

18 October 2023

Application Number: DA 2021/0419

Lot 221 DP 15376, 266 Whale Beach Road, WHALE BEACH, NSW, 2107

Demolition Works and the construction of a dwelling house

Zoning: E4 Environmental Living

Section 4.55 Statement of Modification

Adjustments to set out of retaining walls

Reduced massing and Building Envelope. Increase in landscape ares left as natural bush

The changes to the proposal are a response to structural requirements brought about by site and solid stabilisation that became evident during excavation and subsequent reductions in the scale of the building envelope and landscaping to reduce the impact to these requirements, both environmental and economically.

As shown on the accompanying drawings, adjustment to the retaining walls to allow for the structural stability of the site and the proposed house. The Modification is for these adjustments to fulfil the conditions of approval and will not change these conditions.

These modifications are fully supported by Geotechnical and Structural documentation.

To maintain adequate stability and structural integrity, it was necessary to complete work at the basement level already begun under the DA, for safety and stability of the site and neighbouring properties, adjustments to the basement slab, went beyond that approved.

This work is subject to separate Building Information Certificate Application. It is entirely below natural Ground level, and has full documentation of Geotechnical Analysis and Structural Certification.

Reduced massing and Building Envelope. Increase in landscape areas left as natural bush.

The extent of the Structural footings and retaining that became necessary after the onsite investigation described above, has resulted in amendments to the set out of the building footprint and that of the external living areas at the north of the building.

Practical issues of site access for the required excavation machinery, and the combination of soil conditions, the depth of the solid rock, and the slope of the site. has resulted in the necessity to make these adjustments.

The reduced area available for the north facing outdoor living area, required a similar reduction in the scale of the building at the mezzanine level, to maintain a balance of scale between the building and the adjacent courtyard.

These changes have reduced the building envelope from that shown on the approved drawings. The Modifications are within the approved building envelope. The changes remain within the building height limitations set by council and have no further impact on the neighbours, privacy, view sharing of solar access.

The reduction of excavation to the north of Grid 7 as shown on the plan has created an extended area available for the maintenance of existing bush to the rear of the sloping site. The preservation of this planting as the site climbs to the escarpment was emphasised as desirable, as the site is viewed at a distance across the arc to the bay.

All other planning concerns remain within the parameters of the Approved Development. The street presence and impact on the neighbours and the desired future character of the Palm Beach Locality, are unaffected by these changes.

There is a reduction in the building envelope that increases the setback from the upper mezzanine level from the western boundary.

The Modifications have been generated solely by practical concerns relating to the stability of the proposed building, the site and the neighbouring structures. The modifications are contained within the parameters of the Approved Development.

The Modification required for site stability has no impact on the approved building envelope, or the street presence of the approved design.

The modification has been generated by practical structural concerns and has no further impact on neighbours, the street or the character of the Palm Beach Locality Beach Locality.

The modifications are contained within the parameters of the Approved Development.

This statement references the following Conditions of Approval.

B8.1 Construction and Demolition - Excavation and Landfill

The proposal includes excavation exceeding 1.5 metres in depth. In order to address the requirements of this clause, the Applicant submitted a Geotechnical Report and certified forms 1 and 1A. Furthermore, Council's Development Engineer reviewed these documents, and raised no objections, subject to conditions as recommended.

13. Structural Adequacy and Excavation Work

Excavation work is to ensure the stability of the soil material of adjoining properties, the protection of adjoining buildings, services, structures and / or public infrastructure from damage using underpinning, shoring, retaining walls and support where required. All retaining walls are to be structurally adequate for the intended purpose, designed and certified by a Structural Engineer, except where site conditions permit the following:

Structural Adequacy and Excavation Work

The Modification addresses the requirement of the conditions of approval to ensure the stability of the soil material of adjoining properties, the protection of adjoining buildings, services, structures and / or public infrastructure from damage using underpinning, shoring, retaining walls and support where required. All retaining walls are to be structural adequate for the intended purpose, designed by and certified by a Structural Engineer.

Further the modification has been carried out to ensure compliance with Geotechnical Certification under the Geotechnical Risk Management Policy9Appendix5 of P21 DCP), To ensure geotechnical risk is mitigated appropriately.

RL of Entry Vehicle access , Garage and Basement determined by Planning codes relating to requirements for on site vehicle access and egress, as detailed in the Statement of Environmental Effects that accompanies the Development Approval.

After demolition of the existing house and removal of contaminated soil discovered under the house, further test bores that were not possible prior to demolition were carried out, as required by the original geotechnical report.

The results of these tests showed the ground condition in greater detail than that possible while the old house was still in place. The rock located in the initial analysis showed to be unstable floaters and stable footings at a deeper level.

Geotechnical Certification

The Geotechnical and Structural Engineers collaborated through an extensive process that included 3d modelling of the soil structure and bearing capacity to achieve the necessary stability with minimum excavation.

With the in ground supporting structure rationalised in this way, some areas required further excavation. This was mitigated by reducing the extent of excavation in other areas.

A structural solution that addressed the neighbours concern that the project structural support did not include any anchoring that extended beyond the property boundary was required.

The structural requirements to stabilise the site consisted of continuous piling of a greater diameter than anticipated. The slabs at each sub grade level were also required to provide bracing to the piles. (To achieve this bracing the slab at the garage level was extended to intersect with the piles.

This has resulted in a modification to the layout of the garage level, as shown shaded red on the accompanying Drawing

This work is further detailed in the accompanying Geotechnical Report and Structural Details

The reason for this modification is solely for consolidation and stabilisation of ground/soil conditions to provide adequate structural support. It does not alter the building envelope above ground.

The structural requirements that have generated the need for this modification are entirely below grade and have no impact on the street presence or any other planning controls.

Therefore it is considered that this Modification will not require further notification.

Allen de Carteret, Architect