

A detailed review of all external mechanical plant will be undertaken during design development, once plant selections and locations have been finalised. Acoustic treatments will be determined in order to control plant noise emissions to the requirements of the NSW EPA Industrial Noise Policy so as to be within acceptable levels for all nearby sensitive receivers, both within and external to the site.

In relation to the area for the proposed child care, the acoustic consultant has undertaken a review and recommends the following building and management measures to control noise impact on surrounding receivers, including future residential receivers within the development:

- *Children's outdoor play area to be operational between 8am and 6pm on any given day.*
- *Minimum 6.38mm laminated glazing with acoustic seals around the perimeter of the internal areas of the centre is required, with a minimum Rw of 30.*
- *Signs reminding staff and visitors to minimise noise at all times to be installed at ingress/egress points from the childcare centre.*
- *The underside of the building structure to the external area is to be acoustically absorptive treatment such as envirospray, absorptive insulation or the like. Treatments should be to a minimum of 40% of the soffit area. Details are to be provided at the CC stage of the project.*
- *Management is to ensure children are supervised at all times to minimise noise generated by the children whenever practical and possible.*
- *Install a contact phone number at the front of the centre so that any complaints regarding centre operation can be made.*
- *A canopy is requested to be located above the external play areas of the centre. The canopy is to be constructed from the shade material or other solid type structure.*

Mirvac has successfully integrated child care centres on building podiums in projects for example Pacific Place in Chatswood, and will work with the acoustic engineer to ensure noise is minimised. Importantly the acoustic consultant has recommended measures that will result in an acceptable outcome.

7.2.5.5 COMMUNAL OPEN SPACE

The look and feel of the proposed development is strongly influenced by the large number of internal and external landscaped and recreational spaces proposed.

Private formal and informal recreational spaces for use by residents of the proposed apartments will be accommodated and include a sky garden at Level 14 of Tower 1, along with communal meeting facilities at Level 2 of Tower 1. The high quality communal open spaces will provide opportunities for passive recreation and interaction among residents of the development.

The ground level plaza will also provide space for active and passive recreation for residents of the site.

Further details of these areas are provided in the plans at Appendix A.

7.2.6 IMPACTS ON NEIGHBOURING PROPERTIES

7.2.6.1 BUILDING SEPARATION AND PRIVACY

The Pacific Highway, Friedlander Place and Nicholson Street provide for adequate separation should residential apartments be constructed on the other side of these public streets/places from the subject site. Along the site's south-eastern boundary to 470 Pacific Highway, the residential tower is set back 6.3 metres, ensuring that the proposal will not prejudice any possible future redevelopment of that site.

Dwelling orientation and window placement will minimise direct overlooking to residents of the Abode apartments at Albany Street. Abode is separated across the Pacific Highway from the residential dwellings within Tower 1 by approximately 41m, at an oblique angle, minimising opportunities for direct overlooking between residences.

Tower 2 will be constructed to the site boundary along Nicholson Street. Apartments in this building will be elevated above the commercial buildings on the southern side of Nicholson Street. Should redevelopment of those commercial properties occur in the future for residential purposes, the existing roadway will provide sufficient separation (approximately 28m) to ensure visual privacy can be achieved between the future apartments.

Building separation to 500 Pacific Highway to the west of the site will be 44m from the balcony of Tower 1 and 22m to the balcony of Tower 2. This is in accordance with the building envelopes approved for the precinct and reflected in Council's LEP and DCP controls. The building separation has therefore been assessed as acceptable by Council and the NSW Department of Planning.

7.2.6.2 VIEW SHARING AND VISUAL IMPACT

Planning Proposal View Impact Assessment

As part of the Planning Proposal analysis, various building envelopes were analysed to ensure view sharing across the site is maximised. This Development Application complies with the building envelopes contemplated and endorsed by the Planning Proposal, which was assessed as acceptable and promotes view sharing by:

- Extending the view corridor along Mitchell Street through the site, with the tower forms located on either side of that corridor.
- Setting the tower forms back from the site boundary with 470 Pacific Highway to achieve slot views between the subject building and any future development on that site.
- Creating slender buildings, triangular in form, between which views and outlook can be achieved from dwellings at the north of the site through to the south.

