Proposed Amendment to the Draft Conditions

Draft Conditions	Amended Conditions
1 **Deferred Commencement Matters** 1.1 Under section 4.16(1)(3) of the *Environmental Planning and Assessment Act 1979,* this development consent is not to operate until such time as the requirements set out in Conditions 1.1.1 - 1.1.5 are satisfied. 1.1.1 Stormwater management plans by Woolacotts Consulting Engineers Job Number 16-257 Drawing Number SW1 Amendment A dated February 2017 shall be amended to the satisfaction of the Manager Asset Design to address the following: a) Provide a scale bar to assess areas on the drawing. b) Increase the text size for the existing 'levels' and ensure it is legible. c) Provide additional information for the existing combined bioretention basin and OSD basin. Show cross sections and levels for review. d) All pits must be numbered. e) Provide for all new pits, sizes, surface and invert levels on the plan. Clearly identify which pits have Enviropods f) Enviropods treating only surface flows require a minimum clear depth of 500 mm below the grate to any inlet or outlet pipe obvert. Enviropods treating surface flows and upstream pipe flows require a minimum clear depth of 500 mm from the invert of the upstream pipes to be treated, to the obvert of the outlet pipe. Where these pits are treating upstream pipe flows the inverts of all pipes in and out of the pit are to be shown. g) All Enviropods are to be clearly notated as "200 micron Enviropods". h) Provide additional details for the new raingarden including pit layout, levels and sections. i) Provide a detail of a subsoil riser for flushing and maintenance of the subsoil collection pipe. The riser is to include two 450 bends with a short	7 **PRIOR TO CONSTRUCTION WORK COMMENCING (ENGINEERING)** 7.5.2.1 Stormwater management plans by Woolacotts Consulting Engineers Job Number 16-257 Drawing Number SW1 Amendment A dated February 2017 shall be amended to the satisfaction of the Manager Asset Design to address the following: a) Provide a scale bar to assess areas on the drawing. b) Increase the text size for the existing 'levels' and ensure it is legible. c) Provide additional information for the existing combined bioretention basin and OSD basin. Show cross sections and levels for review. d) All pits must be numbered. e) Provide for all new pits, sizes, surface and invert levels on the plan. Clearly identify which pits have Enviropods f) Enviropods treating only surface flows require a minimum clear depth of 500 mm below the grate to any inlet or outlet pipe obvert. Enviropods treating surface flows and upstream pipe flows require a minimum clear depth of 500 mm from the invert of the upstream pipes to be treated, to the obvert of the outlet pipe. Where these pits are treating upstream pipe flows the inverts of all pipes in and out of the pit are to be shown. g) All Enviropods are to be clearly notated as "200 micron Enviropods". h) Provide additional details for the new raingarden including pit layout, levels and sections. i) Provide a detail of a subsoil riser for flushing and maintenance of the subsoil collection pipe. The riser is to include two 450 bends with a short section of un-slotted straight (minimum 300 mm) in between. The vertical riser is to be sealed with a removable screw cap. j) Provide a section for the new raingarden media. The bioretention profile is to be amended to provide 400 mm of filter media, a 350 mm transition layer and a 200 mm

