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19th November 2024

Our Ref: 231125-C1/AM

Fabcot Pty Ltd 1 Woolworths Way BELLA VISTA NSW 2153

Attention: Ms Nikita Mahapatra

Dear Nikita,

RE: RESPONSE TO COUNCIL RFI PROPOSED RETAIL DEVELOPMENT 495 FOURTH AVENUE, AUSTRAL NORTH, NSW

The following letter is composed to address Request for Additional Information raised by Liverpool City Council as part of the Development Application for the proposed commerical development at 495 Fourth Avenue, Austral (DA-311/2024), dated 1st October 2024.

Updated Engineering Drawings and Engineering Reporting is provided in satisfaction of the Request for Additional Information. This letter should be reviewed in conjuction with the updated Engineering Drawings and Engineering Reporting.

Responses to Council's request are tabulated below, feel free to contact the undersigned if you have any further questions.

Council RFI	Response
14	The proposed stormwater management system from the development includes a
	rainwater harvesting, storage and reuse system. Captured stormwater is proposed to be
	used for non-potable water uses such a toilet flushing and landscape irrigation. Refer
	Chapter 3.45 of Civil Engineering Report and 231125_DA_C102 for additional details
17	The enclosed Civil drawings show the road improvement works and intersection treatment
	for the Fourth Avenue and Gunter Avenue frontages.
18	Refer to C101 for carpark access of Gurner Avenue and dock entry off Fourth Avenue.
	Refer to 231125_DA_C102 for carpark access.
21	Half road and drainage construction on Gurner Avenue is included as part of the
	development proposal, refer engineering drawings 231125_DA_C101-102 and C120 for
	additional details.
22	Engineering drawings have been amended to include a cross section of the proposed half
	road reconstruction and formalisation. The geometry of the works complies with the
	minimum dimensions shown in LGCP DCP- Schedule 1, Figure 3-13, refer to





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	231125_DA_C101 for the dimensions of Gurner Avenue. It should be noted the road reserve is a not standard width (wider) resulting in dimensions greater than those of the minimum detailed in the aforementioned Figure.
23	Henry & Hymas have had discussions with Council regarding the suitability of incorporating a silt trap/raingarden at the corner of Fourth and Gurner Avenue. If a raingarden was to be incorporated it would drastically reduce the available width for the shared path. As Fourth Avenue has a relatively steep longitudinal fall it will require larger retaining walls at the high end of each garden Bay (greater than 600mm). Handrails would also be required to prevent pedestrians from falling into the garden. It should also be noted there is an element of landscaping in this area along the building.
24	Onsite Stormwater Detention (OSD) is included as part of the development proposal. An OSD storage tank is proposed and designed to ensure flows generated by either the eastern or western catchments (considered independently) are not increased during the post-development scenario. Refer Civil Engineering report Chapter 3.2.2.
	A water quality system treatment system to the satisfaction of Liverpool City Council's Water Sensitive Urban Design Standards has been provided for the full development site catchment. Refer Civil Engineering Report Chapter 3.3.2.
25, 26, 27	The engineering drawing package has been updated to document a grass lined drainage channel on the site's southern boundary to capture surface flows generated from the upstream catchment. As advised by council, this upstream catchment is to be considered undeveloped.
	The existing site currently grades in both a north-easterly and north-westerly direction. Two drainage channels are proposed to direct run-off generated by the upstream catchment to the pre-existing discharge locations.
	The smaller of the two upstream catchments, draining northwest, is collected via a drainage channel and drains to a pit connected to the existing kerb inlet pit in Fourth Avenue.
	The northeast draining upstream catchment totaling 2934m ² is collected by an appropriately sized drainage channel and is drained by a series of stormwater pits into a piped stormwater system. The pipe system follows the eastern boundary and discharges upstream flows (up to 0.113m ³ /s during the 100yr ARI event) to the pre-existing discharge location, Gurner Avenue. Refer to 231125_DA_C101 and C102 for more information. It should be noted this is a temporary solution until the area south of our site is developed.
28	Civil Engineering drawings show pipe details (size, grade, length and inverts). A Stormwater long section is shown on engineering drawings C210.
29	The catchment plan has been amended to indicate the post development direction each onsite sub catchment is draining towards
30	Noted, DRAINS and MUSIC models will be submitted in complement to this report.



Yours faithfully,

ADRIAN MARTANO For, and on behalf of, H & H Consulting Engineers Pty Ltd