



The Palm Beach & Whale Beach Association Inc.

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PALM BEACH & WHALE BEACH ASSOCIATION

NBC GEOTECHNICAL REVIEW – GEOTECHNICAL PLANNING CONTROLS

*“Landslips are relatively common on slopes underlain by the Narrabeen Group rocks, particularly in areas where there has been excavation into the natural slopes or concentration of stormwater”
(Douglas Partners Report, p.9)*

The Palm Beach & Whale Beach Association Inc which has more than 400 members, represents the residents and businesses of a particularly beautiful part of the Northern Beaches LGA and has done so for more than 100 years. Its views on this Review necessarily concentrate on its area of direct interest, namely the suburbs of Palm Beach and Whale Beach, but the Council would, we believe, be justified in applying the analysis PBWBA has provided for these two suburbs to other areas of special natural beauty and similar geotechnical risk within the LGA, such as Avalon, Bilgola and Bilgola Plateau, Clareville, Newport, Collaroy Plateau, Church Point, Bayview, Seaforth and Clontarf.

We appreciate the opportunity to comment on this important review. We believe that it covers a topic which currently receives insufficient attention in the planning process, particularly in the light of the changes in climatic conditions. These changes, in our view, increase the importance of understanding and planning for, changes in our physical environment. There is another element in our considerations which has also received little attention in the planning process to this point - as the quote above illustrates, geotechnical aspects of the planning now encompass a matter of public safety which needs to be incorporated into the consideration of developments in this LGA (see also cl 6.4 (3) of the Warringah LEP).

We are content with the simplicity and efficiency of a process which effectively optimises the most effective wording of the existing four LEP's, although we have comments (see Appendix A) about some of the wording of the consultants' resulting recommendations. Working with texts which have been used in at least part of the public domain, means that they carry a level of understanding and experience in operation and that offers some comfort to the public at a time of considerable change in the planning environment in this LGA.

We are also comfortable with the recommendation of the consultants that geotechnical risks be categorised into seven grades, based on physical characteristics, although we differ on some of the measures recommended to follow from these categorisations – see Appendix B.

However our overall perception of geotechnical risks is that the long-term effects of excavation, both on stability and on waterflows have not had adequate consideration and these risks are not just a minor matter confined to one property – they are potentially a public risk. For example, the Review on page 9 refers to Hawkesbury Sandstone (which covers the majority of the LGA) as having “*slopes or cliffs formed into a series of steps or cliffs, with or without large, potentially unstable joint blocks or boulders. Slopes are usually relatively stable, the key hazards are the potential for collapse of cliff lines, boulders falling from cliffs, caused by weathering of softer layers, root jacking by trees*” etc. Since the Review does not specifically recommend controls on development on inland cliffs or bluffs, these words are of considerable concern to us and we believe that the final version of the LEP and DCP needs to recognise this reality.

We have the following particular comments on various particular aspects of the Geotechnical Review and risks present in the LGA and the way they influence development in the LGA: -

