmation from BCO, that the proposals are suitable.

I have spoken to Martin, he advised he has no issues with the proposals, but wanted me to check with yourself first as the project has been signed off. I have attached the relevant information for your review (see email below for further design philosophy).

Kind Regards,

Ryan Hofman BEng (Hons) CEng MICE | Lead Engineer



reducing · preventing · protecting

Ambiental, Science Park Square, Brighton, BN1 9SB

[Twitter](#) | [LinkedIn](#)

Ambiental Technical Solutions Limited: company registered in England & Wales; Company Number 4581745, Registered Address, Sussex Innovation Centre, Science Park Square, Brighton, BN1 9SB, UK. This email and any attachments are confidential and intended exclusively for the use of the intended recipient(s). Any views or opinions presented are solely those of the author and do not necessarily represent those of Ambiental Technical Solutions Ltd. If you are not the intended recipient(s) please note that any form of distribution, copying or use of this email or the information in it is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender and then delete the message and any attachments from your system. Please note that no responsibility for viruses is taken and it is your responsibility to scan this message and any attachments. Please consider the environment before printing out this email

From: Ryan Hofman

Sent: 24 January 2018 16:57

Cc: 'Jeremy Napthine | Edge BP' [redacted] Stavros Drakopoulos

Subject: FW: Building Control at 1-4 Holm Oaks, BN18 OGB [Filed 26 Jan 2018 12:33]

Dear Steve,

We have been passed on your details from our Client for the 4 dwelling development at the above site. We are the Drainage Engineers and we understand you have been the BCO overseeing this project.

I am not sure if you are aware, we have been made aware some groundwater data that made the previous drainage not fully suitable for the site. The groundwater levels recorded during the initial site investigation were quite high (circa 650mm bgl), and as such we have had to revise the drainage layout slightly on site. The primary change is creating an overflow from the soakaways in the rear gardens into the permeable pavement. This is required in the case of the groundwater being exceptionally high as well as a 1 in 100 year storm event. The principle, is to utilise the infiltration base of the permeable paving by directing (in the worst case) roof runoff (via the soakaways) into the permeable paving. The discharge points have been shown 5m from the building edge (in line with building regs).

We understand that discharging more than its own catchment through permeable paving is a bit of grey area, however I have attached the CIRIA Factsheet which provides some guidance when doing this. This basically concludes that as long as the ratio of drained surface area to base (infiltration area) is less than 10:1, the risk to foundations (wash out of fines) is considered low. In this instance we are proposing to create the overflow points 5m from the edge of the building therefore further reducing the risk (FYI the drained area to base infiltration area is approximately 1.72:1 (620sqm total drained area (360sqm paving + 260sqm roof) vs 360sqm permeable paving infiltration area), this is well below the maximum of 10:1).

We have had a meeting with Paul Cann (LLFA for Arun), who has agreed the above calculations and principles of the attached drawing (see attached correspondence).

If you could please review the above and let us know if you have any comments

Kind Regards,

Ryan Hofman BEng (Hons) CEng MICE | Lead Engineer



reducing · preventing · protecting

Ambiental, Science Park Square, Brighton, BN1 9SB

[Twitter](#) | [LinkedIn](#)

Ambiental Technical Solutions Limited: company registered in England & Wales; Company Number 4581745, Registered Address, Sussex Innovation Centre, Science Park Square, Brighton, BN1 9SB, UK. This email and any attachments are confidential and intended exclusively for the use of the intended recipient(s). Any views or opinions presented are solely those of the author and do not necessarily represent those of Ambiental Technical Solutions Ltd. If you are not the intended recipient(s) please note that any form of distribution, copying or use of this email or the information in it is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender and then delete the message and any

From: Jeremy Napthine | Edge BP [REDACTED]

Sent: 24 January 2018 16:38

To: Ryan Hofman [REDACTED]

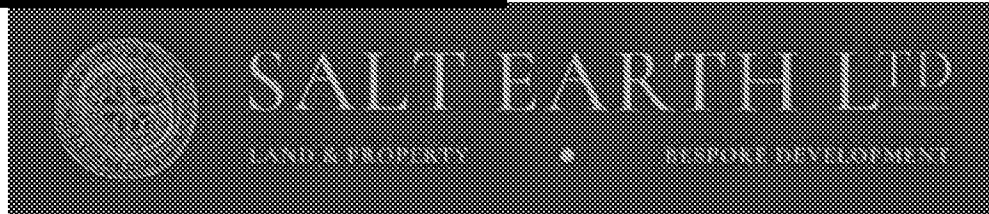
Subject: RE: Building Control at 1-4 Holm Oaks, BN18 OGB

So sorry, Ryan, my fault entirely, see the details as attached. I hope we haven't lost much time on this

Kind Regards

Jeremy Napthine

Director
[REDACTED]



SALT EARTH LTD | The Edge Building | 1 Fontwell Avenue | Eastergate | West Sussex | PO20 3RU
01403 212506 | www.saltearth.co.uk

From: Ryan Hofman [REDACTED]

Sent: 24 January 2018 16:31

To: Jeremy Napthine | Edge BP
[REDACTED]

Subject: FW: Building Control at 1-4 Holm Oaks, BN18 OGB

Jeremy,

See response from Patrick Clarke. Do you have any other details for the LBC.

