

TZG Architectural Statement

Project Overview

The 38 Pacific Highway proposal is based on the objectives of the "Crows Nest Transport Oriented Development (TOD) Accelerated Precinct", that encourages high density accommodation close to St Leonards Train, Metro and Bus routes.

The building has a concrete base accommodating the Pacific Highway civic colonnade, laneway and ground floor retail with office space above. From level one the super structure is made of cross laminate timber for, carbon capture, speed of construction and visual appeal.

The Pacific Highway facade protects the timber structure, screens the residents from the highway, passively ventilates residents and self-shades the building for thermal control. The laneway elevation has a greater expanse of thermal glass given its southerly aspect.

Design Excellence Response

(3) In considering whether the development exhibits design excellence, the consent authority must have regard to the following matters

(a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,

The architectural approach embraces and successfully synthesises a broad range of design objectives, namely:

- An understanding of the building's current context along with the objectives of the planning controls.
- The incorporation sustainability at the project's core, that includes a cross-laminated timber super structure.
- An abundance of private and communal external terraces along with integrated landscape for thermal balancing and biodiversity.
- The provision of a high level of amenity for the building's inhabitants along with respecting the amenity of the existing neighbours
- Passive ventilation and mixed mode air conditioning to reduce energy consumption.
- Material selection based on attractiveness, durability and low maintenance with articulated concrete side walls in the expectation that neighbouring buildings will be built up to them.
- The significant improvement of the existing public domain with Pacific Highway colonnade and Marshall Lane activation.

(b) whether the form and external appearance of the development will improve the quality and amenity of the public domain,

The Pacific Highway public domain has been dramatically improved by a six-metre-high, four metre deep north facing colonnade to Pacific Highway, with public seating and integrated landscape with the possibility of temporary artworks to either end, should the adjoining colonnades not be built at the same time.

The Marshall Lane public domain has been improved by providing as much street activating retail as possible, with stair access to the Pacific Highway level terrace that overlooks the laneway. Services entrances are recessed and considered in detail to reduce their impact on the public domain.

The Pacific Highway has been addressed with a civic base, an articulated middle with offset windows and sun awning casting ever changing shadows and an expressive building top that shades communal outdoor space.

Marshall Lane is addressed with a low scale one and half story form meeting the lane with shopfront glass, recessed service entrances and stair access up to the Pacific Highway level. The middle portion of the building is set back from the Laneway with vertically articulated windows above and terraces step back from the laneway.

(c) whether the development detrimentally impacts on view corridors from public spaces,

The building complies with the "Crows Nest Transport Oriented Development (TOD) Accelerated Precinct" envelope and does not impact on view corridors from public spaces.

(d) how the development addresses the following matters

(i) the suitability of the land for development,

Refer, Paro Consulting Planning report.

(ii) existing and proposed uses and use mix,

Refer, Paro Consulting Planning report.

(iii) heritage issues and streetscape constraints,

Refer, Paro Consulting Planning report.

(iv) the relationship of the development with other existing or proposed development on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,

The proposed building urban form and setbacks are based on the "Crows Nest Transport Oriented Development (TOD) Accelerated Precinct" building envelope.

The proposal responds to the differing scales of the Pacific Highway to the north and Marshall Lane to the south. A larger scale form is presented to the highway, whilst setbacks and terraces are proposed to the Lane, respecting the amenity of the recently constructed apartment building to the southern side of Marshall Lane.

(v) bulk, massing and modulation of buildings,

The building's mass is built up to the Pacific Highway and terraces down to Marshall Lane as anticipated by the "Crows Nest Transport Oriented Development (TOD) Accelerated Precinct" building envelope.

The building has a concrete base accommodating the Pacific Highway civic colonnade, laneway and ground floor retail with office space above, above which the articulated self-shading cladding panels protect the cross-laminate timber superstructure and shade all north facing windows. Celebrating the top of the building, a version of the wall cladding shades the communal roof terrace.

The Marshall Lane elevation is vertically articulated reducing the scale of the building to suit the laneway, whilst the Pacific Highway elevation is articulated in two forms addressing the scale of the surrounding existing buildings.

