Mr Timperi
2 Tebbutt Street
Leichhardt, NSW 2040

L11105499_120C_OldCanterburyRd.docx

21 June 2016

Attention: Mr Timperi

Dear Rick,

Re: Flood Certificate for 120C Old Canterbury Road, Lewisham

Thank you for contacting WMAwater in regard to a flood certificate for the property located at the above referenced address. WMAwater completed the Hawthorne Canal Flood Study on behalf of Ashfield Council and Marrickville Council, within which area the property is located.

The site consists of Lot 1 in DP 817359 and Lot 100 in DP 875660; with the joint address of 120C Old Canterbury Road, Lewisham. It is bounded by Old Canterbury Road to the south, the light-rail line to the west, the open channel of Hawthorne Canal to the east, and the intersection of the light-rail line and the open channel at the north boundary of the site. Access to the site is via a privately owned and operated bridge across Hawthorne Canal with a right of carriageway through the adjacent property.

The current land use of the site is industrial and no impermeable buildings are currently located on the site. The Planning Proposal is for an increase in Floor Space Ratio (FSR), an increase in allowable building height and a rezoning of the site.

Figure 1 and Figure 2 attached shows the existing flood behaviour in the vicinity of the property for the 1% AEP event and the PMF event. Based on modelling results from the Flood Study, it is evident that 120C Old Canterbury Road is impacted by mainstream and overland flow.

Mainstream flow in the vicinity of the site originates from the open channel of Hawthorne Canal, located to the south-east of the site, and which travels in a northerly direction along the eastern boundary of the site. Overland flow approaches the site from the west; with overland flow originating from streets and properties to the west as well as from the light-rail underpass to the south-west of the site. Flow through the light-rail underpass occurs when the mainstream flow to the south of the Old Canterbury Road embankment exceeds the capacity of the constricting culvert and backwaters; with the increasing flood level and extent allowing flow to diverge through the light-rail underpass.

WMAwater Pty Ltd (Formerly Webb McKeown and Associates) **ABN 14 600 315 053**

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The peak flood depth on the site was found to be 5.7 m in the 1% AEP event and 7.9 m in the PMF event. The peak flood level was found to be:

- In the 1% AEP event: a minimum of 11.8 m AHD and a maximum of 12.3 m AHD; and
- In the PMF event: a minimum of 14.0 m AHD and a maximum of 14.4 m AHD.

COUNCIL POLICY

The Ashfield Council *Interim Flood Development Control Policy* (DCP) was adopted by Council on the 25th March 2014 and is applicable to this development proposal. From this:

Controls for new residential developments

- *(2.1) Floor levels of habitable rooms must be a minimum of 0.5m above the standard flood level at that location. For areas of minor overland flow (a flood depth of 300mm or less or overland flow of 2cum/sec or less) a lower freeboard of 300mm may be considered on its merits.*
- *(2.2) Any portion of buildings classified as being flood prone must be constructed from flood compatible materials.*
- *(2.3) Flood free access must be provided where practicable.*

Controls for new non-residential development

- *(5.1) Floor levels (except for access-ways) must be at least 0.5m above the standard flood level or the buildings must be flood-proofed to at least 0.5m above the standard flood level. For areas of minor overland flow (a flood depth of 300mm or less or overland flow of 2cum/sec or less) a lower freeboard of 300mm may be considered on its merits.*
- *(5.2) Flood free access must be provided where practicable.*

Controls for underground garages

- *(11.1) Freeboard protection of 500mm must be provided within the internal driveway prior to descending into the underground garage.*
- *(11.2) Suitable pumps must be provided within the garage to allow for drainage of stormwater should the underground garage become inundated during flooding.*
- *(11.3) Adequate flood warning systems, signage and exits must be available to allow safe and orderly evacuation without increased reliance upon the SES or other authorised emergency services personnel.*
- *(11.4) Reliable access for pedestrians or vehicles must be provided from the building, commencing at a minimum level equal to the lowest habitable floor level to an area of refuge above the PMF.*

FLOOD PLANNING LEVEL

Given the depth of flood affectation, the recommended freeboard is 0.5 m in addition to the 1% AEP peak flood level. Therefore the minimum level of 12.8 m AHD is applicable for:

- the entry levels to the underground car park facilities (this includes the driveway entry level, the ground floor entry level of stairs or lifts that will descend into the underground area and ventilation ducts);
- the floor level for residential dwellings; and
- the floor level or if not the floor level, the level below which the building should be flood-proofed with no sensitive equipment below this level for non-residential areas

Should you require any further clarification, please do not hesitate to contact the undersigned.

