

PLANNING PROPOSAL 25 ST LEONARDS SOUTH Lane Cove Council

Re: Commission advice for Planning Proposal 25 St Leonards South

The purpose of this submission is to evaluate the appropriateness of Planning Proposal 25 St Leonards South with particular reference to the density and proposed built form.

EXECUTIVE SUMMARY

**Planning Methodology**

Transit Oriented Design (TOD's) is a formulaic planning method ill-suited to the complexities of the St Leonards South Precinct. The result as interpreted into the Planning Proposal 25 LEP controls result in an outcome that does not address context, topography, street network, natural features, connectivity or existing character.

The planning methodology should define the desired future outcome should be the basis for the planning controls. In this case the planning controls define exactly the location and form of buildings without any design considerations.

**Proposed Outcome**

The proposed outcome as determined by the LEP (Building Typology, FSR, HOB and set-backs):

- Reduces the connectivity of the precinct by closing Berry Road and by not introducing a pedestrian connection across River Road .
- Does not improve internal connectivity with an east / west mid-block street. The so 300m long blocks need to be reduced in to about 150m.
- Has insufficient open space for the increased population in this precinct. 0.4 hectares is provided and a minimum of 1.4 hectares is required
- Does not address the loss of natural ground, mid-block tree cover, deep soil and street set-backs

- Introduces a population of 5040 in approximately 6.4 hectares (net area) that is too great for the area. It is denser than most comparable areas in Sydney.
- Has only apartment buildings and no diversity of housing
- Predetermines building locations and typologies for large footprint buildings located across the contours. These will require substantial benching and retaining walls, loss of both vegetation and deep soil
- Terminates the critical view corridor at the end of Holdsworth Avenue with a multi storey building.

St Leonards South is not well enough integrated into a street network or sufficiently accessible to facilities and services to support an additional population of 5040. Its current character reflects why it was developed as a low density precinct. Like much of the western side of the Pacific Highway and Northern rail line it is hilly and vegetated. Higher density precincts require a comprehensive three dimensional design that addresses all factors associated with substantial change.

## MY CREDENTIALS

I have Master of Urban Design, Diploma of Town and Country Planning, Master of Architecture. I am Life Fellow of Australian Institute of Architecture. (AIA) 2010 and a Member of the Planning Institute of Australia (PIA). I was Director of the Urban Design Advisory Service (UDAS) in the Department of Planning and oversaw the Development of SEPP65 and the Residential Flat Design Code. I have lived in Northwood, Greenwich and McMahons Point since 1987.

## PLANNING DOCUMENTS

The comments are based on the following documents

- Planning Proposal 25 St Leonards South Lane Cove Council May 2016
- Planning Proposal 25 St Leonards South Lane Cove Council September 2017 + associated Maps.
- The St Leonards Crows Nest Draft 2036 Plan and St Leonards South Planning Proposal presentation to the Independent Planning Commission. 10 May 2019
- The St Leonards South Master Plan Draft Annand + Associates December 2014
- The St Leonards South Master Plan Supplementary Report Annand + Associates May 2016
- St Leonards / Crows Nest Draft 2036 Plan
- IPC review of SLS Residential Development – Lane Cove Planning Proposal Terms of Reference

- SJB Crows Nest Sydney Metro Sites Detailed Urban Design

## THE PRECINCT

- The precinct is bounded Marshall Avenue on the north, Canberra Avenue on the east, River Road on the south and Park Road on the west. The precinct is the eastern half of a precinct initially identified by the Council that extended to Greenwich Road.
- The precinct blocks run north/south and the only east / west streets are on the edge of precinct.
- The land slopes steeply to the south and to the east.
- Newlands Park is located to the east of Canberra Avenue.
- Street Widths 20m wide; Laneway 6m

## PLANNING PROPOSAL 25

The proposal is to rezone St Leonards South as follows:

- Low Density Residential R2 (detached dwellings) to High Density Residential R4(apartments)
- Floor Space Ratio (FSR) from 0.5:1 -0.5 6:1 to between 2.75:1 to 4.0:1
- Height increases from 9.5m (2 storey) to between 15m and 65m (4-5 storeys – 20 storeys)
- Part of Holdsworth Avenue and Berry Road to RE1 (Open Space)
- 0.4 Hectares between Park Road and Berry Road to RE1.