The view analysis prepared to inform the Planning Proposal showed that the proposal will allow for much improved view sharing than that which would be realised should the site be developed as a block form commercial building that complied with the previous planning controls. The elongated triangular building forms proposed allow for view lines from the Abode site and other residential dwellings located to the north.

Despite this level of view sharing having been supported by Council and the NSW Department of Planning and reflected in the adopted LEP and DCP controls, further analysis work has been undertaken in respect to the views that will be achievable from residential buildings north of the subject site.

Proposed Development View Impact Study

The Abode is a residential building located directly to the north of the subject site. As water and City views are located to the south and south east of the Abode and the subject site, this building has the potential to be most impacted with regard to views. For this reason a view study has been undertaken to illustrate the future view corridors from Abode following construction of the proposed development.

The view study has been undertaken by Urbis specifically in relation to the proposed building form contemplated by this DA, and is included within the Design Report at Appendix A. This study demonstrates that, consistent with the Planning Proposal concept, views will be available across the site from the Abode apartments following construction of the proposed development.

The view study compares the potential views that would have been available from Abode resulting from a scheme compliant with the previous planning controls (being a commercial building up to 65m in height) with those that will be available should the proposed development scheme be approved and constructed.

This view study demonstrates that:

- The proposed mixed use building, which complies with the current Lane Cove LEP and DCP building envelope provisions, significantly improves the view aspects attainable from living areas within the Abode, when compared to the previously allowable commercial building envelope prior to gazettal of LEP Amendment 18.

- View permeability through the site, afforded by the tower orientation and setbacks, allows residents of the Abode (from Living Area 1) views to significant landmarks such as the Anzac Bridge where otherwise they would not have been available. A view corridor is also available from Living Area 2 across the site, however the Anzac Bridge may not be viewable.
- The view corridor from Living Area 1 between the site and no.500 Pacific Highway is slightly narrowed, however affords residents of a slot view that captures Cockatoo Island that would not have otherwise been available. The view corridor width from Living Area 2 is retained.
- View lines to the Harbour Bridge are improved from Living Areas 1 and 2, resulting from a wider view aperture to the landmark structure and in some instances capturing the pylons where this would not have previously been able to be viewed. This improves the quality of the view of this icon. City views from Living Areas 1 and 2 are also improved from those available by a complying commercial building under the previous building envelope controls.

The extract from the View Study at Figures 7 and 8 below, demonstrate these findings.

FIGURE 7 – VIEWS FROM LIVING AREA 1 – RL128 (APPROX 12TH STOREY)

Views from Abode Living Area 1 with Proposed Mixed Use Building



Figure 11: Views from Abode at RL 128 - approximately the 12th storey

Views from Abode Living Area 1 with Permissible 60m Commercial Building Envelope under the previous LEP and DCP

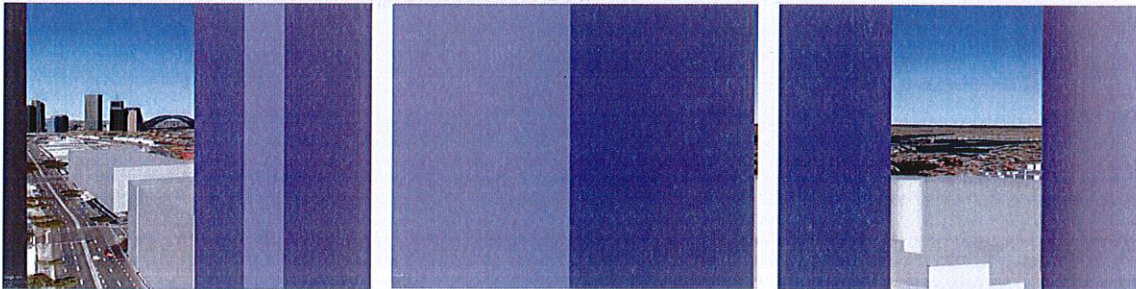


Figure 12: Views from Abode at RL 128 - approximately the 12th storey

FIGURE 8 – VIEWS FROM LIVING AREA 2 – RL 128 (APPRIX 12TH STOREY)