Kind Regards,

Ryan Hofman BEng (Hons) CEng MICE | Lead Engineer



Ambiental, Science Park Square, Brighton, BN1 9SB
[REDACTED]

[Twitter](#) | [LinkedIn](#)

Ambiental Technical Solutions Limited, company registered in England & Wales; Company Number 4531745; Registered Address, Sussex Innovation Centre, Science Park Square, Brighton, BN1 9SB, UK. This email and any attachments are confidential and intended exclusively for the use of the intended recipient(s). Any views or opinions presented are solely those of the author and do not necessarily represent those of Ambiental Technical Solutions Ltd. If you are not the intended recipient(s) please note that any form of distribution, copying or use of this email or the information in it is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender and then delete the message and any attachments from your system. Please note that no responsibility for viruses is taken and it is your responsibility to scan this message and any attachments. Please consider the environment before printing out this email.

From: Patrick Clarke [REDACTED]

Sent: 24 January 2018 14:53

To: Ryan Hofman [REDACTED]

Subject: RE: Building Control at 1-4 Holm Oaks, BN18 OGB

Ryan,

We were only doing the warranty inspections the Building Control body I understand was LBC (South). I will certainly forward on your comments to the warranty provider.

Kind Regards,

Patrick

Patrick Clarke BSc (Hons) MCABE

Chartered Building Control Surveyor
[REDACTED]



Everything under one roof
Approved Inspectors and Consultants
for Building Control, Environmental and Health & Safety

Head & Registered Office: Teaselwood Barn, Lamberhurst Vineyard, Furnace Lane, Lamberhurst,
Tunbridge Wells, Kent TN3 8LA.
<http://www.bbsenvironmental.co.uk> - [REDACTED]

From: Ryan Hofman [REDACTED]
Sent: 24 January 2018 13:03
To: Patrick Clarke
Cc: Stavros Drakopoulos
Subject: Building Control at 1-4 Holm Oaks, BN18 OGB
Paul,

We have been passed on your details from our Client for the 4 dwelling development at the above site. We are the Drainage Engineers and we understand you have been the BCO overseeing this project.

I am not sure if you are aware, we have been made aware some groundwater data that made the previous drainage not fully suitable for the site. The groundwater levels recorded during the initial site investigation were quite high (circa 650mm bgl), and as such we have had to revise the drainage layout slightly on site. The primary change is creating an overflow from the soakaways in the rear gardens into the permeable pavement. This is required in the case of the groundwater being exceptionally high as well as a 1 in 100 year storm event. The principle, is to utilise the infiltration base of the permeable paving by directing (in the worst case) roof runoff (via the soakaways) into the permeable paving. The discharge points have been shown 5m from the building edge (in line with building regs).

We understand that discharging more than its own catchment through permeable paving is a bit of grey area, however I have attached the CIRIA Factsheet which provides some guidance when doing this. This basically concludes that as long as the ratio of drained surface area to base (infiltration area) is less than 10:1, the risk to foundations (wash out of fines) is considered low. In this instance we are proposing to create the overflow points 5m from the edge of the building therefore further reducing the risk (FYI the drained area to base infiltration area is approximately 1.72:1 (620sqm total drained area (360sqm paving + 260sqm roof) vs 360sqm permeable paving infiltration area), this is well below the maximum of 10:1).

We have had a meeting with Paul Cann (LLFA for Arun), who has agreed the above calculations and principles of the attached drawing (see attached correspondence).

If you could please review the above and let us know if you have any comments.

Kind Regards,

Ryan Hofman BEng (Hons) CEng MICE | Lead Engineer

ambiental
predicting · preventing · protecting

Ambiental, Science Park Square, Brighton, BN1 9SB
[REDACTED]

[Twitter](#) | [LinkedIn](#)

Ambiental Technical Solutions Limited: company registered in England & Wales, Company Number 4531745; Registered Address, Sussex Innovation Centre, Science Park Square, Brighton, BN1 9SB, UK. This email and any attachments are confidential and intended exclusively for the use of the intended recipient(s). Any views or opinions presented are solely those of the author and do not necessarily represent those of Ambiental Technical Solutions Ltd. If you are not the intended recipient(s) please note that any form of distribution, copying or use of this email or the information in it is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender and then delete the message and any attachments from your system. Please note that no responsibility for viruses is taken and it is your responsibility to scan this message and any attachments. Please consider the environment before printing out this email.



Everything under one roof
*Approved Inspectors and Consultants
for Building Control, Environmental and Health & Safety*

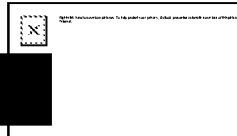
COLCHESTER | LONDON | RUGBY | TRURO | TUNBRIDGE WELLS | WINDSOR

Head & Registered Office: Teaselwood Barn, Lamberhurst Vineyard, Furnace Lane, Lamberhurst,
Tunbridge Wells, Kent TN3 8LA.

<http://www.bbsgroup.co.uk>

<http://www.bbsbuildingcontrol.co.uk> -

<http://www.bbsenvironmental.co.uk> -



Follow Us:



BBS Building Control Ltd: Registered in England Number - 4161657 | VAT Registration - 779 5326 77
Bespoke Builder Services Ltd: Registered in England Number - 4135932 | VAT Registration - 771 2862 19

NOTICE: This email is intended for the named recipient only. It may contain privileged and confidential information. If you are not the intended recipient, notify the sender immediately and destroy this email. You must not copy, distribute or take action in reliance upon it. Whilst all efforts are made to safeguard emails, BBS Building Control Ltd, Bespoke Builder Services Ltd and BBS Site Services LLP cannot guarantee that attachments are virus free or compatible with your systems and does not accept liability in respect of viruses or computer problems experienced.

Before you print, think about the environment