Hi Tony

Please see below in vellow responses from Costin Roe to each of your items. Also attached are the updated plans reflecting these comments

Could please confirm that the updated plans are acceptable at your earliest to allow issuance of the consent by the Department of Planning?

1. In the water quality system increase the number of 690 mm high Stormfilter cartridges from 70 to a minimum of 75 proportionally.

72 fillers were included in the original submission to BCC and DPE. We have now updated to include the additional 3 filters and proportioned to the respective filter chambers at 50% of contributing catchment. Note we have adopted 76 to include an equal 38 filters in each chamber.

2. Modify the on-site stormwater detention spreadsheet (12829.14 OSD Deemed to Comply Tool - Developer's Edition Spreadsheet v1.9.xlsm) to account for the discharge through the additional Stormfilters and modify the orifice size and review the average base level of the tank as required by the conditions below.

3. Amend the Costin Roe Consulting drainage plan series Co12829.14 Issue A Drawing SSDA44 in accordance with the requirements of Council's "WSUD Development Signage" attached. Show the rainwater tank sizes and show which roof areas are directed to the tanks.

The rainwater tank sizes, and roofwater being directed to the tanks has been included in the updated drawing. It is noted that the intent of this drawing is not the signage drawing noted by Mr Merrilees and any signage drawing should be completed as part of a Construction Certificate documentation exercise and can be conditioned as such.

Amend the Costin Roe Consulting drainage plan series Co12829.14 Issue A Drawing SSDA45 by:
 a) On the "Concept Stormwater Management Device Configuration" the red hatched area is the overflow pit only and does not contain any orifice controls.
 Orifice size has been shown on the drawing – refer updated.

b) On the "Concept Stormwater Management Device Configuration" provide the 1.5 year ARI pit and weir surrounding the 100 year orifice control.

The 1.5 yr ARI pit detail has been added on drawing SSD45 in accordance with point 4c below.
c) Due to the large number of cartridges there is no 1.5 year orifice in the detention tank. The underdrain flow from the cartridges acts as the low flow control. To do this the overflow from the Stormfilter chamber that enters the main detention tank has to re-enter the Stormfilter chamber to drain. Provide a series of 150 mm pipes from each side of the detention tank with non-return flap on the inside of the central Stormfilter Chamber. Set the invert of these pipes at a minimum of 100mm above the false floor level and regrade the base of the tank at 2% to these pipe inverts. Review the tank dimensions to achieve the required storage.

tank amensions to achieve the required storage.

A series of 150mm pipes set at a minimum of 100mm above the false floor level has been provided as shown on drawing SSDA45-refer updated.
d) Set the Stormfilter Chamber false floor level at or above the 1 year HGL level in the overflow pit.
The hydraulics and driving head of the system do not require the false floor to be any higher than 150mm above the orifice discharge. Further the false floor will be at least an additional 150mm higher than minimum due to the falls in the base slab (ie 300mm above base). The design is consistent with manufacturers specification, adopted engineering practice and recent Blacktown City Council

e) On the "Concept Stormwater Management Device Configuration" in the Stormfilter Chambers provide two to three access points within the chamber in addition to access to the energy dissipation

Additional intests have been provided as requested, keller updated drawing.

1) On the "Overflow Weir 920 High" as this will not be valid as the weir height relative to the tank base will vary depending upon the finished level of the tank.

It is noted that the weir height will vary due to the fall in the base of the tank — we have adjusted the note to reflect this and the minimum height requirement.

g) On the "Concept Stormwater Management Device Configuration" review the grated access spacing based on the internal wall configuration. Clear access a minimum spacing is required within each

on.

Juni spacing per original SSDA is provided as specified on drawing SSDA45. The spacing varies in depth of the tank and will be finalised in detail design. It is noted that all in

openings (Min 800mm wide) between all in

h) On the "Concept Stormwater Management Device Configuration" provide step irons or ladders for all grates.

i) On the "Typical Filtration Chamber Detail" delete the reference to "920" and on the inside of the weir show a "150 False Floor" and a "770 Weir above False Floor".

j) On the "Typical Outlet Configuration" either lower the invert of the outlet pipe to be at or below the lower of the underdrain pipe inverts or the 100 year orifice / pipe invert.