Views from Abode Living Area 2 with Proposed Mixed Use Building

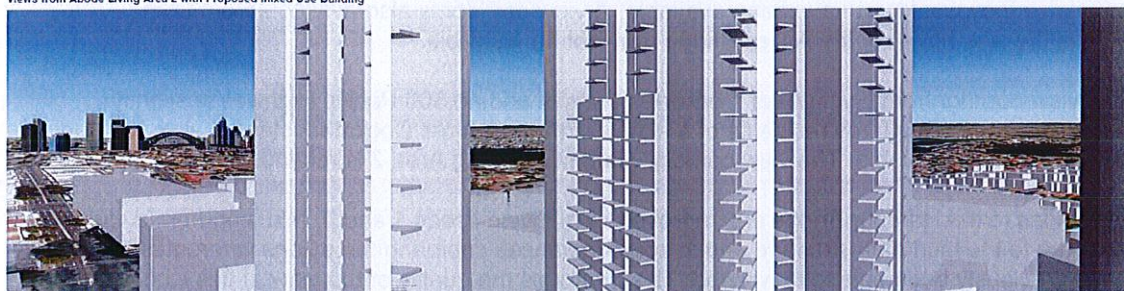


Figure 20 View from Abode at RL 128 - approximately the 12th storey

Views from Abode Living Area 2 with Permissible 65m Commercial Building Envelope under the previous LEP and DCP

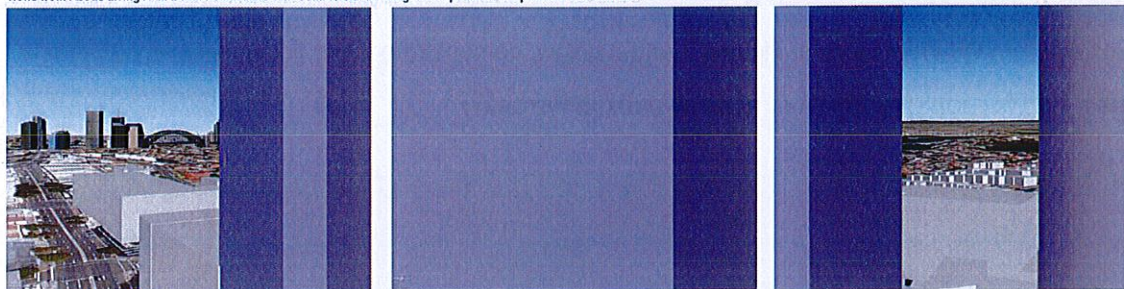


Figure 21 View from Abode at RL 128 - approximately the 12th storey

Proposed Development – View Impact Assessment

The assessment of view sharing impact is guided by the Planning Principles outlined in the NSW Land and Environment Court Cases *Tenacity Consulting v Warringah Council* and *Veloshin v Randwick Council* [2007] NSWLEC 428. These Court Principles have been addressed in turn in respect to the potential impact on views from the Abode residential building north of the subject site.

Tenacity v Warringah Council

In the *Tenacity* judgment, Roseth SC outlined the following four step consideration of whether or not view sharing is reasonable. This judgement was made for a development within a residential context. Whilst the subject proposal is located in a commercial core context where residential is not a primary use, an assessment of the proposal is undertaken here against those principles. This assessment demonstrates that the extent of view sharing proposed is substantial notwithstanding the reduced expectation to retain views from residential dwellings within a commercial core context.

