# STATEMENT OF ENVIRONMENTAL EFFECTS

# **S96 AMENDMENT**

NEW HOUSE AND POOL @ 83 LAGOON STREET, NARRABEEN FOR ROBERT & EMMA BROWNING



PERSPECTIVE FROM LAGOON STREET

### LIST OF AMENDMENTS

- 1. MODIFIED INTERNAL LAUNDRY WALL
- 2. W03 & W17 RAISED SILL HEIGHT TO 1.5M
- 3. W05,W06,W07 RAISED HEAD HEIGHT, NO SEPARATE HIGH LITES
- 4. NEW SUNHOOD TO W09
- 5. SOLID ROOF TO FIRST FLOOR ROOF TO REPLACE OPEN PERGOLA
- 6. NEW RETAINING WALLS TO EAST AND NORTH BOUNDARIES WITH 1.65M FENCE ABOVE
- NEW RETAINING WALL SET IN 900MM FROM BOUNDARY WITH 1.65M FENCE ABOVE.

The proposed changes do not alter the approved external walls, or roof envelopes already approved. The changes to the windows increase privacy to the south, whilst increasing solar gain to the north and east, and by using performance glass have improved their heat gain and loss. The new retaining walls to the boundaries are due to site conditions being different than anticipated from the survey, and the building being further above the natural ground level than anticipated on the north-east corner. The new 1.65m fence above is to maintain privacy between dwellings whilst minimising any additional bulk.

The existing proposal sought to utilise the existing contemporary beach house character of the area in its style and so preserve and enhance the existing streetscape. To minimise any impact from the proposal on neighbouring dwellings, the new home has been located predominantly in the existing position of the house currently on the site, and positioned in from

the eastern boundary to create breathing space between dwellings and maintain existing neighbouring views.

The design recognises small size of the site(455m2), the difficulty with being a corner block and the constraints of the existing large Norfolk Island Pine tree with the landscape coverage and it's desire is to regain and enhance the connection to the primary outdoor landscaped space and encourage solar passive design within the primary living space.

The property is zoned R3 Medium Density, but the proposal is for a single residential conservatively sized dwelling on a small, corner block we request that the proposal be viewed under the constraints of a Low Density development for the landscaped open space and site coverage, and setback requirements.



EXISTING VIEW FROM CORNER OF OCTAVIA AND LAGOON STREETS

### **BUILT FORM (part B) (\$96 Unchanged)**

The design maintains the established soft landscaping on the site, to the west, removing small trees to accommodate the new driveway and garage and relocating the frangipani tree that is established to the north. The existing house and garage are to be demolished with this creating a new area for soft landscaping to the east to minimise the bulk of the new two storey dwelling to the neighbouring property. The proposed home sits at 5m from the trunk of the large established Norfolk Island Pine that dominates the street corner, (see above)and any landscaping works within this zone are to be done with a tree protection zone in place. All new soft landscaping works are to be consistent with the landscaping plan L-01, 25/10/12 by Space Landscape Designs.

The house has been positioned with councils required setbacks in mind and the second story setback a further 690mm from the south with a low 3' pitched roof, sloping to the north, to minimise the additional bulk

and scale to the neighbouring dwelling to the south. The house to the south is unusual in it long, narrow shape, but has the added benefit of a double length block size to create an outdoor space further east than the new development, creating minimal impact to this space. The courtyard style of the house with a primary north facing aspect creates the potential to maximise solar passive design principles with its orientation and so utilise solar gain in winter and cooling sea breezes in summer. The positioning of the pool at ground floor level to the north of the primary Living space means that the cooling breezes can be intensified by flowing across the pools surface.

The duality of having two streetscapes has produced two very different facades to harmonise with the existing characteristics of the streets. The Lagoon Street façade(west) is of similar bulk and scale to the neighbouring dwelling at number 81, and has the driveway entering the site in a similar fashion to strengthen this relationship. The façade facing Octavia Street (north) is much longer and so modulation has been used with a variety of vertical and horizontal wall and roof elements to create an interesting display of shadows that enhance the street appeal of the new two storey home, whilst reducing the bulk.



