



20th of April 2012,

Attention: May Li, Assessing officer,  
Lane Cove Council  
PO Box 20 Lane Cove  
NSW 1595

Your ref: DA # 233/2011

Dear Ms May Li,

**RE: revised comments following a meeting with the applicant receipt of amended plans  
SEPP 65 COMMENTS AND RECOMMENDATIONS**

I refer to your letter of the 10<sup>th</sup> January requesting my comment on the matter.  
I refer also to my report of 31<sup>st</sup> January, to the meeting held in your offices with the applicant and the amended drawings and accompanying documentation submitted by the applicant, including a letter addressed to you dated Friday 13th of April 2012.

This report will focus on what I see as being the main issues regarding this application with respect to SEPP65.

**Natural ground level**

It is clear from the applicant's elevation drawings that the natural ground level has been assumed to correspond to the natural contours of the site prior to any quarrying. The 12 m height plane is a clear indication of this. The proposed development does not, however, respect the natural ground level, as a large proportion of the development site has been excavated to create an artificial ground level significantly below the natural ground level. In large portions of the site, this new assumed datum is more than the equivalent of 2 storeys below the natural ground level.

Buildings on the south-western boundary of the site have been set back 10 m, this is to allow for the 6 storeys to fall within the 12 m height limit above the natural ground level. As the ground falls away towards Wilson's or stringy bark Creek, the lower apartments in these buildings will have a good outlook across the property at number 15 Centennial Avenue and the small piece of public reserve at Gordon Crescent. The property at 15 Centennial Avenue will be severely overshadowed by the proposed development.

As for the northern half of the site, the artificial ground level some 2 stories below the natural ground level, results in unacceptable conditions for the apartments at the lower levels along the northern and eastern boundaries.

Figure 1. (the applicant's section BB) shows the proposed relationship between the existing natural ground level to the north of the site and the proposed level of the apartments along the northern boundary. The section is drawn through a portion of the building, which is set back further from the boundary than portions on either side. The difference between the natural ground level and that of the proposed ground level of B06, B07 and B08 is 6.35 m, more than 2 stories. Units B03, B04 and B05, they will have a 3 to 4 m deep courtyard in front of the wall of the excavation. None of these units, in my view, should be approved. In addition, when one takes into account the development potential on the site to the North, the outcome for these units would be even worse.



Similarly, figure 2 (which is the applicants section CC, which incidentally was drawn incorrectly according to the survey) shows the relationship between building B and Centennial Avenue. Lower-level units along this boundary vary from 4.35 m below natural ground level at B 17 to 5.35 m (close to 2 storeys) below ground level at B 16.

