

Our Ref: L001a Stanton Dahl Planning Report:KL

Miscellaneous Reference:KL

Contact Kevin Leedow

28th February 2013

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Dear Sir,

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WAHROONGA ADVENTIST COLLEGE –
FOX VALLEY ROAD WAHROONGA
DIRECTOR GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

The Director General's Environmental Assessment Requirements nominates a structural report for the development.

Geotechnical Considerations

Refer to the Geotechnical Desktop Study carried out by Douglas Partners numbered 73244.00 dated November 2012. This study is based on previous investigations and a walk over the site.

Based on this study, it is expected that the site will consist of stiff clays within the first 0.5m to 1.5m overlying weathered shale or weathered sandstone. Rock would occur at 1-3 metres below ground level.

On this basis, excavation conditions, slope stability and excavation support would be generally typical for this area without any abnormal geotechnical conditions. The natural clays will be suitable as a subgrade for the roads. The building would be founded on the underlying rock due to the close proximity and strength of the rock to provide a cost effective foundation solution.

The geotechnical study carried out to date is preliminary and a detailed site specific borehole investigation will be required to establish quantities for pricing, tender and construction detailing.

Structural Considerations

The design of the structural elements for the above project shall conform to the relevant SAA Codes, in particular the following:

AS 1170	Structural Design Actions Part 1 Permanent, Imposed and other Actions Part 2 Wind Actions Part 4 Earthquake Loads
AS 1720	Timber Structures
AS 2159	Piling Code
AS 2870	Residential Slabs and Footings

AS 3600 Concrete Structures
AS 3700 Masonry Structures
AS 4100 Steel Structures
DMR FORM 76 Pavement Thickness Design
Building Code of Australia - Section B - Structure

The building structure will have the Fire Resistance Level as noted in the Building Code of Australia.

Yours faithfully



Kevin Leedow BE, MEngSc, FIE(Aust), NPER
Senior Principal NSW Building Structures
for **Cardno**