"The first step is the assessment of views to be affected. Water views are valued more highly than land views. Iconic views (e.g. of the Opera House, the Harbour Bridge or North Head) are valued more highly than views without icons. Whole views are valued more highly than partial views, e.g. a water view in which the interface between land and water is visible is more valuable than one in which it is obscured."

Views to be affected by the proposal include part of a regional vista to the south, between Sydney CBD and the Parramatta River, which is currently enjoyed by residents of Abode. This vista results from the Abode's location on a ridge and the lack of development of any significant height south of the Pacific Highway, despite planning controls having been in place since 2009 that would allow a building up to 65m in height (similar to the maximum height of Abode).

Whilst interruption of the vista will break up the outlook from Abode apartments, it will not result in a complete blocking from view of any significant icon from all apartments. Existing views to the Sydney CBD skyline will be maintained through the view corridor along the Pacific Highway to the east. Views of the Parramatta River will be retained however they will be reduced to the slot view through the subject site and above Friedlander Place. These slot view lines will provide opportunities for views to Cockatoo Island and the Anzac Bridge from some apartments.

The attainment of views to these icons is demonstrated as being an improved result from that which would be available from a building that complied with the previous planning controls applicable to the land.

"The second step is to consider from what part of the property the views are obtained. For example the protection of views across side boundaries is more difficult than the protection of views from front and rear boundaries. In addition, whether the view is enjoyed from a standing or sitting position may also be relevant. Sitting views are more difficult to protect than standing views. The expectation to retain side views and sitting views is often unrealistic."

The views potentially affected could be considered to be views from the 'front' of the building, given its corner location. Depending on the height of the apartment, the views could be sitting or standing views. The View Study included at Appendix A has assessed view impact from the living areas of the Abode apartment building. This demonstrates that views to iconic and landscape elements will be retained from these areas, and improved from that which would otherwise have been a complying scheme under the previous planning framework.

"The third step is to assess the extent of the impact. This should be done for the whole of the property, not just for the view that is affected. The impact on views from living areas is more significant than from bedrooms or service areas (though views from kitchens are highly valued because people spend so much time in them). The impact may be assessed quantitatively, but in many cases this can be meaningless. For example, it is unhelpful to say that the view loss is 20% if it includes one of the sails of the Opera House. It is usually more useful to assess the view loss qualitatively as negligible, minor, moderate, severe or devastating."

The existing views would be obtained from both living and sleeping areas within various residential apartments, and both from sitting and standing positions depending on the elevation of the respective apartment. Whilst the extent of view loss from some apartments may be greater than from others, the significance of view loss extent is considered to be negligible in terms of 'iconic view loss' and potentially up to moderate when considering the loss of sweeping outlook to the south, noting that slot views of the Parramatta River and its land interface will be retained. The views however are considered to be an improvement from those which would have otherwise resulted from a building form compliant with the previous planning controls.

"The fourth step is to assess the reasonableness of the proposal that is causing the impact. A development that complies with all planning controls would be considered more reasonable than one that breaches them. Where an impact on views arises as a result of non-compliance with one or more planning controls, even a moderate impact may be considered unreasonable. With a complying proposal, the question should be asked whether a more skilful design could provide the applicant with the same development potential and amenity and reduce the impact on the views of neighbours. If the answer to that question is no, then the view impact of a complying development would probably be considered acceptable and the view sharing reasonable."

The view loss from the Abode apartments across the Pacific Highway from the site will result from a building form that will comply with the allowable building envelope. The building envelope adopted for the site by Lane Cove LEP Amendment 18 resulted from the significant testing of different envelope options by the Applicant, Council and Council's independent urban designer during the Planning Proposal process and was considered to be the most appropriate for the site. In this regard, the extent of view sharing that could be realised from the resultant building form has been assessed by Council and the NSW Department of Planning and Environment and has been considered acceptable in principle.

Veloshin v Randwick Council .