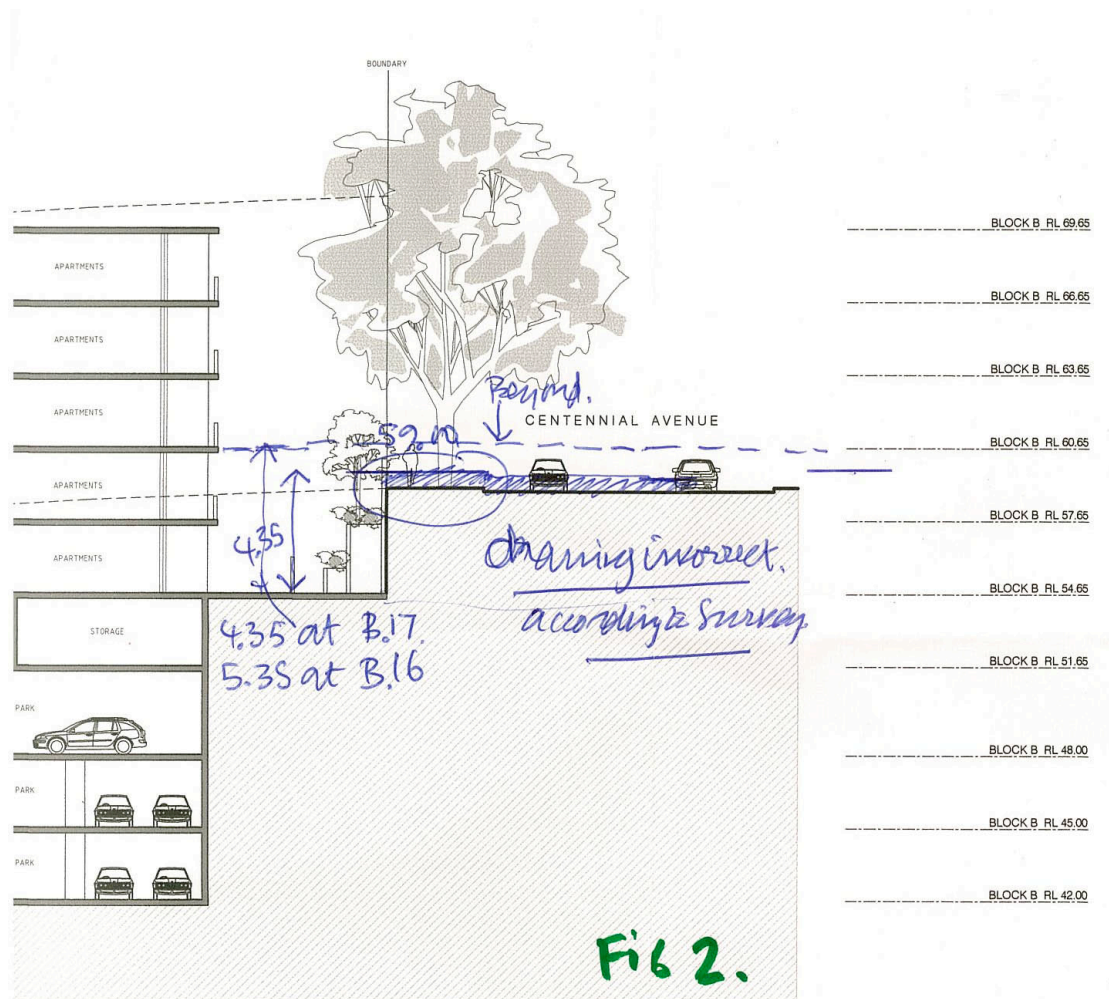
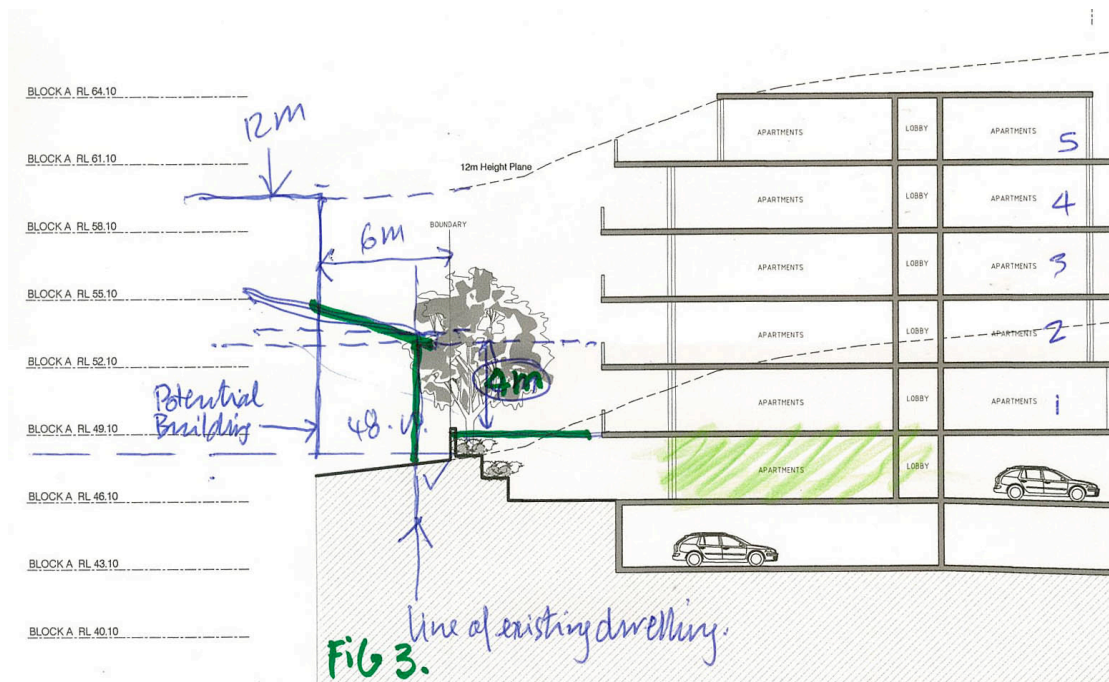


Figure 3 (also section CC) shows the relationship between block A and the property to the north west of the site. This section is taken through the most advantageous part of the site. If a section had been taken adjacent to unit A21, the difference between the natural ground level, 53 to 54 m and the proposed level of the unit, the difference would be 4 to 5 m, again, an unacceptable depth to be living below ground.



Beyond.  
 height difference is more than 4m  
 between Boundary 53-54m and  
 Ground level. 49.1 . Unit A.21.