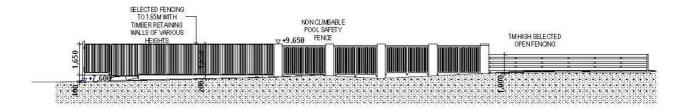
OCTAVIA (NORTH) PERSPECTIVE

The wall heights have been kept at a reasonable height with the maximum being located on the north at 6.45m with a maximum roof height of 6.7m well under the 8.5m allowed under councils codes. With both neighbouring dwellings of similar heights, the new home sits comfortably within the streetscape. The minimal setback of 0.9m is only for the one story garage to the south with the bulk of this façade positioned at 1.59m off the boundary. As shown on the elevations DA04 and DA05 the new house falls under the required side boundary envelopes.

The primary street being Lagoon Street has utilised the minimum 6.5m setback to the garage which again is only one story, with the rest of this façade located a further 1.4-2m away. The secondary street front being Octavia Street has utilised the 3.5m setback for only 7m with a further almost 10.5m having walls located between 6.5-7.2m, creating a balance between the large dominant pine tree to the west and the existing neighbouring dwelling to the east. Being a corner block there is no rear boundary setback requirement.

# **Proposed modified Fences \$96**

The new proposed fencing has a variety of heights and materials to soften the built form. They have a small retaining wall which varies in height as a base and 1.65m fence proposed to the Octavia street and eastern boundary side for privacy and safety. The neighbouring house across Octavia Street to the north has an existing imposing 1.8m solid masonry fence, with our proposed fence having a predominantly open feel with powder coated slats varying from 1m to 1.8m, and broken up with stone pillars to soften the linear nature of the form. With the proposed new soft planting to the boundaries the opportunity exists for this to grow through the fencing and further hide the structure from the street. The fencing wraps westwards around the corner and the large pine tree with a 1m height to allow for visual access across the corner for vehicular and pedestrian safety. It is also proposed to have a lower 1m height on the southern boundary from Lagoon Street until the garage for the same safety reasons.



The new pool sits within this minimum 3.5m setback on the secondary street but is proposed to be an inground pool which is reflective of a soft landscaping element rather than a solid built form. There are many local house with pools on their secondary street front, one which is found on the corner of Octavia and Lisle Street, and the other on the corner of Tourmaline and Lisle Street. Siting the pool directly behind the front fence maintains the visual continuity, landscaping and privacy to the streetscape amenity.



Octavia Street to the north

### LOCATION (Part C) (\$96 Unchanged)

### **Parking**

As previously discussed the new two car garage is positioned on Lagoon Street with an easy flat access and similarly situated to the neighbouring car accommodation. It is more than 12m from Octavia Street, and so maintains the existing traffic access safely.

### Stormwater

The site is zoned 'Landslip Risk Area A', which means it falls into the least sloping category. The design and planning of the stormwater concept ensures the impacts of the stormwater runoff from the development will

not adversely impact the stability of the property, or of surrounding properties down slope. It has not only been designed with the risk of landslip addressed, but also the impact of any existing subsurface flow.

The new coverage which includes roof, driveway and paved areas is 254.5m2 (55.9%) but this is actually a modest footprint that happens to be on a small block 455m2, but has the benefit of flat with sandy soil for drainage. The proposal includes a new 2000ltr water tank to take the initial rainfall which will be kept quite low as it will be utilised for the new toilets, cold water tap to laundry, garden watering and pool top up. The overflow from the roof will go from the tank to two pits before slowly entering the street system in Octavia Street. The grated drain to the driveway will also go via two pits before entering the same street system. (Refer Stormwater Drainage Concept Plan).

This system is seen to be in keeping with councils stormwater objectives as it temporarily stores the stormwater on site, and releases it at a slower rate down slope to the street system

### **Excavation**

The new pool is positioned at ground floor level which is approximately 300mm above the natural ground level, minimising excavation requirements and keeping them below 2m. As it is also proposed to marginally raise the existing north-east ground level, the fill will be able to be kept and re-used on site.

### **Waste Management**

The existing lawn area to the north-west of the site, downslope from the new house will be maintained during excavation, along with a sediment control fence along this boundary to reduce soil erosion during construction. All sand and stockpiles will be behind this new sediment fence as shown on DA01, and all **waste** to stored in a skip bin to prevent any being washed into the stormwater system.

