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Ref: 20-315-L-001

Darwin Group Limited
London House
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Dear Lindsey

re: Connell Co-Op College - Addendum to SuDS Design Strategy Statement

Further to our meeting with Laura Peacock on 11/03/21 regarding the drainage strategy for the new building at site below provides an explanation of the betterment provided to the overall drainage scheme by our proposal.

At present the calculated discharge rates from the current site are as follows;

1 in 1 return period = 37.9 l/s
1 in 30 return period = 80.8 l/s
1 in 100 return period = 95.9 l/s
1 in 100 + 40% return period = 105.8 l/s

If we keep the drainage from the new build separate and restrict run-off to greenfield rate of 2 l/s with suitable attenuation then we will effectively be increasing the discharge rate off-site to UU by 2 l/s for the whole site and the discharge rates for the whole site would then become;

1 in 1 return period = 39.9 l/s
1 in 30 return period = 82.8 l/s
1 in 100 return period = 97.9 l/s
1 in 100 + 40% return period = 107.8 l/s

At present discharge from the site is via a 300mm diameter pipe with no restriction.

Our proposal of bringing the existing drainage into an attenuating system and installing an orifice plate flow control offers a decrease in the overall discharge rate for the whole site, with discharge rates as follows;

1 in 1 return period = 37.3 l/s
1 in 30 return period = 61.1 l/s
1 in 100 return period = 72.1 l/s
1 in 100 + 40% return period = 87.5 l/s

Hopefully the logic of the above is clear, however if you have any queries please do not hesitate to contact me to discuss. Attached is the revised drainage layout drawing, drawing number 20-315-DR001.

Yours faithfully

Brian Duthie

UK Registered Ground Engineering Advisor

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