Sent: 16/07/2021 5:20:06 PM

Subject: Submission - Proposed Development at 266 Whale Beach Rd (Application Number: DA2021/0419)

Attachments: Comments on JKG Response.pdf;

Dear Sir/Madam,

We act for Mr & Mrs Geoff & Ann Godden, owners of 264 Whale Beach Road, Whale Beach, NSW 2107 in relation to their objection to the proposed development at 266 Whale Beach Road, Whale Beach.

We have reviewed a letter prepared by JK Geotechnics on 14 June 2021 in response to our previous peer review comments. Our comments on the recent JKG response is attached in support of the objection lodged by Mr & Mrs Godden.

Regards,

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Your ref: Application Number: DA2021/0419
Our ref: 12552659

16 July 2021

G.A. Godden
264 Whale Beach Road
Whale Beach NSW 2107

Comment on JKG Response – Geotechnical Letter in Response for 266 Whale Beach Road, Whale Beach

Dear Geoff,

At your request, we have reviewed the amended plans (Project No. WBR0002 dated 30 March 2021) prepared by Allen De Carteret Architect and the JK Geotechnics (JKG) letter (Ref: 33313Zlet dated 14 June 2021) in response to the issues raised by GHD in our letter dated 28 May 2021 for the proposed development at 266 Whale Beach Road, Whale Beach, NSW. Our comments on the JKG response are provided below.

This letter should be read in conjunction with our previous peer review letter of 28 May 2021.

Comments on JKG Response

1. We acknowledge that the original JKG report (Ref: 33313Zrpt dated 7 July 2020) included 2 tables (Tables A and B) summarising their risk assessment to property and life respectively. However, no specific analysis or consideration has been reported on the impact of the proposed development on adjoining properties. Further, we would consider that the JKG risk assessment of the impact on adjoining properties to be optimistic. By way of example, for 'instability of bulk excavation', we disagree the JKG assessed consequence of 'insignificant'. We would consider that the consequence of excavation instability on the adjoining properties to be either 'medium' or 'major', with the resulting risk to be 'moderate' to 'high'. Similarly, for 'instability of proposed retaining walls', the JKG assessed likelihood of 'barely credible' is only reasonable if both the design and construction of the retaining walls are executed properly. Nevertheless, we consider that the possibility of errors in design and/or construction cannot be discounted, particularly when no details of the retaining walls are available for review at this stage. In this instance, we would consider the likelihood of instability of proposed retaining walls should be 'possible'. The resulting risk of instability of proposed retaining walls on the adjoining properties therefore is 'high'.
2. With regard to our previous comment in relation to temporary excavations no steeper than 1V:1H, we were simply quoting the JKG recommendation, noting that such temporary batters are not acceptable when the proposed excavation is located at about 1m from the boundary.
3. The original JKG report recommended that the retention system should '*comprise an anchored soldier pile wall with reinforced shotcrete infill panels*'. No other retention systems were proposed or recommended in the original report. The JKG recent response stated the following: '*Our report was not intended to address geotechnical design issues in detail. Such details will be included in the geotechnical investigation report which will be prepared following the drilling of the nominated boreholes and more detailed subsurface information becomes available. Detailed structural design will*

then be carried out, probably with our input, and only at this stage are various retention systems considered and optimised'. We request that the above nominated work, i.e. geotechnical investigation, geotechnical input and detailed structural design of the proposed retention system, be completed and supplied for review.

4. While we understand that any temporary anchors will be distressed on completion of construction, the distressed anchors will remain within our client's property. We agree that the anchors can be cut in the future. However, the costs of such work, i.e. locating and cutting the anchors will need to be added to the costs of future development. We also note that the installation of any anchors (temporary or permanent) within the boundary of our client's property should not proceed without obtaining the permission from our client.
5. We concur with JKG that a hydraulic engineer should be engaged to address any hydraulic issues. However, we request that such hydraulic report should be provided for review to confirm that surface water discharge will not pose any issues to the property at 264 Whale Beach Road, Whale Beach (WBR).

Proposed Actions

Based on the JKG response and our comments above, we would propose the following work to be carried out by the developer of 266 Whale Beach Road, Whale Beach with the reports supplied for review:

– Geotechnical investigation – JKG noted in their original report that the 2 previously drilled boreholes did not extend to the proposed bulk excavation level and have not proven bedrock. We therefore recommend at least 2 new boreholes to be drilled with the bedrock cored near the boundary with 264 WBR. The borehole logs and the interpreted ground model should be documented in a geotechnical investigation report.
– Geotechnical design of the proposed retention system – The proposed retention system based on the refined ground model should be nominated. The proposed retention system should be designed on the assumption that no permission will be granted by the owners of 264 WBR to install anchors below their property. In addition, specific analysis and assessment of the impact of the retention system on 264 WBR should be conducted and reported.
– Hydraulic assessment – A hydraulic report should be prepared to address any potential surface water discharge issues and to propose any mitigation measures required to minimise impact on 264 WBR.
– Vibration assessment – We note that due to the age and sensitive nature of the building located on 264 WBR, we would recommend site specific vibration assessment be undertaken to confirm that the proposed vibration limit will not adversely impact on the building at 264 WBR. Vibration monitoring plan should be specified.

We trust that the above comments are sufficient for your needs. Please contact us if you require any further assistance.

Regards,

Kim Chan
Senior Technical Director - Geotechnics

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