(vi) environmental impacts such as sustainable design, overshadowing, wind and reflectivity,

The sustainable design aims that are embedded in the proposal are based around a series of pillars, being:

- Durable low carbon, long-life materials requiring little maintenance (energy reduction)
- Building orientation and fenestration (thermal comfort)
- A building that consumes as little energy as possible
- A building that employs the most efficient energy source commercially available
- Water retention and reuse
- Diverse urban habitat for people, plants and bird life

Refer, Desquard Consulting ESD Report.

Durable low carbon, long-life materials requiring little maintenance (energy reduction)

The building's superstructure is constructed of cross laminate timber (CLT) for carbon capture, speed of construction and visual appeal. The timber structure sits on first floor and below concrete base accommodating the Pacific Highway civic colonnade, laneway and ground floor retail with office space above.

The Pacific Highway facade protects the timber structure, screens the residents from the highway, passively ventilates residents and self-shades the building for thermal control. The laneway elevation has a greater expanse of thermal glass angled to the east to avoid late afternoon summer sun striking the glass.

The facade and roof terraces are highly insulated with landscaped soil cover for additional thermal control.

The glazing system comprises high performance, clear double glazing with low emissivity coating on the surface to maximize transparency. This combination gives excellent thermal performance to reduce ongoing energy costs associated with heating and cooling, and provides rigorous acoustic attenuation.

Long-life durable natural materials with minimal paint finishes, and the avoidance of Volatile Organic Compounds (VOC's) are proposed.

The production of a building that consumes as little energy as possible

With conditioned air for heating and cooling being the main source of energy consumption, mixed mode air conditioning is proposed for the all uses, taking advantage of ambient air temperature when suitable.

The selection of fittings is based on energy rating, in addition to aesthetic consideration.

Diverse urban habitat for people, plants and bird life

With landscape covering the majority of the roof terraces, the planter beds' earth layer will insulate the building from the sun's heat, substantially reducing the heat load on the building and mitigating the urban heat island effect

Water Retention and Reuse

Rainwater would be collected for storage in underground tanks and re-used for landscape irrigation.\

Overshadowing

The south side of the building is stepped to maximise solar access to the southern neighbours, inline with the building envelope anticipated by the "Crows Nest Transport Oriented Development (TOD) Accelerated Precinct".

Wind

The south facade is highly stepped breaking up wind flow, whilst the Pacific Highway facade is highly modulated to break up wind patterns. In addition the four-metre-deep colonnade provides pedestrian wind and rain protection.

Reflectivity

The Pacific Highway facade glazing has large horizontal awnings with angle extensions to the west preventing sun from striking the glass and reflecting. The ground level shop front glazing is to the rear of the four-metre-deep colonnade and is shaded, eliminating reflections. The south facing glazing has deliberately been angled to the east to prevent late afternoon summer sun striking the glass.

(vii) the achievement of the principles of ecologically sustainable development,

All horizontal levels of the proposal have integrated landscape, with a range of plant species that it is intended to attract a range of bird and insect life.

(viii) pedestrian, cycle, vehicular and service access, circulation and requirements,

The building's primary pedestrian access is located off the Pacific Highway colonnade activating the public domain, with a secondary pedestrian access off Marshall Lane via a stair reflecting the site's Highway and Laneway hierarchy.

Vehicle and cycle access is off Marshall Lane, with the accessible car parks located on the laneway level, whilst the bulk of the parking is on Basement One to maximise the extent of Laneway activating retail frontage. The End of Trip facility is located next to the building lifts for cyclist convenience.

(ix) the impact on, and proposed improvements to, the public domain,

Marshall Lane has a recent stair and lift connection at Wadaggarri Park over the railway line, enhancing the east west pedestrian connect across the railway line. 38 Pacific Highway will further encourage pedestrians with laneway style retail and enhanced public domain surveillance.

The Pacific Highway colonnade realises Council's long held vision for St Leonards that has been further supported by the Crows Nest Transport Oriented Development strategy.

(x) achieving appropriate interfaces at ground level between the development and the public domain,

Building floor levels have been aligned with the public domain to ensure seamless connections.

(xi) active street frontages,

Both the Pacific Highway and Marshall Lane frontages have the maximum amount of retail frontage, with only exception being essential services and vehicle access to the laneway.

(xii) integration of landscape design.

All horizontal levels of the proposal have integrated landscape, with hardy plant species selected for survival in the various microclimates that occur around the building. The planting locations are fully support with water and nutrient supply with integrated drainage.

Refer, Melissa Wilson Landscape proposal.