Neter updated useful to letted use across.

It is a trained to letted use across a constant of the long length of travel allow for a minimum grade in the underdrain pipes from the Stormfilter chamber to the overflow pit typically at 1% minimum or higher.

as required by Ocean Protects

False floor levels have been set as per the above noted requirement.

I) On the "Typical Outlet Configuration" delete the Weldlok screen from the Overflow Chamber.

m) On the "Typical Outlet Configuration" the reference and location of "1500" is unclear.

This is the distance between the external perimeter wall and the weir wall.

n) On the "Rainwater Tank Configuration" delete the single 180 kL tank and show how the two 120 kL tank (240 kL total) configuration will work.

o) On "Detail A" delete the reference to "900mm WIDE" and "500". The baffle is to extend from "400" below the weir to "200 above the 100 year storage level or to the tank soffit.

Thanks

Fraser McDonald Development Manager

M. ±61 427 727 379

Please consider the environment before printing this email.

This e-mail is confidential and may also be privileged. If you are not the intended recipient, please delete it and notify us immediately; you should not copy or use it for any purpose, nor disclose its contents to any other person. It is your responsibility to check any attachments for vivuses and deletes before opening or sending them access, see our privacy policy at logosproperly.com

This email may contain information intended for the financial service clients of LOGOS Investment Manager Pty Ltd (ACN 623 281 345, AFSL 505699) and LOGOS Investment Management Pty Ltd (ACN 602 048 082, CAR 1260636) Any financial product advice is general advice and provided to wholesale clients only. See our website for further regulatory information at <u>logospopenty.com</u>

From: Ania Dorocinska

Sent: Thursday, 15 August 2019 7:13 AM

To: Craig Thomas <<u>CraigThomas@logosproperty.com</u>>; Andrew Hobbs <<u>ahobbs@urbis.com.au</u>>

Subject: FW: MC-17-00001 SSD 8606 MOD 2 - Marsden Park Warehousing Estate - request for update on Drainage Engineering comments

SSD 8606 MOD 2 / MARSDEN PARK WAREHOUSING ESTATE

Good Morning.

Please see comments from Council's Hydraulic Engineer, do you want to look at providing revised drainage plans to address the points?

Thank you

Kind regards

Ania Dorocinska

Industry Assessments | Department of Planning, Industry and Environment

T 02 9274 6225 | E ania.dorocinska@planning.ns

Level 29, 320 Pitt Street, GPO Box 39, Sydney NSW 2001

Please consider the enviro

From: Tony Merrilees <Tony Merril

Sent: Wednesday, 14 August 2019 7:05 PM

To: Joanna Bakopanos < Joanna Bakopanos@planning.nsw.gov.au>; Ruth Bennett < Ruth.Bennett@blacktown.nsw.gov.au>

Cr. Shakeeh Mushtan < Shakeeh Mushtan@blacktown nsw gov aux: Ania Dorocinska < Ania Dorocinska @nlanning nsw gov aux: Mark@costinge com aux

Subject: RE: MC-17-00001 SSD 8606 MOD 2 - Marsden Park Warehousing Estate - request for update on Drainage Engineering comments

I have recently received the MUSIC model from the engineers Costin Roe that has enabled me, together with the recently supplied OSD Spreadsheet and drainage plans, to make a proper assessment of the

In reviewing the MUSIC model for the reduced Lot 1, I found that the water quality targets were not fully met and there were some minor issues with some modelling aspects. These could be overcome by adding five additional Stormfilter cartridges. In addition the configuration of the on-site stormwater detention tank (OSD) and Stormfilter Chamber is incorrect and will not operate as required. The following requirements could be covered as a conditions of consent or preferably amended drainage plans could be provided now.

