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From: system@accelo.com on behalf of Mal Brown [REDACTED]
Sent: Thursday, 1 November 2018 4:49 PM
To: [REDACTED]
Subject: Submission Details for Mal Brown of Northrop (comments)
Attachments: 291786_Submission to Aerotropolis LUIP.pdf

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation:

Agreed to false or misleading information statements: yes

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Content:
Adoption of PMF to define Non-urban area, see attachment

IP Address: - 163.53.22.66
Submission: Online Submission from Mal Brown of Northrop (comments)
https://majorprojects.accelo.com/?action=view_activity&id=291786

Submission for Job: #9552
https://majorprojects.accelo.com/?action=view_job&id=9552

Site: #0
https://majorprojects.accelo.com/?action=view_site&id=0

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Table 1: Extract of s149 Certificate for 50 Kelvin Park Drive, Bringelly

Code	Extent of the land for which development is permitted:	The reason(s) as to why development is prohibited:
General Housing Code and Rural Housing Code	All	
Commercial and Industrial (New Buildings and Additions) Code	All	
General Development Code, Fire Safety Code, Housing Alterations Code, Commercial and Industrial Alterations Code, Subdivisions Code, and Demolition Code	All	

Council's s149 Planning Certificate also describes flood-related development controls, including:

- i. Part of the land is within a flood planning area; and
- ii. The land is subject to flood-related development controls

For point ii. it refers to the *Liverpool DCP 2008* for details. Liverpool City Council has characterised the flood risk of the site (Figure 4) as follows:

- 98% Low Flood Risk
- 2% Medium Flood Risk



Figure 3: Flood risk at Bringelly

Taking this further, the *Liverpool DCP 2008* (Table 2) states the following in relation to land use in Low and Medium Flood Risk areas in the applicable catchment of Nepean River floodplains (incl. South Creek).

Table 2 Nepean River Floodplains (Includes South Ck, Kemps Ck, Bonds Ck and other tributaries of the Nepean River)

Flood Risk Category	Land Use Risk Category	Planning Controls							
		Floor Level	Building Components	Structural Soundness	Flood Effects	Car Parking & Driveway Access	Evacuation	Management & Design	Fencing
Low Flood Risk	Critical Uses & Facilities								
	Sensitive Uses & Facilities	12	4	4	2, 4, 5	2, 3, 6, 7, 8	2, 6, 8	4, 5	
	Subdivision				2, 4, 5			1, 6	
	Residential (++)	2, 6	3	3		2, 3, 6, 7, 8	2, 6		
	Commercial & Industrial	2, 6	3	3	2, 4, 5	2, 3, 6, 7, 8	1, 6	2, 3, 5	
	Tourist Related Development	1, 6, 15	3	3	2, 4, 5	2, 3, 6, 7, 8	2, 6	2, 3, 5	
	Recreation & Non-Urban	1, 9, 15	3	3		1, 5, 7, 8	6, 8	2, 3, 5	
	Concessional Development	14	3	3		1, 3, 5, 7, 8, 9	2, 6	2, 3, 5	
Medium Flood Risk	Critical Uses & Facilities								
	Sensitive Uses & Facilities								
	Subdivision				1, 4, 5			1	1, 2, 3
	Residential	2, 6, 15	3	1	2, 4, 5	2, 3, 6, 7, 8	2, 6		1, 2, 3
	Commercial & Industrial	2, 6, 15	3	1	2, 4, 5	2, 3, 6, 7, 8	1, 6	2, 3, 5	1, 2, 3
	Tourist Related Development	1, 6, 15	3	1	2, 4, 5	2, 3, 6, 7, 8	2, 6	2, 3, 5	1, 2, 3
	Recreation & Non-Urban	1, 9, 15	3	1	2, 4, 5	1, 5, 7, 8	6, 8	2, 3, 5	1, 2, 3
	Concessional Development	1, 14, 15	3	1	2, 4, 5	1, 3, 5, 7, 8, 9	2, 8	2, 3, 5	1, 2, 3

Key:

Not Relevant

Unsuitable Land Use

1, 2, 3
(++)

Control reference number relevant to the particular planning consideration. (see Table 6)

Attached dwellings, Dwelling houses, dual occupancies, multi unit dwelling housing, residential flat buildings (not including development for the purpose of group homes or seniors housing), Secondary dwellings and Semi-detached dwellings are exempt from these controls.

Table 2 indicates that various land uses are applicable, subject to them demonstrating compliance with specific flood-related criteria. Typically, Table 6 in Council's DCP Chapter on Flood Risk lists flood criteria for Low Flood Risk land as habitable floor levels which range from the 20% AEP to the 1% AEP flood plus 500mm freeboard.

Council's existing development controls for flooding (as stated above) appear to strike a balanced outcome of development coupled with flood protection. They represent the norm as applied in New South Wales. They allow for a range of developments to occur on the land, subject to meeting various flood planning criteria.

Council's flood controls are also consistent with the *NSW Floodplain Development Manual – the management of flood liable land* (April 2005). Specifically, the 1% AEP (or 1:100 year) flood level is adopted as the Flood Planning Level for the state. The PMF is not considered as a Flood Planning Level in the Manual.

In summary, prior to the Draft LUIIP, my client owned developable land with some minor flooding constraints. With the proposed Draft LUIIP, my client (and other landholders in the vicinity) will own land that is largely undevelopable (Non-urban). The adopted Draft LUIIP planning control is the PMF which relates to flooding. However, in this case the PMF defines a green corridor and is unrelated to flooding. The conflation of PMF and green corridors to create a zoning for planning purposes is unprecedented, and its merit is questionable.

Adoption of the PMF to define a Non-urban zone is unprecedented and unsupported. The 1% AEP level should be adopted as the appropriate flood planning level for this zone.

Riparian corridors

The *Guidelines for riparian corridors on waterfront land* (NSW Office of Water 2012) adopts the Strahler method to recommend Vegetated Riparian Zone (VRZ) widths for waterways in NSW. These VRZ widths have been specifically defined to provide a range of important environmental functions, such as:

- Providing bed and bank stability and reducing erosion
- Providing water quality by trapping sediment, etc
- Providing diversity of habitat for flora and fauna
- Providing connectivity of wildlife habitats
- Conveying flood flows
- Provide an interface or buffer between developments and waterways
- Providing passive recreational uses

The maximum VRZ width in the Guidelines is for 4th order waterways (rivers) and is 40m wide. Thompsons Creek (to the immediate north of the site) is a 2nd order waterway, requiring only a 20m wide VRZ. To be conservative, we have applied a maximum 40m wide VRZ to Thompsons Creek (Figure 4). The resulting VRZ affects a very small portion of the north-western corner of the site.