section of un-slotted straight (minimum 300 mm) in between. The vertical riser is to be sealed with a removable screw cap.	gravel layer. Provide a saturated zone in accordance with the control shown on Council's Water Sensitive Urban Design (WSUD) Standard Drawings Plan No. A(BS)175M Detail 12 or 13.
j) Provide a section for the new raingarden media. The bioretention profile is to be amended to provide 400 mm of filter media, a 350 mm transition layer and a 200 mm gravel layer. Provide a saturated zone in accordance with the control shown on Council's Water Sensitive Urban Design (WSUD) Standard Drawings Plan No. A(BS)175M Detail 12 or 13.	k) The un-socked subsoil drains within the saturated bioretention filter bed can be laid flat, however any non-slotted collection c the subsoil flows away from the basin, are to have a minimum grade of 0.5 %. Where subsoil lines connect with a larger subsoil collection pipe, the subsoil pipes are to connect via two 45 degree bends with a minimum 300 mm straight section between to allow for rodding. The collection pipe is to have its own rodding point. Provide details of sizing to ensure a minimum of twice the capacity based on both pipe capacity and flow through the slots.
k) The un-socked subsoil drains within the saturated bioretention filter bed can be laid flat, however any non-slotted collection c the subsoil flows away from the basin, are to have a minimum grade of 0.5 %. Where subsoil lines connect with a larger subsoil collection pipe, the subsoil pipes are to connect via two 45 degree bends with a minimum 300 mm straight section between to allow for rodding. The collection pipe is to have its own rodding point. Provide details of sizing to ensure a minimum of twice the capacity based on both pipe capacity and flow through the slots.	l) Provide a Raingarden Sediment Pit as part of the scour protection for the piped outlets to the bioretention basins. This pit is to include a minimum 400 mm deep silt trap to protect the filter material from clogging. The concrete top of pit is to be set to the filter media level with a surcharge style grate over or surrounded by railings. The subsoil seepage drainage is to be directed through the side to the bioretention filter media, or transition layer, but not to the gravel layer.
l) Provide a Raingarden Sediment Pit as part of the scour protection for the piped outlets to the bioretention basins. This pit is to include a minimum 400 mm deep silt trap to protect the filter material from clogging. The concrete top of pit is to be set to the filter media level with a surcharge style grate over or surrounded by railings. The subsoil seepage drainage is to be directed through the side to the bioretention filter media, or transition layer, but not to the gravel layer.	m) For the overland flow calculation allow for a minimum Mannings n generally of 0.05 and a Mannings n of 0.025 for hard paved areas and roadways.
m) For the overland flow calculation allow for a minimum Mannings n generally of 0.05 and a Mannings n of 0.025 for hard paved areas and roadways.	n) Provide minimum 1% slope away from building.
n) It is unclear as to the location of the proposed swale. This must be indicated on the plan. Allow for Mannings n = 0.05 and provide a minimum 50 mm freeboard to the top of the swale. Calculations and section details are to be provided to justify the swale capacity. Note when calculating travel times the maximum length using the kinematic wave equation is 50 m, otherwise use Manning's	o) All pits within the proposed development must comply with the following. Pits 600 * 600 mm are limited to 600 mm maximum depth, pits 600 * 900 mm are limited to 900 mm depth and pits greater than 900 mm depth are all to be minimum 900 * 900 mm.
	p) Provide a detail of the overflow pit for the proposed raingarden. The grate is to be a raised park or surcharge style to minimise blockage. The pit size is to be increased such that depth of weir flow into the pit for the 1 in 20 year ARI event is a maximum of 100 mm. Provide a detail of a subsoil riser for flushing and maintenance of the subsoil collection pipe. The riser is to include two 450 bends with a short section of un-slotted straight (minimum 300 mm) in between. The vertical riser is to be sealed with a removable screw cap.
	q) Provide a MUSIC catchment plan for the existing and proposed development