In addition to the Planning Principles included in *Tenacity vs Warringah Council*, the judgement in *Veloshin v Randwick Council [2007] NSWLEC 428* is relevant when considering the impacts of height, bulk and scale in the context of existing planning controls. These Planning Principles are addressed in turn below.

Are the impacts consistent with the impacts that might be reasonably expected under the controls? It is noted that for a non-complying development the question cannot be answered unless the difference between the impacts of a complying and non-complying development is quantified.

The current built form controls were subject to thorough analysis by Lane Cove Council and the NSW Department of Planning & Environment during the Planning Proposal, including view impact analysis. The impacts generated by the proposed building envelope controls were considered acceptable and those building envelope controls are now adopted into Lane Cove LEP and DCP.

The proposed building forms are as contemplated in the Planning Proposal and adopted by the Lane Cove LEP 2009 and DCP. The impact of the proposed building forms on the views currently enjoyed by residents of Abode is consistent with those that informed the Planning Proposal assessment. It is therefore considered that the view impacts generated by the proposal are consistent with those that are to be expected under the controls.

How does the proposal's height and bulk relate to the height and bulk desired under the relevant controls?

The height and bulk of the proposal is generally consistent with the height and bulk desired under LEP 2009 and DCP. The building sits within the building envelope intended for the site and reinforced by the site specific planning controls. Minor variances are proposed to the building height (24cm or 240mm) and residential floorplate (68m² at the lower levels), however these will be imperceptible and will have no material impact on views across the site.

Does the area have a predominant existing character and are the planning controls likely to maintain it? Does the proposal fit into the existing character of the area?

The St Leonards precinct is currently characterised by high rise mixed use buildings on the northern side of the Pacific Highway, including the Forum and numerous residential apartment buildings. High rise buildings are particularly characteristic of that section of St Leonards that falls within North Sydney LGA. On the southern side of the Pacific Highway, St Leonards is currently characterised by older-stock commercial buildings. These buildings do not necessarily reflect the development potential of these sites under the current planning controls nor those that were applicable to the Friedlander Precinct prior to gazettal of LEP Amendment no 18.

St Leonards is a precinct undergoing change in character and building typology. It is evolving from a commercial centre to a mixed use centre, and development is taking advantage of the precinct's proximity to employment and transport. There have in recent times been a number of development approvals granted for tall mixed use buildings. This has happened to date mostly on the northern side of the highway in the mixed use pocket of the North Sydney Council area. Since gazettal of Lane Cove LEP Amendment no.18, North Sydney Council has also adopted the recommendations of an Urban Design Study which identifies opportunities for additional tall towers within its portion of St Leonards.

The new planning controls applicable to the subject site and its wider precinct including Friedlander Place, 500 and 504 Pacific Highway will change the character of development on the southern side of the Pacific Highway in a manner that is not inconsistent with building forms contemplated elsewhere in St Leonards centre, especially the precinct to the north of the Pacific Highway across from the subject site.

Does the proposal look appropriate in its context?

The proposal will look appropriate in the broader context of St Leonards, which is evolving in character from a mainly commercial precinct to a mixed use, transit oriented suburb comprising tall tower forms.

Is the proposal consistent with the bulk and character intended by the planning controls?

The proposal is consistent with the bulk and character intended by the planning controls. The proposal generally complies with the height, FSR and land use mix allowed on the site by Lane Cove LEP and DCP. It is consistent with the architectural scheme from which the planning controls were derived. In this regard, the extent of view loss from apartments within the Abode building is consistent with that which was assessed as acceptable to inform the current planning controls.

