18-525
19th October 2018

SHAC
224 Maitland Road
Islington NSW 2296

Attention: Chris Vlatko
Email: chris@shac.com.au

**RE: LAKE CATHIE PUBLIC SCHOOL – Wind Loading on Surrounding Structures**

At the request of Chris Vlatko of SHAC, MPC understand that clarification has been requested regarding the effect of wind loads on adjacent buildings that surround the proposal Lake Cathie Public School Expansion, after the construction of the new buildings.

The Australian Standard AS1170.2:2011 Structural Design Actions Part 2: Wind Loads, outlines wind load calculation methodology for all areas of Australia and New Zealand. The standard allows calculations for site wind speeds using regional gust wind speeds in different regions and considers the terrain over which the approach wind flows towards a structure, shielding effects provided by upwind buildings or other structures and site topography.

Noting the above, in considering the impact of constructing new buildings, the result expected is that existing surrounding buildings often become shielded by new development, and as further development occurs the Terrain Category in the Australian Standard increases which therefore reduces the wind speeds and pressures on all surrounding properties and structures.

We trust this information is of assistance.

Yours faithfully,

DEREK PRENTICE - Director
BE MIE AUST CPEng, NER Structural