



**Our Ref:** Letter 01 PLDC 21-11-13 AT  
AT:at

28 November 2013

Penrith Lakes Development Corporation  
PO Box 457  
CRANE BROOK NSW 2749

**Attn:** Chad Jackson

**Subject: Cranebrook West Development at Sardam Ave, Cranebrook  
Flood Evacuation Route**

Dear Chad,

J. Wyndham Prince has reviewed the Hawkesbury Nepean Flood Emergency Sub Plan, December 2005 to identify a flood evacuation route from the proposed 7 lot subdivision at Sardam Avenue, Cranebrook.

The recommended evacuation route is towards The Northern Road which is a Regional Evacuation Route. This route is based the Hawkesbury/Nepean Flood Evacuation Route Map stated in this plan

The aim of the evacuation route is to proceed safely to flood evacuation centres. A list of evacuation centres is included in the Hawkesbury Nepean Flood Emergency Sub Plan, December 2005

Future residents can evacuate in a rising flood by vehicle and as a pedestrian as follows.

The recommended evacuation route that can be used by vehicles or pedestrians is:

<b>Road Name</b>	<b>Distance</b>	<b>Direction</b>
Sardam Ave	150m	Turn Right
Farrells Lane	100m	Turn Left
Cranebrook Road	85m	Turn Right
Boundary Road	1000m	Turn Right
Laycock Ave	500m	Turn Left
Borrowdale Way	1400m	Turn Right
The Northern Road	4000m	Turn Left onto Great Western Highway (Figure 1)
Or		
The Northern Road	7400m	Turn left onto the M4 Motorway (Figure 2)

An alternative route is to walk up the embankment at the rear of the lots to access Castlereagh Road.

The Northern Road and Castlereagh Road are designated flood evacuation routes in the Hawkesbury Nepean Flood Emergency Sub Plan, December 2005.



The maximum distance to high ground, above the Probable Maximum Flood PMF (RL 29 AHD), is 750 metres. The high ground location is at the intersection of Boundary Road and Enterprise Road along the evacuation route to The Northern Road. The evacuation time, at a walking pace of 5km/hour, is within 9 minutes.

The peak 100 year ARI level at Sardam Avenue is 20.69m AHD, as stated in the Future Urban Development Area – Flood Affection, Cardno, 20 September 2013.

The lowest design road surface level in Sardam Ave will be 20.59m AHD, J. Wyndham Prince design 9600/DA21 Revision B.

Recent advice from other developments in the North West Precincts suggests inundation of a flood evacuation route up to 250mm is safe to traverse by vehicle and pedestrian egress. The 100 year ARI will inundate Sardam Avenue by 100mm, therefore Sardam Avenue is considered to be a satisfactory flood evacuation route.

If further information is required, please contact J. Wyndham Prince.