Conclusion

The subject proposal is the result of Council and State Government recognition that St Leonards should accommodate taller building forms to leverage off the precinct's transport and employment access. The views and outlook currently enjoyed by residents in apartments to the north have been available as a result of sites on the southern side of the Highway not being developed to their full capacity due to a low demand for commercial office space in St Leonards. The retention of such views within a strategic centre that is undergoing significant change should not be expected. It is considered that the proposed building forms have been resolved in such a way as to promote view sharing to residents of Abode as much as is practicable. Views will not be completely blocked by the proposed development, and sight lines to iconic landscape and built elements will still be achievable between the proposed buildings through the significant view corridors provided. Views to the Sydney CBD skyline currently enjoyed down the Pacific Highway corridor will not be affected.

7.2.6.3 OVERSHADOWING

During the assessment of the Planning Proposal, Lane Cove Council prepared an independent shadow analysis of the proposed building massing to ascertain the likely impact on adjacent properties to the south of the subject site. The analysis demonstrated that affected properties will receive at least 2 hours of sunlight at midwinter, between 9am and 3pm.

Notwithstanding that overshadowing was considered as part of the Planning Proposal request, further analysis has been undertaken in respect to the proposed building forms the subject of this Development Application.

The shadows cast by the proposal will have no material impact on the solar access to affected properties. The tall tower forms create fast moving shadows that do not rest upon any property for greater than 20 minutes throughout the day, exceeding the minimum performance criteria.

Shadow diagrams for the proposed development have been prepared. This overshadowing analysis of the proposed building forms at the winter solstice (21 June), included at Appendix A, confirms that:

- Between the hours of 9:00am and 10:30am, the orientation of the tower building forms combined with the angle of the sun casts a narrow fast moving shadow that moves quickly from the R2 zoned land and R3 zoned land west of the railway corridor to the B3 zoned land east of the railway corridor.
- The majority of the R2 zoned land is impacted for less than 30 minutes which is within the relevant time period nominated in RFDC.
- Between the hours of 10:00am and 1:00pm, the orientation of the tower building forms allows for solar access to occur between the building towers.
- Between the hours of 1:00pm and 3:00pm, the shadows reconverge and overshadow the predominately commercial buildings along the Pacific Highway. Some overshadowing is cast onto a small portion of R3 land fronting Oxley Street and Nicholson Street
- The shadows cast by the proposed building forms allow maintenance of direct sunlight to all of the public open space (RE1 zoned land) at Christie St between 12:00pm and 2:00pm. Potential overshadowing from the future development of 500 and 504 Pacific Highway may reduce this solar access to between 12:30pm and 2:00pm.
- All residential zoned land affected by the shadows created by the proposed buildings will receive more than two hours of solar access as required by the RFDC.

In respect to the provision of solar access to the Friedlander Place and ground floor public plaza space within the site at midwinter (21 June), the following observations are concluded from the Overshadowing Analysis:

- At 9:30am, Friedlander Place is in full shade. Solar access is provided to this space from 10:00am, with the maximum solar access achieved at 11:00am across a significant area of the public domain. By 11:30am the sunshine at ground level is restricted to the northern part of Friedlander Place only.
- Solar access to the Plaza between the residential towers starts from just after 11:00am, with the plaza in full sun by 11:30am. The sun then moves across the Plaza space, with partial sun in the middle part of the Plaza at 12:30. Sun rays are available to the northern part of the plaza after 2:00, with the plaza in full shadow by 3pm.

It is considered that the level of solar access to the ground level public open spaces will provide adequate enjoyment of these spaces at midwinter. Sun access will be available within different areas of the public open space from 10am until 3pm at midwinter.

7.2.6.4 NOISE IMPACT

An assessment of the potential noise generation from the site has been undertaken by Acoustic Logic and is included at Appendix Q. The report identifies the potential noise sources as

- Mechanical plant; and
- Child care centre.

The report recommends that a detailed review of all external mechanical plant be undertaken during design development, once plant selections and locations have been finalised. Acoustic treatments can then be determined to control plant noise emissions to within the required limits of the NSW EPA Industrial Noise Policy so that noise impacts are within acceptable levels for all nearby sensitive receivers.

Section 7.2.5.4 outlines the requirements for acoustic items in relation to the child care area.