On sloping sites, whilst it should be avoided, it is often necessary to partially excavate in order to provide sufficient depth to an apartment or a room. This can allow the building to marry the ground in a natural and more convincing fashion. In this case, however, the wholesale excavation of the site denies the natural landform and results in a very poor relationship with the boundaries to the east, the North, and the North West.

### Resource, energy and water efficiency

#### Excavation

The proposed datum level, approximately 2 storeys below the natural ground level, requires significant additional excavation. Not only are there more apartments to be serviced by car parking but these must be provided 2 storeys further underground. Conservatively, I estimate the additional excavation required to represent approximately 25,000 m<sup>3</sup>.

The Lane Cove DCP discourages excessive excavation. This quantity of excavation would mean over 500 tons of carbon emissions from the truck movements alone.



## Outdoor drying areas

The NSW government *save power* website suggests a single household's carbon emission is reduced by 1,300kg per year by hanging washing in the sun. In a 10 year period 185 units would produce 2400 tons of additional carbon emission if residents are not able to hang their washing outside to dry.

## The consequence of development potential on adjoining properties

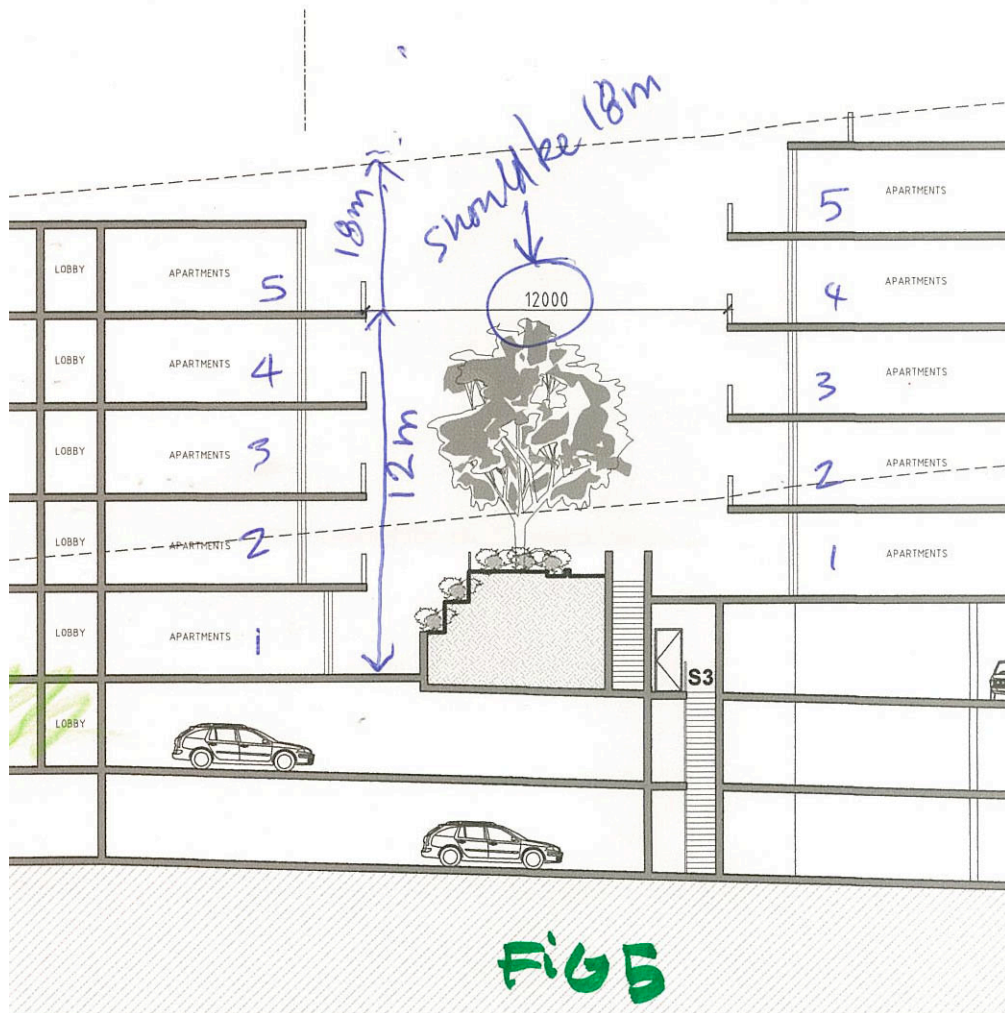
The applicant has calculated the solar access numbers based on an assumed stepped building being on the property north of the site. This diagram can be seen on page 22 of their letter addressed to Council dated 23rd of March 2012. It cannot be assumed that the development to the North will follow this form. It can only be assumed that this property will be subject to the same controls as the subject site. This equates to a setback from the boundary of 6 m (minus some permissible encroachments) to a height of 12 m.

