



Neil Petherbridge

NORTHROP CONSULTING ENGINEERS P/L
LEVEL 1, 215 PACIFIC HWY
CHARLESTOWN NSW 2290

Dear Sir,

**DEVELOPMENT APPLICATION NO. TBA15-31649N1 LOT 20 DP
1217043 NO 787 HUNTER ST, NEWCASTLE WEST**

In accordance with Clause 15 of the *Mine Subsidence Compensation Act 1961*, the Board has conditionally approved the above development, subject to conditions 1 to 6 outlined below;

1. Design the improvements such that the proposed final structures will remain safe, serviceable and easily repairable for the following mine subsidence design parameters;

- a) Maximum vertical subsidence : 50mm
- b) Maximum tilt : 1 mm/m
- c) Horizontal strains : +/- 1mm/m
- d) Maximum radius of curvature : 20km

2. The proposed additional four stories and the existing six storey car-park should be designed to remain safe for an ultimate limit state using the following mine subsidence parameters;

- a) Maximum vertical subsidence : 280mm
- b) Maximum tilt : 8 mm/m
- c) Horizontal strains : +/- 3mm/m
- d) Maximum radius of curvature : 3km

3. Submit a *Building Impact Statement* prior to the commencement of detailed design for the Boards acceptance. It shall identify

- a) Design parameters
- b) The proposed building structures, elements and materials
- c) The mine subsidence mitigations measures proposed for each building element

4. Submit a final design incorporating the design methodology contained in the "*Building Impact Statement*", for acceptance by the Board prior to commencement of construction. It shall include certification by a qualified structural engineer to the effect that the improvements will remain "*safe, serviceable and any damage from mine subsidence will be slight, localised and readily repairable*" taking into consideration the mine subsidence parameters outlined in Condition 1.

5. *The final design drawings shall;*

- a) Be developed from the concept design accompanying the Building Application.
- b) Include sufficient drawing plans, long-sections, elevations, to describe the work and proposed mine subsidence mitigation measures.
- c) Include an additional grade for tilt (outlined in condition 1) due to mine subsidence, in excess of the minimum Code requirements for structures including pipes, gutters and wet areas.
- d) Ensure internal finishes are installed in accordance with relevant codes and standards and industry best practice guidelines.
- e) Ensure there is suitable provision for articulation jointing in building elements. All control joints including articulation for mine subsidence are to be shown on the design plans and elevations,

6. Upon completion of construction, work-as-executed certification by a qualified engineer is to be forwarded to the Board confirming that construction was in accordance with the plans previously approved by the Board.

This "condition of approval" remains current for 2 years from the date of this letter. You will need to respond adequately to these conditions before the Board will consider its approval of this development.

If you have any queries concerning this matter, please contact the Risk Engineer, Mr Kieran Black (ph: 4908 4362)

Yours faithfully



Kieran Black
Risk Engineer, Mine Subsidence Board
18th August 2016