

## **MEMORANDUM**

Attention:	David Waldren	Copy to:	Paul McDonald
Company:	Vicinity	Date:	27/02/2023
From:	Daniel Jones	Sent Via:	Aconex
Project:	Chatswood Chase	#Pages:	2
Subject:	Flood Requirements for 5-7 Havilah	Reference:	14291 MM30

## David,

As requested, please find below items to be considered for 5-7 Havilah Street property in response to the council RFI's regarding the impact on this property from the proposed DA.

The property at 5-7 Havilah Street currently owned by Vicinity is subject to overland flow during larger storm events (particularly 1% AEP and over). The overland flow path currently (existing condition) passes through the from the rear of the ground-floor carpark and around the outside of building through to Havilah Street. This carpark has large openings on three sides.

The further development of CCSC and the implementation of flood gates on the Victoria Avenue Basement Carpark entry ramps to by-pass overland flows from the council system and prevent significant risks to life and property within the shopping centre basement carpark. It is proposed that certain measures are required to be implemented on 5-7 Havilah Street to reduce the impact of the additional flows downstream of the shopping centre.

To assist in the mitigation of floodwater flows downstream of Havilah Street CJ Arms have proposed an upgrade of the current carpark entry vehicular gate to include a mostly impervious barrier (solid gate) up to 1m. This barrier need not be water-tight but should heavily impede the flow from the carpark entrance to Havilah Street. In addition, as part of an update to the CCSC flood management plan there will be a requirement to remove all vehicles & pedestrians from the parking area on instruction from the centre staff (fire warden) and to ensure the car park gate was closed.

In summary the requirements are:

- Installation of a carpark gate that includes a suitable solid flood barrier (to the height of 1m).
- Removal of all vehicles & pedestrians in event of Yellow alert (as per flood management plan)
- Ensuring that new gate is closed when required by the flood management plan.

It would be necessary to assess the property and building from a structural perspective to ensure that the building structure is capable of withstanding water depths and velocities as proposed for the storm events as required by structural codes and Australian Standards.

The flood water depths and velocities per storm event are shown in the extract below.

## CJ ARMS



Regards,

**Daniel Jones** 

CJ Arms