- 1. In the water quality system increase the number of 690 mm high Stormfilter cartridges from 70 to a minimum of 75 proportionally.
- 2. Modify the on-site stormwater detention spreadsheet (12829.14 OSD Deemed to Comply Tool Developer's Edition Spreadsheet v1.9.x/sm) to account for the discharge through the additional Stormfilters and modify the orifice size and review the average base level of the tank as required by the conditions below.
- 3. Amend the Costin Roe Consulting drainage plan series Co12829.14 Issue A Drawing SSDA44 in accordance with the requirements of Council's "WSUD Development Signage" attached. Show the rainwater tank sizes and show which roof areas are directed to the tanks.
- 4. Amend the Costin Roe Consulting drainage plan series Co12829.14 Issue A Drawing SSDA45 by:
- Animal the Costain Note Consulting a plantage plant series Configuration. The red hatched area is the overflow pit only and does not contain any orifice controls.
 b) On the "Concept Stormwater Management Device Configuration" provide the 1.5 year ARI pit and weir surrounding the 100 year orifice control.
 c) Due to the large number of cartridges there is no 1.5 year orifice in the detention tank. The underdrain flow from the cartridges acts as the low flow control. To do this the overflow from the Stormfilter chamber that enters the main detention tank has to re-enter the Stormfilter chamber to drain. Provide a series of 150 mm pipes from each side of the detention tank with non-return flap on the inside of the central Stormfilter Chamber. Set the invert of these pipes at a minimum of 100mm above the false floor level and regrade the base of the tank at 2% to these pipe inverts. Review the tank dimensions to achieve the required storage.
- d) Set the Stormfilter Chamber false floor level at or above the 1 year HGL level in the overflow pit.
- e) On the "Concept Stormwater Management Device Configuration" in the Stormfilter Chambers provide two to three access points within the chamber in addition to access to the energy dissipation
- f) On the "Concept Stormwater Management Device Configuration" delete the two references to the "Overflow Weir 920 High" as this will not be valid as the weir height relative to the tank base will vary
- g) On the "Concept Stormwater Management Device Configuration" review the grated access spacing based on the internal wall configuration. Clear access a minimum spacing is required within ea section.
- h) On the "Concept Stormwater Management Device Configuration" provide step irons or ladders for all grates
- i) On the "Typical Filtration Chamber Detail" delete the reference to "920" and on the inside of the weir show a "150 False Floor" and a "770 Weir above False Floor".

 j) On the "Typical Outlet Configuration" either lower the invert of the outlet pipe to be at or below the lower of the underdrain pipe inverts or the 100 year orifice / pipe invert.
- k) In setting the false floor levels based on the long length of travel allow for a minimum grade in the underdrain pipes from the Stormfilter chamber to the overflow pit typically at 1% minimum or higher as required by Ocean Protect.
- I) On the "Typical Outlet Configuration" delete the Weldlok screen from the Overflow Chamber
- m) On the "Typical Outlet Configuration" the reference and location of "1500" is unclear.
- n) On the "Rinwater Tank Configuration" delete the single 180 kL tank and show how the two 120 kL tank (240 kL total) configuration will work.

 o) On "Detail A" delete the reference to "900mm WIDE" and "500". The baffle is to extend from "400" below the weir to "200 above the 100 year storage level or to the tank soffit.



Tony Merrilees Senior Engineer (Drainage) Developments

9839 6348 Tony.Merrilees@blacktown.nsw.gov.au PO Box 63 Blacktown NSW 2148 acktown.nsw.gov.au Follow us on social media

From: Joanna Bakopanos [mailto: Joanna Bakopanos@planning.nsw.gov.au]
Sent: Friday, 9 August 2019 4:00 PM
To: Ruth Bennot.
Ce: Tory Merrilees: Shakeeb Mushtaq: Ania Dorocinska
Subject: RE: Not-17-00001 SSD 8606 MOD 2 - Marsdan Park Warehousing Estate - request for update on Drainage Engineering comm

Much appreciated Ruth. Thank you Joanna

Joanna Bakopanos Team Leader, Industry Assessments

Level 29, 320 Pitt Street | GPO Box 39 | Sydney NSW 2001 T 02 9274 6387 Service Centre: 1300 305 695

E: joanna.bakopanos@planning.ns Tuesday, Thursday, Friday anning.nsw.gov.au

nvironment acknowledges that it stands on Aboriginal land tment to providing places in which Aboriginal people are in