Yours Sincerely,
WMAwater

Erika Taylor
Project Engineer

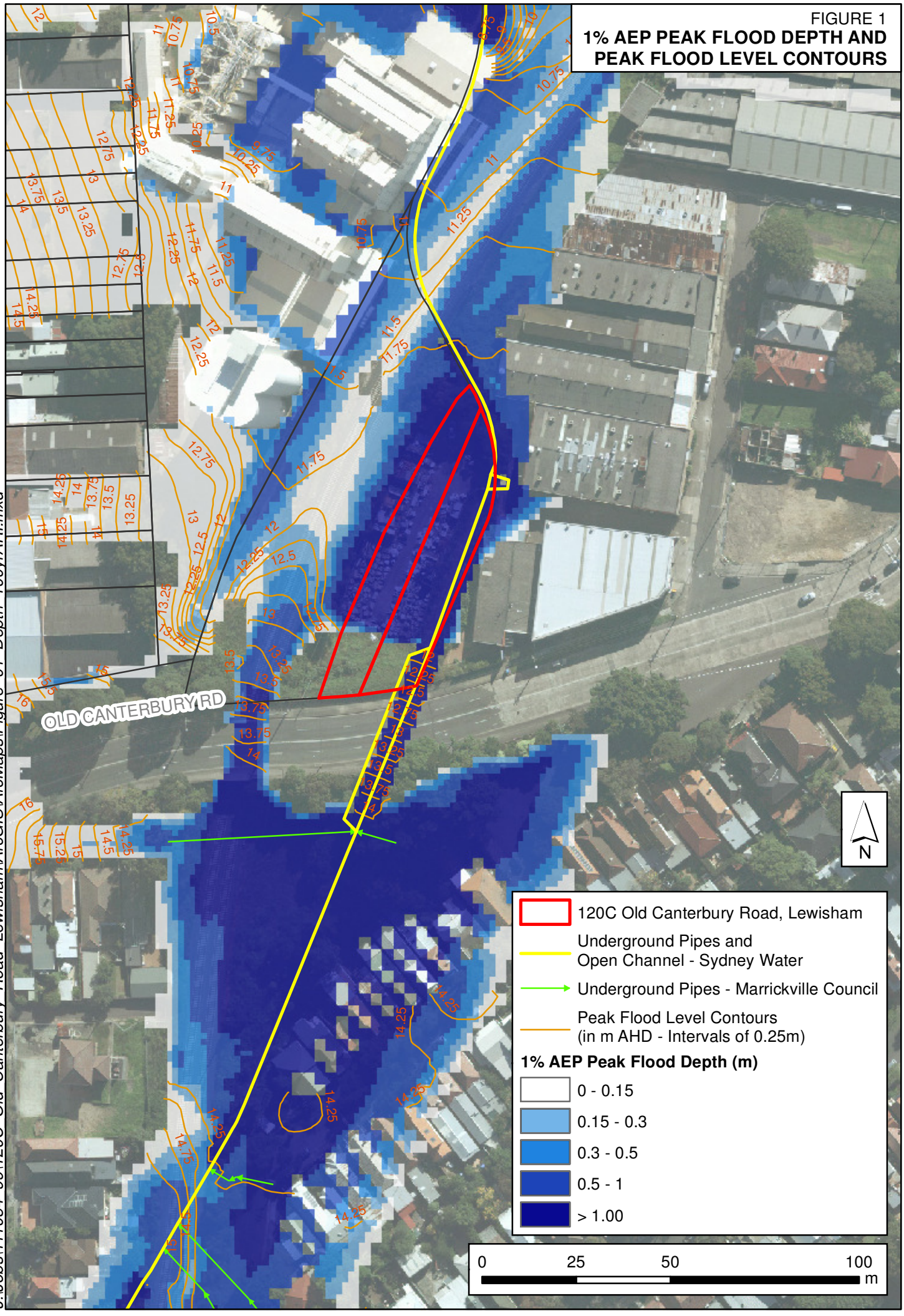
FIGURE 1
1% AEP PEAK FLOOD DEPTH AND PEAK FLOOD LEVEL CONTOURS
OLD CANTERBURY RD
N
120C Old Canterbury Road, Lewisham
Underground Pipes and Open Channel - Sydney Water
Underground Pipes - Marrickville Council
