

1 February 2019

Our ref: GEOTLCOV24292AA-ZA

Rose Group
51 Riley Street
Woolloomooloo NSW 2011

Attention: Mr Nick Jackman

Dear Mr Nick Jackman,

DA/2018/1574 Development Application – 23 Fisher Road, Dee Why – Groundwater Opinion

This letter presents an opinion on the presence of permanent groundwater at the level of proposed basement structures for a residential apartment development at 23 Fisher Road, Dee Why. Northern Beaches Council (Council) have provided a preliminary assessment to a development application for the proposed development (DA2018/1574). In their letter dated 17 January 2019 (to Hamptons By Rose Pty Ltd) Council have indicated that they do not support the application due to a number of areas where Council considers the application non-compliant or containing insufficient information.

This letter responds to one aspect nominated in the Council letter relating to groundwater. The letter states:

Groundwater

Clause 6.2 (Earthworks) of WLEP 2011

E10 (Landslip Risk) of WDCP

S.4.46 of the EP&A Act

S.90 of the Water Management Act

The proposed development is likely to interfere with groundwater, which constitutes integrated development under the provisions of s4.46 of the EP&A Act and s90 of the Water Management Act. General terms of approval are required from Water NSW before the application can be determined; however, the application form does not nominate that the proposal constitutes integrated development, and general terms of approval have not been sought or obtained.

The geotechnical risk management report suggests ongoing dewatering of the basement; yet no information is provided in this regard. It is Council's preference for the basement to be tanked in accordance with the Sydney Coastal Council's "Groundwater Management Handbook – A Guide to Local Government" to avoid the need to continually pump out groundwater. The geotechnical report and stormwater management plans are to be amended in this regard.

Groundwater opinion

Coffey has reviewed the conditions at the site including review of the site topographic contours and the proposed basement levels for the development. The site is located on a knoll which is above the surrounding roads and the Council building to the east. The subsurface conditions are interpreted to consist of shallow soil cover over sandstone. Sandstone is exposed on cuts along Sir David Drive to the south of the site and near the roundabout in Fisher Street to the north of the site. The proposed development comprises two basements:

- one located at the northern end of the site where existing surface levels are generally above 36 m AHD (Australian Height Datum) and
- one located at the southern end of the site where the existing surface levels are generally above 32 m AHD.

The finished level of the basement proposed at the northern part of the site would be at 37.2 to 38.8 mAHD. This is above the surrounding levels within the site and well above the level of the roads to the north and west of the basement. There is no catchment above the building at this location and as a result of the topographic setting and the presence of sandstone Coffey considers it likely that the northern basement will be above the permanent groundwater level and as a result will not require continuous dewatering.

The finished level of the basement proposed for the southern part of the site would be at 33.5 mAHD. This is above the level of the base of the sandstone cut to the south in Sir David Avenue (road level 25 to 31 mAHD) and is above the road level in Fisher Road to the west which rises from 31 m at the corner with Sir David Avenue to 34.5 mAHD near the traffic island south of the roundabout connecting to McIntosh Road. Due to the presence of the exposed sandstone cut below the level of the basement and the lack of catchment Coffey considers it likely that the southern basement will not be below the permanent groundwater level and permanent dewatering would not be required.

Coffey acknowledges that the geotechnical report acknowledged that groundwater inflow could be expected during excavation and that this would come from joints and faults and bedding planes. This comment addressed construction requirements and covered the possibility of seepage associated with perched water and the possibility of short term rise in groundwater level. The geotechnical report concluded that the development would be unlikely to cause adverse impact to surrounding land or infrastructure and that a permanent drained basement should be feasible. Coffey continues to hold this view.

For and on behalf of

Coffey Services Australia Pty Ltd



Ross Best
Senior Principal