From: Ruth Bennett < Ruth.Bennett@blacktown.nsw.gov.au>

Sent: Friday, 9 August 2019 3:57 PM

To: Joanna Bakopanos < <u>Joanna Bakopanos@planning.nsw</u>

Cc: Tony Merrilees
Tony.Merrilees@blacktown.nsw.gov.au; Shakeeb Mushtaq
Tony.Merrilees@blacktown.nsw.gov.au; Ania Dorocinska
Tony.Merrilees@blacktown.nsw.gov.au; Ania.Dorocinska
Tony.Merrilees.Merr Subject: FW: MC-17-00001 SSD 8606 MOD 2 - Marsden Park Warehousing Estate - request for update on Drainage Engineering comments

Importance: High

Further to your phone call this afternoon seeking an urgent update on the Drainage Engineering material recently provided to Council for comment, I have contacted our Drainage Engineering department and spoken with Laith Almoil who has advised that Tony Merrilees is out of office today, and he is involved in a LEC matter for next Monday.

I will following up with Tony early next week re the referral currently with him (REF-19-001826), and will then provide advice

Kind regards,



Ruth Bennett Senior Project Planner - Development Assessment

9839 6963 Ruth.Bennett@blacktown.nsw.gov.au PO Box 63 Blacktown NSW 2148

From: Ruth Bennett
Sent: Tuesday, 30 July 2019 4:48 PM
To: Ania Dorocinska: <u>Joanna Bakopanos@planning.nsw.gov.au</u>
Cc: Shakeeb Mushaq; Fraser McDonald (<u>FraserMcDonald@logosproperty.com</u>): Tony Merrilees
Subject: RE: SSD 8606 MO2 - Amarsden Park Warehousing Estate - request for update

Hi Joanna.

As per your enquiry for an update today, I have spoken with Mr Tony Merrilees, our Senior Drainage Engineer, with respect to the four items he had requested be provided by Logos, as follows:

- 1. MUSIC catchment plan showing all bypass.
- 2. OSD catchment plan showing all bypass
- 3. Flectronic MUSIC model.
- 4. Council's OSD Spreadsheet Version 1.9.

He is currently reviewing the items 1, 2, and 3 that have been provided. However he advises that item 4, an electronic OSD Spreadsheet Version 1.9 has not been supplied; and he cordially requests this be provided so he can finalise his review of this material.

Thank you for your kind attention to this matter.

Regards,



Ruth Bennett Senior Project Planner - Development Assessment

9839 6963

9839 6963
Ruth.Bennett@blacktown.nsw.gov.au
PO Box 63 Blacktown NSW 2148
blacktown.nsw.gov.au

Follow us on social media

From: Ania Dorocinska [mailto:Ania Dorocinska@planning.nsw.gov.au]
Sent: Monday, 15 July 2019 9.32 AM
To: Ruth Bennett
Cc: Tony Merrilees; Shakeeb Mushtaq
Subject: Rt: SSD 8606 M0D 2 - Marsden Park Warehousing Estate

Hi Ruth.

The documents are the MUSIC modelling, I cannot open them as I do not have the software. However, I imagine Tony will be able to access them.

Kind regards

Senior Environmental Assessment Officer

Industry Assessments | Department of Planning, Industry and Environment

T 02 9274 6225 | E ania.dorocinska@planning.nsw.gov.a Level 29, 320 Pitt Street, GPO Box 39, Sydney NSW 2001

www.dpie.nsw.gov.au cid:image013.jpg@01D552B9.7FC71AC0



Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we shing to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

Please consider the environment before printing this e-mail.

From: Ruth Bennett < Ruth.Bennett@l
Sent: Monday, 15 July 2019 9:27 AM

To: Ania Dorocinska
To: Ania Dorocinska@planning.nsw.gov.au
Subject: FW: SSD 8606 MOD 2 - Marsden Park Warehousing Estate

Tony Merrilees has been on leave, and I have sent an email requesting an update on his return today.

I note that your email received 4/07 included the words "Warning: unscannable extraction failed"). I do not know whether this has implications in terms of the documents you attached, but am waiting on Tony's advice.



