

18 October 2024

Turner & Townsend
Level 19
On Wharf Lane
171 Sussex Street
Sydney NSW 2000

Job Number: 6850

Attention: Georgia Leonard

Dear Georgia,

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Cessnock Hospital Redevelopment Flooding Impact Assessment Statement

Upon revision of Cessnock Council's Flood Plain Risk Management Study and Plan Report and the local topography it was noted that the campus is located on a crest and therefore, riverine flooding is not a risk. The nearest watercourses, as noted in Figure 1, are the concrete channel that connects to Bellbird Creek and the tributary of Black Creek, both of which are some distance from and at a lower elevation to the hospital site. These watercourses are around 10m or lower than the site (somewhere around RL70).

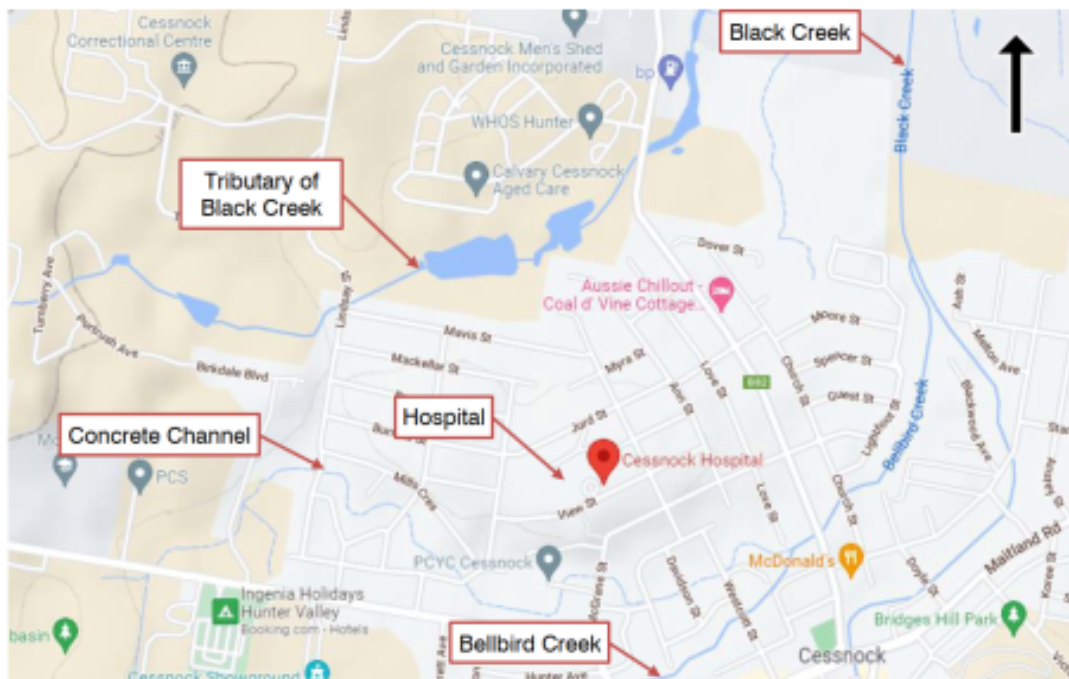


Figure 1: Local Context Map (Source: Google Maps 2021)

With regards to flooding caused by overland flow, being at the crest of the hill limits the amount of catchment and water concentration that leads to overland flow flooding within the site. However, as noted in Council's flood map, shown below in Figure 2, the property across Jurd Street is affected by flooding which has the potential affect any development on the decommissioned helipad. The proposed development has been designed above the flood height with the appropriate freeboard. The design is above the PMF, as is suitable for hospital developments.

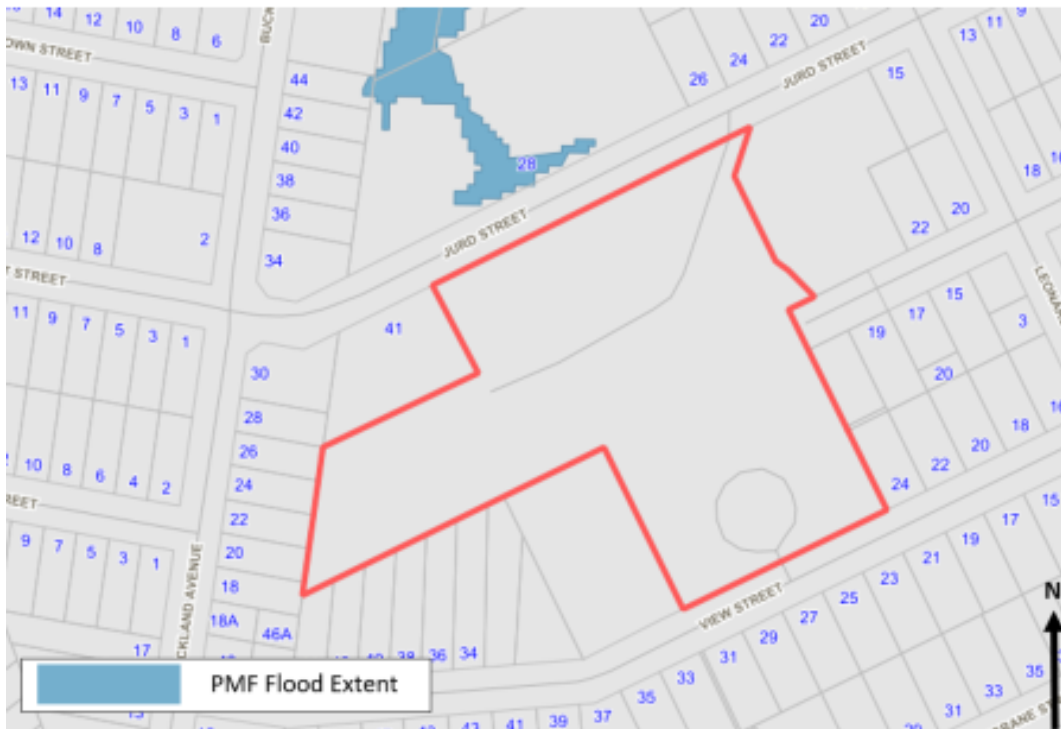


Figure 10: PMF Flood Extent (Source: Cessnock Council Maps)

Council does not specifically provide advice for health facilities, whereas commercial developments, as noted in Council’s Engineering Requirements for Development - Chapter-6 Stormwater Drainage-Design are required to have floor levels at least 500mm above the 1 in 100 Year Average Recurrence Interval flood level.

The PMF level in the property across the street is expected to be below ~RL80.35m. The proposed minimum building floor level is at RL82.40m. This provides significant (1.95m) freeboard to the PMF level and hence the development meets Council’s guidelines.

I am an appropriately qualified and competent person in this area and as such can certify that the design and performance of the design systems comply with the above.

I possess Indemnity Insurance to the satisfaction of the building owner or my principal.

Full Name of Designer:	Phillip Lambley
Qualifications:	BE (Civil), CPEng, MIEAust, NER, VBA

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Director