

Our Ref.

CLIMATE RESPb

Wednesday, 5 December 2007

Your Ref.

The Manager

Delmo Albion Park Pty Ltd

Level 32, 126 Phillip Street

SYDNEY, 2500.

Re: CLIMATE CHANGE REPORT, Illawarra Regional Business Park, Albion Park.

Dear Sir,

As part of the preparation of our flood study and report Reinco and JMP have considered the effects of climate change.

It should be noted that there is very little consensus on the actual effect of climate change on sea level from the various climate change models. The change in sea level is totally dependent on numerous unknown factors and feedback mechanisms which leads a a great range of outcomes for sea level. These factors will also be effected by the response to these global problems from the United Nations and the various government body around the world over the next fifty years.

However the following has been included in our model:

1 A freeboard of 0.5m has been built into our design. This gives a safety factor of at least a 0.2% flood.

2 Sea level change (based on current consensus models - not extreme models) will not have an effect on our flood study. As our catchment feeds directly into the lake and the Lake Illawarra model while using mean sea level as base is effected far greater ways by wave height, erosion at the mouth, development around the lake and the flood response by the lake's catchment area.

3 The likelihood of these extreme events used in our modelling occurring at the same time is remote, i.e. PMF up to 10 million year ARI.

4 Changes in rainfall pattern may occur due to climate change, however there is little consensus of the effect this will have on climate change locally.

5 We have included embedded storms within our flood study. The adopted Embedded Design Storm approach leads to a 15-20% increase in peak discharge in Macquarie Rivulet compared with the currently recommended AR&R burst based approach, providing a significant buffer against the possibility of increased rainfall due to climate change.

Climate change can itself be considered an extreme event and this is why the modeling for the PMF is included in our design.

Please feel free to contact me at my office should you wish to discuss this matter.

Yours faithfully,

Mr. G. A. Mealey.