

6 September 2019 181230 CAAA.

Multiplex Level 22, 135 King Street Sydney NSW 2000

Attention: Tim MacLeod

NEW MAITLAND HOSPITAL

STORMWATER DETENTION AND DISCHARGE STRATEGY

Dear Tim,

TTW can confirm that the stormwater discharges from the New Maitland Hospital site on Metford Road Metford, has been designed to limit post development flows so that they do not exceed pre development flows for all rainfall events up to and including the 1% AEP event.

This includes the site discharge point at the Metford Road Culverts as highlighted in Maitland City Councils response to the SSI Application, as outlined below:

The stormwater strategy for the site is detailed in Section 5 of the Civil Infrastructure Report. This section of the report outlines Councils requirements from its Manual of Engineering Standards, and how the stormwater design for the site will meet those criteria. The catchment plan, included at the bottom of this letter shows the existing catchment boundary, and the final drainage catchments of the site post development. The stormwater design for this site has been undertaken to ensure that the existing catchment boundaries remain as close as is practically possible to the existing catchments.

As can be seen from the catchment plan, the existing urbanised catchment to the south of the site will not be impacted by the works and will continue to discharge via the Metford Road culverts. Catchment C and the Western Portion of the Northern Carpark post development catchments will continue to drain to the Metford Road Culverts. Two On Site Detention (OSD) tanks are provided to achieve the pre-development flows, OSD A-west and OSD C. Catchment C will drain to a large concrete OSD tanks in the western carpark with a volume of 300 cu.m. The attached table for Catchment C shows pre and post development flows. Please note Catchment A – west is directed to OSD A and is treated via bio-swales as described in Section 6 of the Civil Infrastructure Report and as per detail below, as shown in the catchment plans included in the SSI A.

Should you require anything further please contact the undersigned.

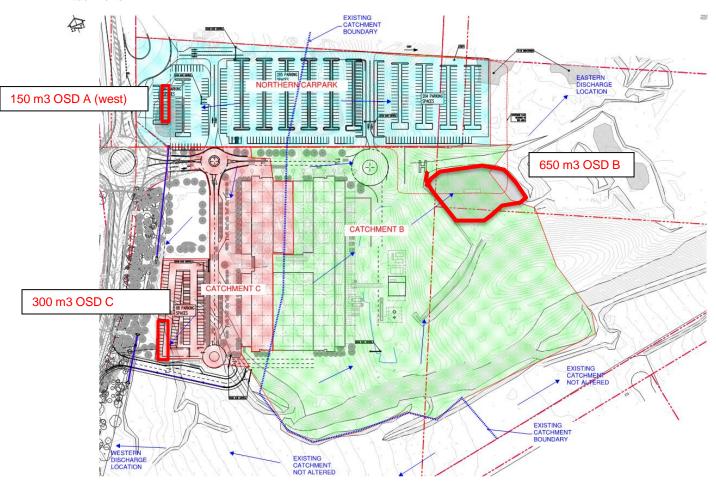
Yours faithfully,

TAYLOR THOMSON WHITTING (NSW) PTY LTD in its capacity as trustee for the TAYLOR THOMSON WHITTING NSW TRUST

STEPHEN BRAIN
TECHNICAL DIRECTOR (Civil)

P:\2018\1812\181230\Letters\Civil\190903 Civil Statement on Site Discharge.docx

Attachments:



CATCHMENT PLAN

Table 5.2 Stormwater peak flows of Catchment A

Catchment A – West (Northern Catchment – West)					
OSD Volume (cu.m)	150				
Catchment Area (ha)	2.01				
	50% AEP	10% AEP	1% AEP		
Pre Development Flows (cu.m/s)	0.069	0.151	0.309		
Post Development Flows (cu.m/s)	0.138	0.236	0.388		
Post Development with OSD Flows (cu.m/s)	0.056	0.100	0.148		

Table 5.3 Stormwater peak flows of Catchment B

Catchment B (Eastern Catchment)				
OSD Volume (cu.m)	650			
Catchment Area (ha)	4.70			
	50% AEP	10% AEP	1% AEP	
Pre Development Flows (cu.m/s)	0.583	1.27	2.38	
Post Development Flows (cu.m/s)	0.597	1.29	2.55	
Post Development with OSD Flows (cu.m/s)	0.476	0.87	1.88	

Table 5.4Stormwater peak flows of Catchment C

Catchment C (South Western)					
OSD Volume (cu.m)	300				
Catchment Area (ha)	1.23				
	50% AEP	10% AEP	1% AEP		
Pre Development Flows (cu.m/s)	0.153	0.332	0.623		
Post Development Flows (cu.m/s)	0.232	0.473	0.795		
Post Development with OSD Flows (cu.m/s)	0.153	0.219	0.303		