Peak Flood Level Contours (in m AHD - Intervals of 0.25m)
1% AEP Peak Flood Depth (m)
0 - 0.15
0.15 - 0.3
0.3 - 0.5
0.5 - 1
> 1.00
0
25
50
100
m
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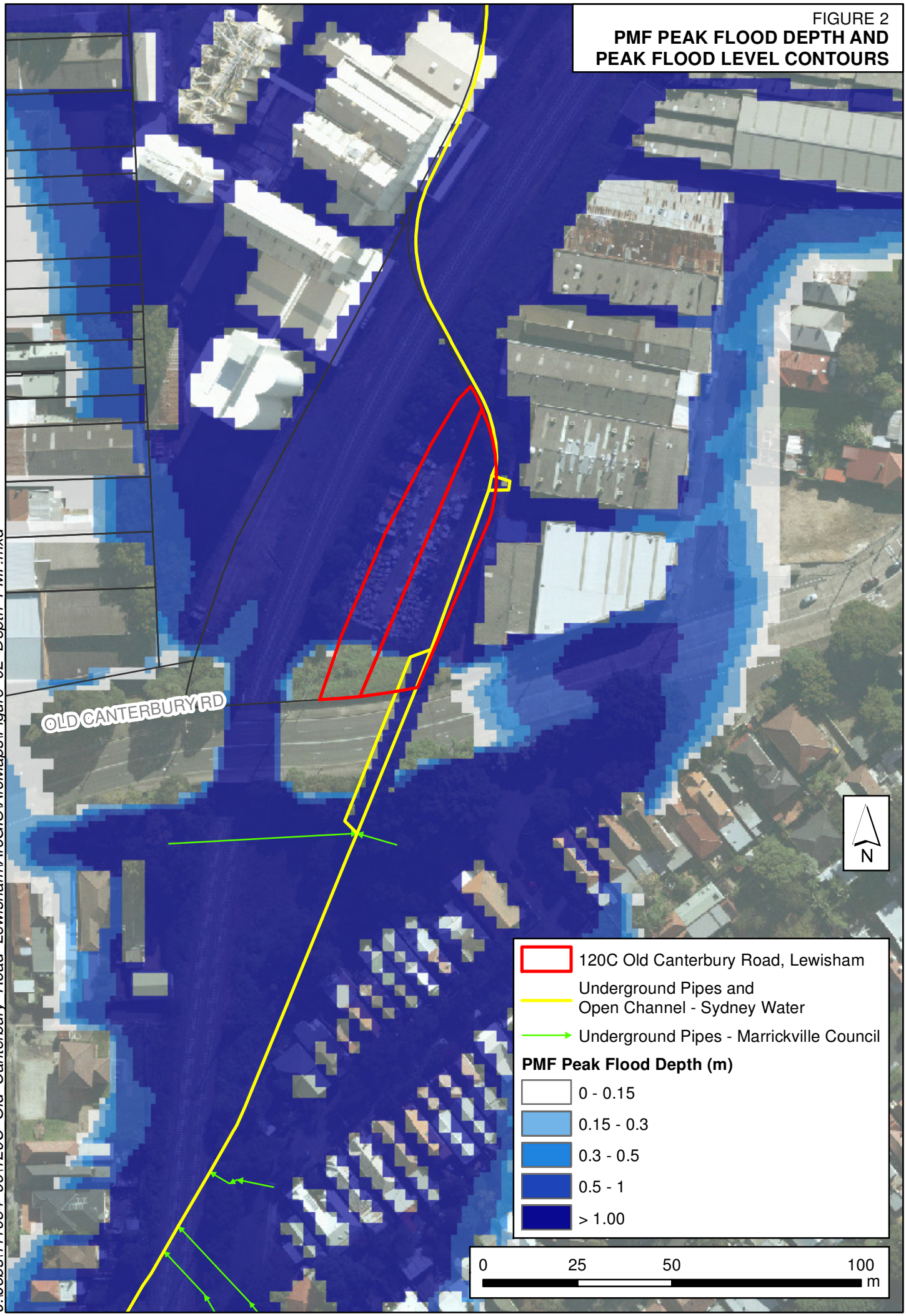
FIGURE 2
PMF PEAK FLOOD DEPTH AND PEAK FLOOD LEVEL CONTOURS



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