1. At present, the Council’s approach on receipt of a D/A which involves earthworks (using the definition in the current LEP’s) is to analyse any geotechnical hazards only in relation to the site in question. One of the lessons we draw from the Douglas Partners’ Review is that geotechnical hazards require a wider view than this because earthworks can lead to a hazard affecting surrounding land, particularly in the light of climate changes. The consideration of a D/A involving earthworks should involve (a) inquiry into past excavations on surrounding blocks to ascertain whether the combined effects of past and proposed earthworks materially increase the risks of the overall area; and (b) consideration of rock and soil features on adjoining blocks. As a small illustration, the earthworks proposed in D/A 2021/0200 (1110 Barrenjoey Road, Palm Beach) would have had significant implications for the adjoining dwellings on at least two of those blocks; alternatively, look at the approach to the development of the seven sites on McCarr’s Creek Road, Church Point sold by the State Government, where the earthworks proposed by the new owners were considered on an individual site basis, rather than for the area as a whole – we believe this approach is, in the light of the Review, at least unwise. We also believe that our suggested approach is mandated by the current language of cl. 7.2 (3) (d) of the Pittwater LEP.
2. Similarly the consideration of the D/A should consider possible effects of earthworks on other blocks in the vicinity, including soil and rock stability and effect on water-flows both surface and subsurface. (In passing, we note that there is no definition of “soil” in the Pittwater LEP and no reason to understand that “soil” includes “rock”).
3. Too little is known about the long-term effects of excavation, not just on the stability of the site in question but also of its potential to have effects on nearby blocks and on surface and subsurface water flows, particularly as most of the underlying substrata in our two suburbs is of Narrabeen Group sandstones, with its greater softness and greater propensity for slip. This ought to be the normal practice – implementing the provisions of the Pittwater LEP, cl. 7.2 (3)(a) which requires the consent authority to consider the effects of a D/A on drainage patterns and soil stability in the locality of the development. *(Emphasis added).*
4. Once earthworks have been carried out, it is impossible to restore the landform or landscape.
5. There is little reference in the DP Review to “floaters” – unattached boulders which have the capability of moving with movements in surrounding soil or of being destabilised by disturbance of surrounding conditions, for example earthworks. That

was the issue in D/A 2021/0200 referred to in 1 above and the Council currently has before it 2 D/A's which illustrate the risks involved – D/A2022/1235 (3 Pacific Road, Palm Beach), involving excavations 9.5 metres deep, and D/A 2022/1097 (316 Whale Beach Road, Whale Beach), involving excavations 8.5 metres deep for a 5-storey house! Both reports mention the presence of floaters on these 2 blocks; the Geotech report for 316 Whale Beach Road mentions visible rock creep along the western boundary shared with 1 Pacific Road and rock creep experienced by 318 Whale Beach Road during their 2010 development when rocks crept to the extent of impacting on the building and also contains disturbing language about the effects of further development in this area (but still says the earthworks could proceed). The report on 3 Pacific Road, by Douglas Partners contains a good deal less detail and less disturbing language and concludes that this development can also continue. Considering the language in the Crozier report, it might be a brave council which waves these developments through without thorough investigation of the risks, for the adjoining owners as well as the developers.

6. We understand that the Council's current view of geotechnical issues is that it lacks the expertise to deal with these issues and therefore has to rely on the reports of the developer's geotechnical consultants and their professional integrity. This is regrettable – the difficulty is the same as with private certifiers, namely that he who pays the piper calls the tune. We believe that the Council should explore other methods of acquiring geotechnical resources, perhaps in conjunction with one of the universities.
7. There should be limits on the amount of excavation permitted and the amount of spoil which can be taken away from the site. Clean fill which is taken away from the site should be recycled within the LGA, where possible, using a scheme similar to the compensatory works system for floodplain work set out in the Manly DCP.
8. Consideration should be given to requiring a proportion of spoil to be utilised/stockpiled on-site, along the lines adopted by (amongst others) Woollahra Council.
9. There are two clauses in the Pittwater LEP conveying concern about the quality of soil (but not rocks?) to be excavated or used as fill and their source or destination (cl 7.2 (3) (c) and (e)). The point of these is not obvious; they do not require new fill to be "clean" or that excavated material is sent to a properly authorised site which might seem obvious; instead they deal with the Council having to consider the quality of the soil to be excavated for no apparent reason and the source of the fill, having already considered its quality. These should be rewritten.
10. It should be a requirement of the LEP that consideration is given to the nature and appearance of rock formations, as well as to their cultural significance, when an application requiring excavation is received. The first criterion should be in favour of preservation, a presumption which has to be rebutted. This is not an attempt to keep the landscape as is but as set out in the LEP, landscape is supposed to take precedence over built form, a principle that in the light of a number of recent developments looks endangered.
11. The LEP (cl. 7.2 (3)) requires the consent authority to consider the effect of a proposed development involving earthworks (both excavation and fill) on a number of key issues, including (d) on the existing and likely amenity of the adjoining properties. This provision, just like the other provisions of cl 7.2(3), is not a matter of considering what objections are raised by the adjoining owners – the responsibility is specifically placed on the Council to consider these issues.
12. The effect of earthworks on environmentally sensitive areas must be considered as part of the application process and should be included in the successor to cl.7.2 (3).

