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16 September 2014

Catylis Properties Pty Ltd Suite 301, Level 3, 66 Berry Street NORTH SYDNEY NSW 2060

Attention: Richard Wykes

171-189 Parramatta Road, Granville – Flooding Advice

Dear Richard

At your request we have undertaken a review of publicly available flooding information to assess whether the proposed development site at 171-189 Parramatta Road, Granville is likely to be flood affected in the 1% Annual Exceedance Probability (AEP) / 100 year Average Recurrence Interval (ARI) event.

Previous flooding advice from Parramatta City Council (Council), as included in their report on the *Preliminary Rezoning Concept* for the site and published in the Business Papers for a Council Meeting held on 16 December 2013, was that: 'The subject site is located above the 1:100 year flood level.'

To verify Council's advice, noting that the closest waterway to the site is A'Becketts Creek approximately 100 m to the north of the site, we undertook a search for publicly available flood studies. We found two potential sources of information:

- 1. A'Becketts Creek Catchment Management Study, Sydney Water, 1990
- 2. Westconnex M4 Widening, Environmental Impact Statement Appendix H: Hydrology and Flooding Technical Study (SMEC, July 2014)

The *A'Becketts Creek Catchment Management Study* is not readily accessible and, given that it was published almost 25 years ago, it is considered unlikely to provide a reliable representation of current flood behaviour. Obtaining a copy of this study has therefore not been pursued further.

The Westconnex M4 Widening EIS was recently published and includes a flood impact assessment for the proposed motorway upgrade works, which includes widening near 171-189 Parramatta Road. The EIS includes figures showing flood extents for A'Becketts Creek under existing conditions for the following events:

- 5% AEP (20 year AR))
- 1% AEP (100 year ARI)
- 1% AEP with Climate Change
- Probable Maximum Flood (PMF).

The attached figure (refer **Attachment 1**) shows that the site is not flood affected in events up to and including the '1% AEP with Climate Change' scenario.

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Flood levels are also documented in the EIS for the 1% AEP event and were estimated to be approx. 7.0 mAHD near 171-189 Parramatta Road. Given that the proposed development site is entirely above 8.0 mAHD, this further reinforces that the site is unlikely to be flood affected in the 1% AEP event.

The EIS does show, however, that the site falls within the PMF extents. Under Council's *Local Floodplain Risk Management Policy* (2006), this would likely lead to the site being classified as a '*Low Flood Risk Precinct*' (this should be confirmed with Council). *Parramatta Development Control Plan* 2011 (PDCP 2011), Section 2.4.2.1 Flooding, provides details of controls which are applicable to the proposed development. These controls largely relate to car parking/driveway access and evacuation.

While the EIS is considered a reliable source of information, given that the intended purpose was to identify flood impacts associated with the M4 widening project, the extracted information should be used with caution. It is inappropriate to rely on the EIS study to set Flood Planning Levels (FPL) for proposed developments. However, it is also hard to envisage that a site specific or more general council flood study would lead to 1% AEP flood levels being more than the 1.0 m above the levels documented in the EIS (1.0 m being the necessary increase for the site to be within the 1% AEP flood extents). We therefore recommend that no further flood study should be required.

We trust the above information adequately addresses your immediate requirements. Should you require anything further please do not hesitate to contact the undersigned.

Yours sincerely

David Stone Drainage Team Leader 02 8907 8294

Encl. Attachment 1 - West Connex EIS - Flooding Component, Figure 13, Existing Flood Extents, Map 3.



Figure 13: Existing Flood Extents - Map 3



125 250 metres

0

The accuracy of flood extents and hydraulic parameters shown on this map is limited to the level of accuracy of the survey data and modelling software available for flood modelling. The flood extents and hydraulic parameters on the map are only an indication of potential flooding conditions throughout the catchment for modelled design storm event and may vary from real flooding conditions.