

5 May 2016

Project Number: 15284

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Dear Jarrod,

## O'Connell Street Primary School, Parramatta – Structural Statement

It is proposed to refurbish the existing Kings School site in Parramatta to form a new primary school.

The majority of the existing buildings on the site will be retained, and a new hall and amenities block are proposed to supplement these, together with other ancillary structures..

### **Existing Buildings**

The existing buildings on the site vary in age, and are primarily constructed with load-bearing masonry supporting timber framed floors and timber framed roofs. They are generally in a satisfactory condition, but some repair works will be required to maintain their adequacy into the future.

Some alterations are required to accommodate the new use as a primary school and new structure will be introduced to support the existing elements and provide lateral support as required.

All new structural elements will be design in accordance with the structural requirements of the BCA, and relevant design codes noted below.

The existing floor structure will be checked for compliance with the required floor loads for their intended use as a primary school to AS1170.1 — Australian Loading Code, and strengthened as required.

As directed, the existing buildings will not be upgraded for earthquake compliance with AS1170.4 – 2007 - Australian Loading Code – Earthquake Loads, or AS3826 – 1998 – Strengthening Existing Buildings for Earthquake.

#### New Buildings and Structures

All structure for the new buildings will be designed in accordance with the structural requirements of the BCA, and relevant design codes noted below.

The new hall will comprise a concrete ground floor slab, masonry veneered walls and structural steel roof. The amenities will comprise concrete floors, masonry walls and timber trussed roof.

#### Foundation Conditions

Geotechnical investigations carried out on the site indicate that foundation conditions comprise stiff clays overlaying shale and sandstone bedrock.

# Basis of Design

Structural design for alterations to the existing buildings and new works will be design in accordance with the following Australian Standards as applicable:

AS 1720	Timber Structures Code
AS 2159	Piling Code
AS 2870	Residential Slabs & Footings Code
AS 3600	Concrete Structures Code
AS 3700	Masonry Structures Code
AS 4100	Steel Structures Code
AS 1170 Par	rts 0, 1,2 & 4 SAA Structural Design Actions

I trust that this of assistance, but please contact us should you require anything further.

Yours sincerely,

Andrew Simpson, Director CPEng, MIE(Aust)

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