Waterways are not a significant feature of Palm Beach or Whale Beach but are significant in other parts of the LGA so the effect of earthworks on waterways should also be one of the issues considered.

13. There should be no further development allowed on coastal headlands. Building lines on coastal bluffs should be further back from the crest – say at least 50 metres (the depth of a normal suburban block) and preferably 100 meters, instead of the 20 metres recommended in the Review. The same rules as apply to coastal bluffs should be extended to bluffs wherever occurring because the risks are similar. (*Clause 7.5 of LEP*).
14. Coastal headlands currently undeveloped should be zoned so as to prevent any future development. Apart from their instability (see the film produced by John Illingworth of the headlands north of Narrabeen Lake), it is desirable that they be preserved in as pristine a state as possible in order to preserve their natural environment.
15. Slope-related controls such as those in the Warringah LEP are essential in all areas of the LGA. Given the prevalence of Narrabeen Group sandstones between Barrenjoey Headland and Long Reef, the point at which the control is implemented in this area should be a lower ratio, and 3V – 20H as recommended by the consultants seems appropriate. (See the quote from p.9 of the Review quoted at the start of this submission).
16. “Special areas”, as defined in the Review, such as, for example, Collaroy Plateau, should be completely included in conservation zones. This would also apply to a number of other similar areas, such as Bilgola Plateau.
17. In view of the nature of the principal hazards, it is critically important that hazard maps and the related planning controls are included in the LEP. These hazards are not subject to constant change and only change slowly in human terms – see the Review p. 10; nevertheless their impact can be devastating so in view of this, it is critical that they be enshrined in a place where they are not subject to frequent modification and where the status of the instrument they are enshrined in has statutory recognition. Otherwise they will not be given the measure of respect, either by the Council or by developers and their advisers, that their seriousness requires. We strongly disagree with the view expressed by the consultants about incorporating the controls in the DCP – p.3 of their Review. As pointed out earlier, geotechnical hazard is now a matter of public safety.
18. The criteria for permitting excavation must include controls on air pollution and its effect on adjoining properties, noise, siltation, pollution of waterways and damage to the environment, particularly including tree canopy, all measured before, during and after completion of development.
19. The effect on Council roadways caused by heavy trucks carting excavation material away should be covered by a special development charge levied against the developers, dependant on the amount of material removed; this should not be addressed through the developer’s bond but should be a separate specific charge. Revegetation of sites should also be covered and all of the controls MUST be enforced.
20. In relation to earthworks, there should be minimum distances from front, side and rear boundaries in the interests of minimising damage to adjoining properties and public roads/pavements. These controls should not be capable of being varied. The present setback required from the front boundary of 6.5 metres should not be infringed for the purposes of excavation. A minimum of 1 metre from side boundaries is required. The model that the minimum distance should be increased by the depth of excavation if greater than 1.5 metres from surface level is a good one but it will need to be enforced.

- 21.** The point of issue of the Building Certificate is too late to require a Geotech report to be furnished by the developer – it should be part of the development application.
- 22.** Paragraph 2(b) of Clause 7.2 of the LEP should not be included in the final version because it permits earthworks to be carried out without consent, if they are ancillary to a development which does not require consent or to a development which has already received consent, As we have pointed out elsewhere, we do not endorse the system of complying development in this area (or in conservation areas generally) and the practice of development creep using private certifiers has been widely demonstrated to be an abuse of process.
- 23.** Too little attention has been paid to the effects of disruption of subsurface water courses caused by excavations.

We appreciate the opportunity to put forward our views on the Review and are pleased to submit them for your consideration.

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Frank Bush AM - Vice President

Palm Beach & Whale Beach Association Inc.

2 December 2022