Regards



Ruth Bennett Senior Project Planner - Development Assessment

9839 6963 Ruth.Bennett@blacktown.nsw.gov.au PO Box 63 Blacktown NSW 2148 blacktown.nsw.gov.au Follow us on social media

From: Ania Dorocinska [mailto:Ania.Dorocinska@planning.nsw.gov.au]
Sent: Friday, 12 July 2019 2:57 PM
To: Ruth Benuts
Subject: SSD 8606 MOD 2 - Marsden Park Warehousing Estate

Hi Ruth.

Can I please have an update on the modification to Marsden Park Warehousing Estate

Thank you

Kind regards Ania Dorocinska

Senior Environmental Assessment Officer Industry Assessments | Department of Planning, Industry and Environment T 02 9274 6225 | E ania.dorocinska@planning.nsw.gov. Level 29, 320 Pitt Street, GPO Box 39, Sydney NSW 2001 www.dpie.nsw.gov.au cid:image013.jpg@01D552B9.7FC71AC0 ? Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodia ing to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically Please consider the environment before printing this e-mail. From: Ania Dorocinska Sent: Thursday, 4 July 2019 8:30 AM To: Ruth Bennett < Ruth.Bennett@blacktown.nsw.gov.au> Subject: SSD 8606 MOD 2 - Marsden Park Warehousing Estate Please find attached response to your request for further information relating to the stormwater management at Marsden Park Warehousing Estate. Can you please review and provide comments by COB 12 July 2019. Kind regards Ania Dorocinska Senior Environmental Assessment Officer Industry Assessments | Department of Planning, Industry and Environment T 02 9274 6225 | E ania.dorocinska@planning.nsw.gov.; Level 29, 320 Pitt Street, GPO Box 39, Sydney NSW 2001 www.dpie.nsw.gov.au cid:image015.jpg@01D552B9.7FC71AC0 ? seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically Please consider the environment before printing this e-mail. From: Fraser McDonald < FraserMcDo ald@logosproperty.com Sent: Wednesday, 3 July 2019 2:49 PM To: Ania Dorocinska Ania, Dorocinska@planning.nsw.gov.au> Cc: Andrew Hobbs au/ Subject: [WARNING: UNSCANNABLE EXTRACTION FAILED]FW: SSD 8606 MOD 2 - Marsden Park Warehousing Estate Hi Ania Further to my trailing email please see attached the proposed 'Stormwater Management Plan' (prepared in accordance with Condition B22 of the SSD8606 consent) for the Orrcon facility, as well as additional attachments which together address the following Council items: 1. MUSIC catchment plan showing all bypass. 2. OSD catchment plan showing all bypass 3. Electronic MUSIC model. 4. Council's OSD Spreadsheet Version 1.9. As discussed previously, we are requesting that in addition to Council's specific review of the above items that they also review the attached 'Stormwater Management Plan' in order to satisfy Condition B22(b) of the SSD8606 approval which relates to 'consultation' needing to take place with Council. Please advise if you require anything further, thanks Fraser McDonald Development Manager M. <u>+61 427 727 379</u> FraserMcDonald@logosproperty.com logosproperty.com Please consider the environment before printing this email. This e-mail is confidential and may also be privileged. If you are not the intended recipient, please delete it and notify us immediately; you should not copy or use it for any purpose, nor disclose its contents to any other person. It is your responsibility to check any attachment viruses and deletes before pening or persons, see our privacy policy at logosproperty.com This email may contain information intended for the financial service clients of LOGOS Investment Manager Pty Ltd (ACN 623 281 345, AFSL 505699) and LOGOS Investment Management Pty Ltd (ACN 602 048 082, CAR 1260636) Any financial product advice is general advice and provided to wholesale clients only. See our website for further regulatory information at <u>logostropenty.com</u> This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the system manager. This footnote also confirms that this email message has been swept for the presence of computer viruses

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the system mana

are addressed. If you have received this email in error please notify

This footnote also confirms that this email message has been swept for the presence of computer viruses

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they

the system manager. This footnote also confirms that this email message has been swept for the presence of computer viruses