Yours faithfully

**J. WYNDHAM PRINCE**



**ANDREW TAYLOR**

Project Manager

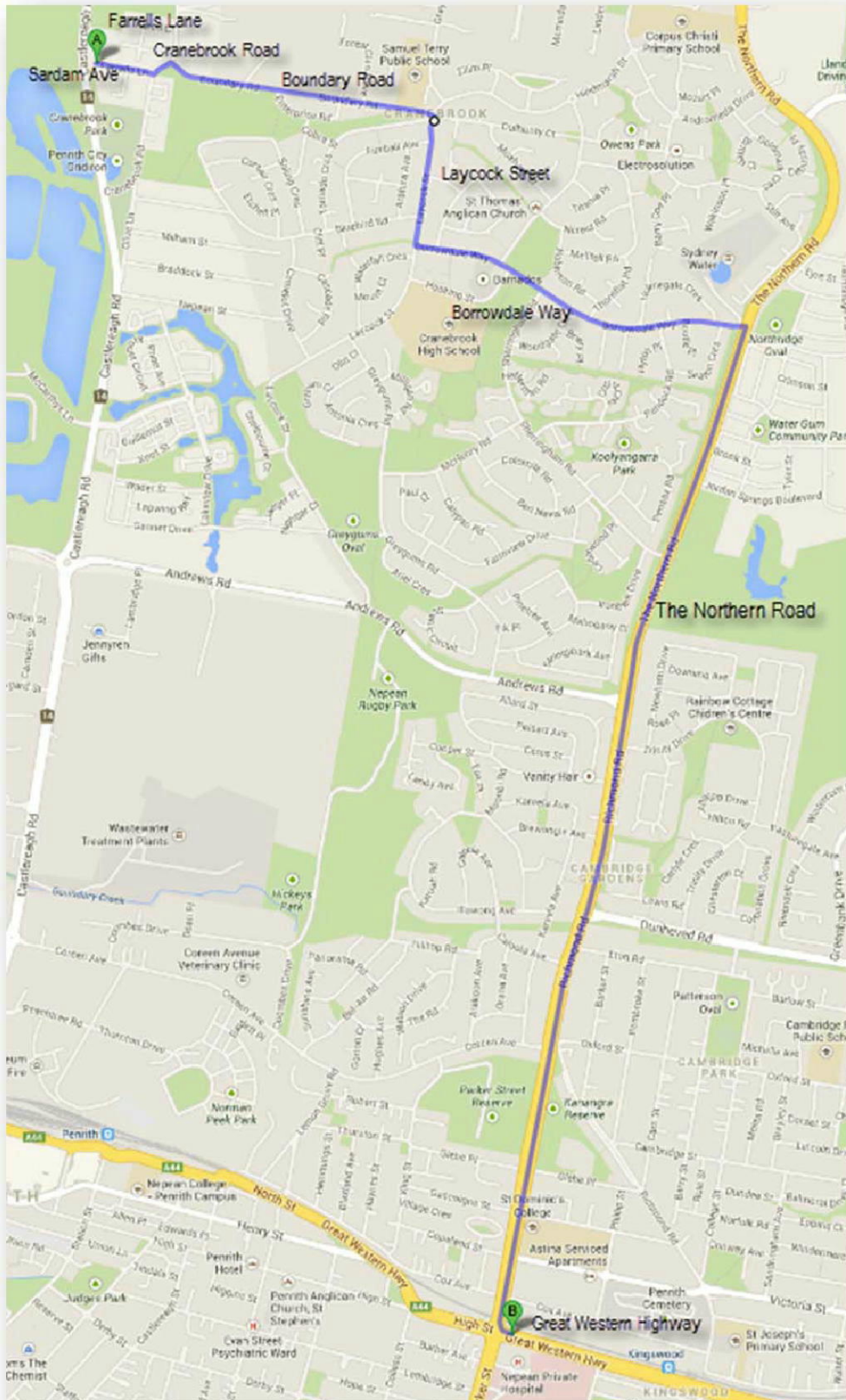


Figure 1. Evacuation Route Sardam Ave to the Great western Highway



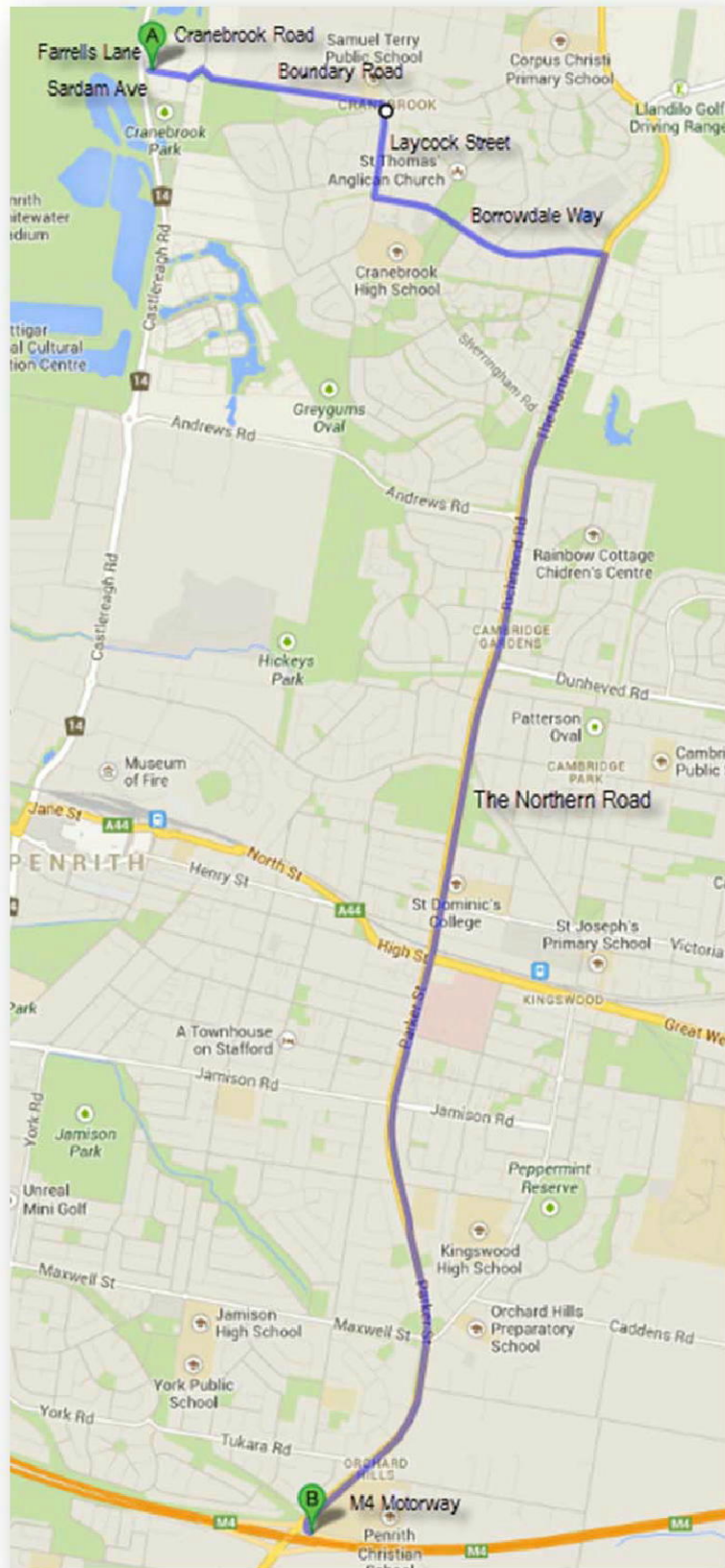


Figure 2. Evacuation Route Sardam Ave to the M4 Motorway