This probable building form will have serious consequences with respect to the solar access to building B, further exacerbating its already poor amenity especially at the lower levels. Similarly, potential development on the property to the North West of block A will affect the amenity of that building.

## Building separation and setbacks

A 12 m separation between habitable rooms is applicable between buildings that are no more than 4 storeys or 12 m high. Buildings A, B and C are 6 storeys high along boundaries and 5 stories high to the internal courtyards. The required separation between five-storey buildings is 18 m. Figure 5, from section CC, shows that the additional height resulting from the artificial ground level requires a building separation of 18 m as per the Residential Flat Design Code.

It should also be pointed out that the building A is a 6 storey Building and as such requires a 9m set back from the boundary to the balcony edge. My reading of the RDFC is that the whole building should be set back 9 meters and that the stepping back configuration only applies to buildings over 8 storeys in height.



### Amenity

Cross ventilation.

The applicant has clarified certain ventilation issues. Ventilation shafts were not labelled on the drawing. Neither were the pop-up roofs. It is difficult to distinguish them from furniture.

As a consequence, I now agree with Mr King that in building A units, 10/A, 17/A 28/A 42 and A35 are cross ventilated due to a ventilation shaft. I also agree that units B 60, C53, C55 and C56 are cross-ventilated, due to pop up roofs. I should have counted B46 This was an oversight on my part. This adds 10 to the 111 we all agreed on. This brings the total to 121. This brings the total number of apartments deemed to comply to 64%. This corresponds to the minimum rule of thumb described in the RDFC.

Solar access,

The minimal changes to the plans have had little impact on the number of units achieving the required hours of direct sun between the hours of 9 AM and 3 PM on 21 June.

There is a significant discrepancy between the figures put forward by the applicant and our own. This is largely due to the assumptions regarding the development potential of the sites to the north of the subject site. This issue has been dealt with above.

We have used a 3-D CAD model to make our assessment. Additional verifications and calculations were made using a protractor and tracing paper overlays.

The table below details the apartments we consider will not achieve 3hrs of sun from 9 AM 3 PM on 21 June. The total for the development is 54.8%, well above the maximum 30% rule of thumb.

If the units that achieve partial sun ( up to 2 hours) are included, the total number of units will be 41.5%, still well above the 30% of the rule of thumb.

Units not receiving 3Hrs sun – Max 30 %	block	affected units	TOTAL	Nbr Flat	flat total	%	% total
	A	A.01 ; A.02 ; A.03 ; A.06 ; A.07 ; A.09 ; A.11 ; A.12 ; A.13 ; A.18 ; A.19 ; A.20 ; A.22 ; A.23 ; A.24 ; A.25 ; A.30 ; A.31 ; A.34 ; A.35 ; A.36 ; A.37 ; A.38 ; A.39 ; A.41 ; A.48 ; A.49 ; A.50 ; A.51 ; A.52 ; A.53 ; A.59 ; A.60 ; A.61 ; A.63 ; A.64 ; A.67	37	67		55.2%	
	B	B.01 ; B.02 ; B.04 ; B.05 ; B.06 ; B.07 ; B.08 ; B.09 ; B.10 ; B.11 ; B.12 ; B.14 ; B.15 ; B.16 ; B.17 ; B.18 ; B.19 ; B.20 ; B.22 ; B.29 ; B.30 ; B.31 ; B.32 ; B.33 ; B.34 ; B.35 ; B.43 ; B.44 ; B.45 ; B.46 ; B.47 ; B.56 ; B.57 ; B.58 ; B.60 ; B.63	36	62	188	58.1%	54.8%
	C	C.01 ; C.02 ; C.03 ; C.04 ; C.05 ; C.06 ; C.07 ; C.08 ; C.09 ; C.10 ; C.11 ; C.12 ; C.13 ; C.15 ; C.16 ; C.18 ; C.19 ; C.20 ; C.21 ; C.23 ; C.25 ; C.26 ; C.32 ; C.36 ; C.37 ; C.38 ; C.48 ; C.49 ; C.52 ; C.57	30	59		50.8%	

## Conclusion

The proposed the new ground level of this proposal, approximately 2 stories lower than the natural ground level over most of the site, results in a development with poor sun amenity, insufficient building separation and setbacks and poor interface with the street and the neighbouring properties.

In my opinion, despite some minor modifications to the initial application, this proposal continues to full short of achieving the objectives of the principles of good design has set out in SEPP65.

One simply cannot squeeze a 6 storey development onto a site which is intended by the DCP to have 4 storeys,

Tim Williams  
Architect AIA