Equation to assess velocity and travel time through the upstream properties. Finished levels within the swale are to be provided at frequent intervals for the length of the swale. o) Set the floor levels at a minimum of 225 mm above the finished ground level. p) All pits within the proposed development must comply with the following. Pits 600 * 600 mm are limited to 600 mm maximum depth, pits 600 * 900 mm are limited to 900 mm depth and pits greater than 900 mm depth are all to be minimum 900 * 900 mm. q) Provide a detail of the overflow pit for the raingarden and the bioretention basin. The grate is to be a raised park or surcharge style to minimise blockage. The pit size is to be increased such that depth of weir flow into the pit for the 1 in 20 year ARI event is a maximum of 100 mm. Provide a detail of a subsoil riser for flushing and maintenance of the subsoil collection pipe. The riser is to include two 450 bends with a short section of un-slotted straight (minimum 300 mm) in between. The vertical riser is to be sealed with a removable screw cap. r) Provide a MUSIC catchment plan for the existing and proposed development showing clearly any areas of bypass. s) Provide an on-site detention catchment plan for existing and proposed development showing clearly the areas draining to the detention basin and clearly show areas of bypass including any upstream swale areas. The one plan shown as part of the Stormwater Management Report in appendix B with the label “Catchment of detention basin 2” shows a different catchment to the pipes shown on the stormwater management plan. t) Provide details of filtration and UV treatment to ensure the non-potable water obtained from the existing rainwater tank is fit for purpose and contact with people. Based on Drawing SW1(A) and the MUSIC model significant surface flows are directed to the rainwater tank in addition to roof areas. This could result in substantial contamination and	showing clearly any areas of bypass. r) Provide an on-site detention catchment plan for existing and proposed development showing clearly the areas draining to the detention basin and clearly show areas of bypass including any upstream swale areas. The one plan shown as part of the Stormwater Management Report in appendix B with the label “Catchment of detention basin 2” shows a different catchment to the pipes shown on the stormwater management plan. s) Provide details of filtration and UV treatment to ensure the non-potable water obtained from the existing rainwater tank is fit for purpose and contact with people. Based on Drawing SW1(A) and the MUSIC model significant surface flows are directed to the rainwater tank in addition to roof areas. This could result in substantial contamination and risk to staff and students and appropriate treatment is required. t) A new independent rainwater tank is to be provided to collect only roofwater from the new buildings and use this for flushing of toilets in the new buildings. 7.5.2.2 Amend the Stormwater Management Report to incorporate all the amendment to the plans and modelling as detailed in this consent. 7.5.2.3 Survey plans by Hill and Blume Consulting Surveyors Drawing Number 58574001A to 58574010A dated 18/08/2016 shall be amended to address the following: a) A survey plan is to be provided of the same area that is shown in the stormwater management plan in order to compare the pre development to post development proposed for the site. b) The survey plan is provided over 10 pages, provide an overall site plan to indicate where the pages belong. 7.5.2.4 Amended XPRAFTS models 16257 Exist.xp and 1625Propo.xp are required to the satisfaction of the Manager Asset Design to address the following: a) RAFTS modelling is to include the 2 year ARI data. b) Refer to table 10.2 of Council’s Engineering Guide for development for the inputs required for XP-Rafts. c) The catchments need to be shown for the existing and proposed scenarios. Catchments for roof, pervious, road and impervious need to be shown draining into the detention basin.

risk to staff and students and appropriate treatment is required.

u) A new independent rainwater tank is to be provided to collect only roofwater from the new buildings and use this for flushing of toilets in the new buildings.

1.1.2 Amend the Stormwater Management Report to incorporate all the amendment to the plans and modelling as detailed in this consent.

1.1.3 Survey plans by Hill and Blume Consulting Surveyors Drawing Number 58574001A to 58574010A dated 18/08/2016 shall be amended to address the following:

a) A survey plan is to be provided of the same area that is shown in the stormwater management plan in order to compare the pre development to post development proposed for the site.

b) The survey plan is provided over 10 pages, provide an overall site plan to indicate where the pages belong.

1.1.4 Amended XPRAFTS models 16257 Exist.xp and 1625Propo.xp are required to the satisfaction of the Manager Asset Design to address the following:

a) RAFTS modelling is to include the 2 year ARI data.

b) Refer to table 10.2 of Council's Engineering Guide for development for the inputs required for XP-Rafts.

c) The catchments need to be shown for the existing and proposed scenarios. Catchments for roof, pervious, road and impervious need to be shown draining into the detention basin.

d) The subcatchment data for the detention basin for existing and proposed scenario should only have the area of the basin inputted.

1.1.5 Revised MUSIC modelling including the submission of the electronic model is to be provided to the satisfaction of the Manager Asset Design to meet the requirements under Council's DCP Part J 2015. The amended model must address the following issues:

a. A minimum of 80% of the non-potable water uses on site is to be met through rainwater. This is to be assessed using the node water balance in MUSIC. Allow for a 20% loss in rainwater tank size volume in MUSIC to that shown on the design

d) The subcatchment data for the detention basin for existing and proposed scenario should only have the area of the basin inputted.

