

February 11, 2019
Project No. 22381/1565D-G
Report No. 19/0299
MG/ms

Mr Michael Barrett
Currenti Constructions
PO Box 3321
ST PAULS NSW 2031

SITE ADDRESS: 73 UNDERCLIFF ROAD, FRESHWATER

Assessment / Recommendations

As requested, one of our senior engineering geologists visited the above site on February 11th, 2019. The purpose of the visit was to inspect the site and provide comment on trimming and partial removal of concrete shoring piles.

We understand that alterations and additions are being constructed at the above address. We understand that as part of the works, it is proposed to trim a series of concrete piles to extend an outdoor area.

A cross section of the site and photographs are attached. The shoring piles that are to be trimmed have been installed along the north western site boundary and were likely installed some time ago, and well before the current works occurring on the site. The piles are 450mm in diameter, have been constructed of reinforced concrete and are contiguous, i.e. there is no gap between the piles. The piles are embedded below the basement garage level of No.73 and protrude approximately 1.4 metres above the ground floor slab of No.73.

The piles were more than likely installed to retain the site at No.71 during the bulk excavation of the basement garage on No.73. The site at No.71 has subsequently been re-developed and now includes a basement that is at the same level, or lower than the basement on No.73.

The excavation of the basement at No.71 has resulted in the creation of a rock column between the two basement garages. The column is estimated to be 300mm in with, and the contiguous piles are present on the south eastern side of the rock column.

We understand that it is proposed to trim the piles from the ground floor slab up. I.e. the section of pile below the ground floor slab would remain and the remaining piles would be propped at the top by the ground floor slab.

In our opinion, the piles are redundant, and trimming the piles above the ground floor slab is not expected to negatively impact on the adjoining buildings foundations, the stability of the piles, or the stability of the rock column.

Due to the proximity of the piles to the adjoining dwelling we would recommend that the piles be cut with a saw, rather than demolished using hydraulic rock hammers.

Further, the rock column is providing foundation support to the adjoining dwelling at No.71. Therefore, any trimming of the rock column on the subject site should be minimised and should be carried out using saws and not rock hammers. The foundations of the dwelling on No.73 should not be undermined.

We trust this meets with your requirements. Should you have any questions, please contact us.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'M Green', enclosed within a hand-drawn oval.

Matthew Green
Senior Engineering Geologist
STS GeoEnvironmental Pty Limited

PROJECT: 73 UNDERCLIFF ROAD, FRESHWATER
PROJECT No:22381/1565D-G
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TITLE: SITE PHOTOS



Piles to be trimmed



**Ground
Floor Slab**

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