

Our Reference: NSW201744

26 Sept 2023

Ms Celia Hooper
C/- Mr Allen De Carteret
33A Forsyth Street
Glebe NSW 2037

Attention: Mr Allen De Carteret

Dear Allen

**Re: Whale Beach Road, No 266, Whale Beach, NSW
Structural Design Certification / Clarification – Section 4.55**

Suite 2, Level 1
33 Herbert Street
ST LEONARDS NSW 2065

PO Box 292
ST LEONARDS NSW 1590

T 02 9438 5098
F 02 9438 5398

ENGINEERS

MANAGERS

INFRASTRUCTURE
PLANNERS

DEVELOPMENT
CONSULTANTS

Further to our previous design certification dated 29th November 2021, we wish to clarify the shoring decisions and requirements relating to the S4.55 submission.

At the time of preparing the CC documentation for the new residence, we had limited geotechnical information due to the steep site and the existing house limiting site access. As part of the design, we agreed with the geotechnical engineers and builder that detailed bore logs could only be conducted once the existing house was demolished and some preliminary benching of the site was completed to enable drilling rigs to be safely located and operated.

The resulting bore log information and advice resulted in the shoring design, assisted by JK Geotechnics using Plaxis modelling, was documented accordingly on our CC Structural engineering drawings.

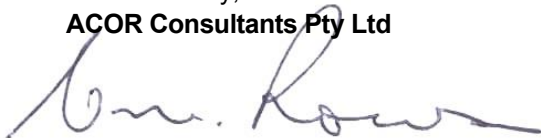
The design allowed for temporary horizontal strutting across the site to replicate the first and second floors which will permanently brace the shoring. In this instance temporary ground anchors could not be used due to the proximity and depth of the neighbouring structures. The temporary horizontal bracing was designed and constructed by Coates Hire.

As a result of the shoring design, we advised that "squaring off" and extending the basement garage level to grid 5 as shown on drawing 11.6.1 prepared by studio deCARTA architects, was required as the shoring could not be stepped due to the location of rock floaters and the fact that the suitable rock foundation material was some 4.5m below the basement / garage level. The extension of the garage slab was also required to lock in the base of the shoring piles.

We trust this explanation of the required shoring design and construction satisfies the requirements of the section 4.55 submission.

Yours faithfully,

ACOR Consultants Pty Ltd



Christopher Rowse
BE, MIEAust, CPEng
Principal

CC JK Geotechnics