7.5.2.5 Revised MUSIC modelling including the submission of the electronic model is to be provided to the satisfaction of the Manager Asset Design to meet the requirements under Council's DCP Part J 2015. The amended model must address the following issues:

a) A minimum of 80% of the non-potable water uses on site is to be met through rainwater. This is to be assessed using the node water balance in MUSIC. Allow for a 20% loss in rainwater tank size volume in MUSIC to that shown on the design plans below the overflow invert to allow for anaerobic zones, mains water top up levels and overflow levels.

i. The rainwater tank should only collect roof water. The model has field, play 1, garden 2 and car 1 directed to the rainwater tank. These potentially contaminated surfaces should not to be connected to the rainwater tank without appropriate treatment.

ii. The allocated 3.3KL/day for internal rainwater reuse is excessive. Internal use refers to daily use such as toilet flushing. Allow for internal rainwater reuse of 0.55 KL/day per toilet/urinal based on 5 days a week and 40 weeks a year.

iii. The rainwater tank does not allow for landscape watering as annual demand. Provide details and calculations.

iv. Provide an additional rainwater tank collecting roofwater off the new building and used for toilet flushing within the new additions. Allow for a 20% loss in rainwater tank size volume in MUSIC to that shown on the design plans to allow for anaerobic zones, mains water top up levels and overflow levels to achieve the 80% reuse target.

v. For raingarden 1, amend to reflect the correct areas draining to it. Currently roofwater (Roof 2) is directed straight to the basin when it should be going to the rainwater tank.

vi. In Raingarden 1 the 'Surface Area' is too high and must be measured at half the extended detention depth.

plans below the overflow invert to allow for anaerobic zones, mains water top up levels and overflow levels. i. The rainwater tank should only collect roof water. The model has field, play 1, garden 2 and car 1 directed to the rainwater tank. These potentially contaminated surfaces should not to be connected to the rainwater tank without appropriate treatment. ii. The allocated 3.3KL/day for internal rainwater reuse is excessive. Internal use refers to daily use such as toilet flushing. Allow for internal rainwater reuse of 0.55 KL/day per toilet/urinal based on 5 days a week and 40 weeks a year. iii. The rainwater tank does not allow for landscape watering as annual demand. Provide details and calculations. iv. Provide an additional rainwater tank collecting roofwater off the new building and used for toilet flushing within the new additions. Allow for a 20% loss in rainwater tank size volume in MUSIC to that shown on the design plans to allow for anaerobic zones, mains water top up levels and overflow levels to achieve the 80% reuse target. v. For raingarden 1, amend to reflect the correct areas draining to it. Currently roofwater (Roof 2) is directed straight to the basin when it should be going to the rainwater tank. vi. In Raingarden 1 the 'Surface Area' is too high and must be measured at half the extended detention depth.	
1.2 **Compliance Timeframe**	
1.2.1 All of the requirements listed in the above condition must be completed within 12 months of the date of this 'deferred commencement' consent. Should these matters not be completed to Council's satisfaction within this time period, this 'deferred commencement' consent will lapse.	
3 **GENERAL**	3 **GENERAL**
3.1 **Scope of Consent**	

3.1.1 This consent relates to the following drawings/details submitted to Council with the Development Application, subject to compliance with any other conditions of this consent:

