enstruct

18th May 2018

enstruct group pty ltd
ABN 32 094 570 671
Tel: +61 2 8904 1444
Fax: +61 2 8904 1555
www.enstruct.com.au
Level 4, 2 Glen Street,
Milsons Point,
NSW, 2061,
Australia

Health Infrastructure
c/o Root Partnerships
Level 2
14 Martin Place
Sydney NSW 2000

For the attention of : - Tina Zheng

Dear Tina,

Campbelltown Hospital Stage 2 Redevelopment
EIS Structural Statement

We are writing to provide a brief summary confirming the parameters that are being adopted in the structural design of the above-mentioned development.

Ground Conditions
Refer Douglas Partners "Report on Preliminary Geotechnical Investigation – Campbelltown Hospital Stage 2 Redevelopment Thierry Road Campbelltown" dated May 2018.
The ground conditions at the site comprises existing pavements, filling or topsoil, underlain by stiff to hard clays, overlying bedrock at depths less than 10m .

Foundations
Generally the new buildings will be founded on rock, pad foundations are proposed for the main building (Building 01), piled foundations may be necessary for works in other areas of the site.
The design of the foundation systems will be in accordance with the parameters provided in the Douglas Partners geotechnical investigation.

Retention Systems
Where required, shoring will be provided to retain material around the perimeters of the new structures. Soldier pile walls are proposed in locations where the existing ground is not able to stand unsupported during excavation works. Temporary ground anchors will be adopted to restrain shoring walls until the permanent works provide permanent support.
The design of the retention systems will be in accordance with the parameters provided in the Douglas Partners geotechnical investigation.

Structure – Building 01
The primary structure for Building 01 will comprise post-tensioned floor slabs, supported by reinforced concrete columns and walls. Lateral loading due to wind and earthquake will be resisted by a system consisting of reinforced concrete shear walls built around the lift and stair cores of the building.

Structure – Refurbishment Works
The proposed structural system for the areas of refurbishment works will be light-weight steel framing. The approach is to maintain separation with existing buildings at the site to minimise impact on these buildings. The lateral system for these elements will be steel bracing.

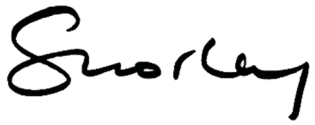
Design Standards

The structural design shall be in accordance with the latest revision of all relevant structural Australian Standards, relevant sections of the BCA and other statutory requirements.

In particular the structural design will be in accordance with the following relevant Australian Standards :

- AS/NZS 1170.0 – Structural Design Actions Part 0 General Principles
- AS/NZS 1170.1 – Structural Design Actions Part 1 Permanent, Imposed and Other Actions
- AS/NZS 1170.2 – Structural Design Actions Part 2 Wind Loads
- AS1170.4 – Structural Design Actions Part 4 Earthquake Actions in Australia
- AS2159 – Piling – Design and Installation
- AS2670.1 – Evaluation of Human Exposure to Whole Body Vibration – General Requirements
- AS2670.2 – Evaluation of Human Exposure to Whole Body Vibration – Continuous and Shock Induced Vibration in Buildings (1 to 80Hz)
- AS3600 – Concrete Structures
- AS3700 – Masonry Code
- AS4100 – Steel Structures
- AS4678 – Earth Retaining Structures

Yours Sincerely,



for
enstruct group pty ltd

Simon Morley
Senior Associate