Vehicle access will be restricted to outside the construction zone where possible and a wash zone will be designated to keep any contaminated water away from the stormwater system.

It is proposed to separate all waste during demolition and re-use bricks for new piers and timber for formwork. All concrete to be washed and recycled., and all roof tiles to be recycled at Kimbriki Tip. All existing windows to be removed and separated to be sold or recycled at Kimbriki tip. Other waste management strategies include ordering minimal quantities of materials, avoiding off cuts, and using any pre-fabricated components where possible. All formwork and scaffolding to be re-used during the construction process.



# Clause 4.6 Variation to Landscape Open Space and Side Setbacks

The landscape open space requirement is 50% for the site being located in the R3 Medium Density Zone. The site is unusual in that not only is it small at 455m2, but it is a corner block requiring two street front setbacks. These constraints limit the potential footprint of the house and with a ground floor area of only 117m2 it is a modest proposal put forth.

The existing proposal has a landscape open space of 183.5m2 (40.3%) with the majority of the footprint that is over the allowable coverage being open decks and covered decks facing north. These decks not only engage the primary outdoor space with the primary north facing living space, but it helps to soften the street front façade with depth and modulation.

The design allows for planting on three of its four boundaries with varying setbacks from 3.5-6.5m allowing the potential for enhanced soft planting between neighbouring dwellings and the street front. The reduced landscaped open space still maintains a sense of openness to the site, enhances the visual quality of the streetscape, allows for view sharing, and has minimal loss of amenity to the neighbouring properties.

As previously mentioned the property is zoned R3 Medium Density, but the proposal is for a single residential conservatively sized dwelling on a small, corner block and so we request that the proposal be viewed under the constraints of a Low Density for setback requirements. If the side setbacks of 4.5m were used, especially to the south it would result in a dwelling of only 7m wide, and would push the height limits and number of stories in order to meet the design requirements, which could impact more heavily on the amenity of the neighbouring properties.

### DESIGN (Part D) (\$96 Unchanged)

# Orientation and Energy Efficiency

As discussed previously, the orientation is perfect for solar passive design with an almost true north orientation for the long axis of the site. The design includes a continuous concrete slab from the decks to the house transferring winter heat gain through the thermal mass to the interior. The large areas of glass on the north allow for large winter heat gain, whilst the large covered decks and eaves shade the slab and windows in summer, reducing the heat gain. Dense concrete panels to the north and west have been used to minimise heat gain along with the walls being shaded by the large pine tree. The light grey roof with 75mm roof blanket and R3.0 ceiling insulation creates a great thermal barrier for the upper level.

The use of louvred windows to the north and east let cross ventilation occur, drawing the cool sea breezes through the home on both levels. The positioning of the glazing in the design results in natural lighting being predominant throughout the day, with only the garage requiring artificial lighting.

### **Access to Sunlight**

Although the winter shadow diagrams look detrimental to the neighbouring dwelling to the south, these are exaggerated due to the long east-west axis of the site and the narrow size of the neighbouring block. (Refer above Google earth Image). The southern neighbour has a second story deck that faces Lagoon Street which will still maintain access to views and sunlight for the required 3.5 hours on the winter solstice. The primary outdoor space of the dwelling actually sits behind the neighbouring property to the east due to its unusually large length, and so is unaffected by the new development.

### **Colours and Materials**

The colours are proposed to be warm and bright reflective of the coastal environment with rich cream walls and mid grey roof in harmony with the local sandstone cliffs. The use of a mixed palette of materials with stone, render and lightweight weatherboard cladding, the beach cottage is in keeping with the local environment and visual aesthetics of the streetscape.

# **PROPOSED COLOURS & FINISHES**

83 LAGOON STREET, NARRABEEN

# EAVES, ARCHITRAVES AND FASCIA: "WHITE ON WHITE" DULUX

**WINDOWS AND DOORS:** 

ANODISED ALUMINIUM, GARAGE TO BE AXIS



ROOFING: COLORBOND ULTRA 'WINDSPRAY'



PREPARED 9<sup>TH</sup> NOVEMBER 2012 SITE SPECIFIC DESIGNS SHERALEE HOGAN B.(ARCH)