Job Number	Drawing No.	Drawing Title	Dated
160711	AR-DA-1102 Revision C	Proposed Site Plan	31/07/18
160711	AR-DA-1201 Revision B	Site Demolition Plan	14/09/17
160711	AR-DA-2001 Revision C	Ground Floor Plan	14/09/17
160711	AR-DA-2002 Revision B	First Floor Plan	14/09/17
160711	AR-DA-2003 Revision B	Roof Plan	14/09/17
160711	AR-DA-2501 Revision B	GFA	14/09/17
160711	AR-DA-3001 Revision C	Elevations	14/09/17
160711	AR-DA-3101 Revision C	Sections	14/09/17
160711	AR-DA-4001 Revision B	External Signage Details	14/09/17
160711	AR-DA-7101 Revision B	External Materials	14/09/17
16564	L101 Issue A	Landscape Masterplan	25/08/17
16564	L102 Issue A	Detailed Landscape Plan 1	25/08/17
16564	L103 Issue A	Detailed Landscape Plan 2	25/08/17
16564	L104 Issue A	Detailed Landscape Plan 2	25/08/17

3.1 **Scope of Consent**

3.1.1 This consent relates to the following drawings/details submitted to Council with the Development Application, subject to compliance with any other conditions of this consent:

Job Number	Drawing No.	Drawing Title	Dated
160711	AR-DA-1102 Revision C	Revised Site Plan	31/07/18
160711	AR-DA-1201 Revision B	Site Demolition Plan	14/09/17
160711	AR-DA-2001 Revision C	Ground Floor Plan	14/09/17
160711	AR-DA-2002 Revision B	First Floor Plan	14/09/17
160711	AR-DA-2003 Revision B	Roof Plan	14/09/17
160711	AR-DA-2501 Revision B	GFA	14/09/17
160711	AR-DA-3001 Revision C	Elevations	14/09/17
160711	AR-DA-3101 Revision C	Sections	14/09/17
160711	AR-DA-4001 Revision B	External Signage Details	14/09/17
160711	AR-DA-7101 Revision B	External Materials	14/09/17
16564	L101 Issue A	Landscape Masterplan	25/08/17
16564	L102 Issue A	Detailed Landscape Plan 1	25/08/17
16564	L103 Issue A	Detailed Landscape Plan 2	25/08/17
16564	L104 Issue A	Detailed Landscape Plan 2	25/08/17
16564	L201 Issue A	Section	25/08/17

16564	L201 Issue A	Section	25/08/17
16564	L301 Issue A	Indicative Planting Palette	25/08/17

16564	L301 Issue A	Indicative Planting Palette	25/08/17
160711	AR-DA-1102 A Revision C	Proposed Site Plan showing additional trees as marked in red by Council	31/07/18
160711	AR.SK.DMT.001 Rev B	Site Plan showing parking layout and proposed relocation of 7 demountables	17/09/2018

3.4 **Demountable classrooms**

3.4.1 The demountable classrooms located on the designated parking spaces along Wentworth Street shall be relocated to a location on the site to Council's satisfaction.

3.4 **Demountable classrooms**

3.4.1 The approved number of parking spaces under JRPP-13-369 shall be complied with. The amended site plan AR.SK.DMT.001 Rev B prepared by TKD Architects shall be complied with in accordance with the amended site plan dated 17 September 2018.

7 **PRIOR TO CONSTRUCTION WORK COMMENCING (ENGINEERING)**

7.11 **Pedestrian Crossing**

7.11.1 A second pedestrian crossing shall be constructed along Wentworth Street. The final location of the pedestrian crossing should be determined in consultation with the school principal.

7.11.2 A separate approval from Council will be required for the second pedestrian crossing.

13 **PRIOR TO OCCUPATION**

13.7 **Pedestrian Crossing**

13.7.1 A second pedestrian crossing shall be constructed along Wentworth Street. The final location of the pedestrian crossing should be determined in consultation with the school principal and Council's Traffic Management Section.

13.7.2 A separate approval from Council's Local Traffic Committee will be required for the second pedestrian crossing.

13.8 **Car parking**

13.8.1 A minimum of 165 car spaces are to be provided on site for staff and visitors, being 155 spaces from previous approval JRPP-13-369 and 10 spaces for this Development Application.

15.3.4 A total of 165 car parking spaces are to be available for staff, visitors and for school use at all times. Any alterations to the parking provision on site will require separate approval of Council.