## PRINCIPLES FOR URBAN PRECINCTS

Best practice principles for urban density precincts (non-CBD) are:

- Accessibility by walking to a range of activities and services in multiple directions ie small street blocks, a connected street network, public transport, open space, retail and a mix of uses.
- Sufficient services and facilities for the proposed population.
- Deep soil, tree coverage, generous footpaths, verges and on-street car parking.
- Views to sky and open views at the ends of streets
- Well-proportioned streets
- A range of housing typologies that relate to the street and block pattern, the topography set-backs, and provide choices.
- A street address for every building.
- Respect and reflect the history and character of the area

## ISSUES

### PLANNING METHODOLOGY

- The planning methodology used for the rezoning in the St Leonards South Planning Proposal 25 is based on the USA concept of Transit Oriented Design (TOD's) .
- Density and height are focused only on St Leonards Station in 400m and 600m circles (as the crow flies). The master plan does not address the precinct isolation and potential accessibility to the proposed Crows Nest Metro, River Road bus corridor and the Wollstonecraft Station.
- This planning concept of allocating density and height in concentric circles around a transport node is not used in Europe because its simplistic formulaic approach does not address the complexities of context, street network, built form or the need for a diversity of outcomes

The densities and resulting building forms do not relate to the capacity of the topography and street block dimensions, the limited choice of movement around and into the precinct and the absence of uses other than residential. Apartments are the only building typology proposed despite their being one street block with a laneway where the subdivision, slope and orientation are brilliantly suitable for Torrens title terrace housing. The two blocks to the west of Park Road have similar characteristics.

### OUTCOME

#### **Connectivity Externally**

- The precinct is isolated by the Pacific Highway, River Road and the rail. It is not 'embedded' in a robust contiguous street network like Surrey Hills, Newtown, Paddington, Sydney CBD and does not have easy access across the Pacific Highway, River Road or to the proposed Crows Nest metro
- The precinct requires pedestrian crossing of River Road and retaining Berry Road as a street open to vehicles so connections to the external street network are maximised.
- The previously proposed pedestrian link over the rail to Oxley Road from Dunbarton Street should be investigated.

#### **Connectivity Internally**

- The long north/south street blocks are 283m; 301.7m and 335m long .They require at least one east/ west street to reduce the block proportions to approximately 150m by 70-80m.Ideally urban blocks are 90m x 90m or slightly larger. They must offer choice of movement for cars and people and on street car parking.

#### **Topography**

- Sloping topography requires buildings with either small footprints or buildings that are located parallel to the contours. Apartment buildings have large footprints and are located over car parking basements. Because in this precinct the street blocks are shallow and the streets run across the contours the proposed apartment buildings are located across the contours. This will result in substantial benching, retaining walls, loss of deep soil and an inevitable poor interface with the street.

- Where buildings with large footprints are located against the contours the allocation of heights should respect the landform, that is by allowing a lower number of storeys on the higher topographical point and a slightly greater number of storeys on the lower topographical points. This enables buildings have greater capacity to sit comfortably on the land without benching, overly stepped buildings and height breaches. The heights in the the LEP are allocated as one height for each footprint without regard for the terrain. The definition of height in the Standard Instrument (LEP) exacerbates this problem.

- A precinct with the characteristics of St Leonards South requires a comprehensive design not dictated by the detached dwelling ownership pattern. This would enable some buildings to be located along the contours creating a series of courtyard, communal and deep soil green spaces and minimal benching .

**Density**

- The proposed density at FSR 2.75:1 to 4:1 is excessive. The proposed population of 5040 has large externalities in terms of schools, open space and on street car parking. The figures below outline provide a comparison of density, open space and services. Other growth precincts and planning proposals in Sydney have lower density and provide more open space services and facilities.

**Comparative Densities**

	Planning Proposal 25	Carter Street	Harold Park	Wolli Creek	Ashmore Estate
No of Dwellings	2400	5500	1064	2982	3485
Precinct area hectares gross	9.27	34.6	10.9	8	13.4
Precinct area hectares net	6.4	17.3			

Population	@ 2.1= 5,040	@2.3= 12,650	@2.5= 2660	@2.0= 5963	@1.8= 6273
Dwgs per hectare gross	258	158	98	375	259
Dwgs per hectare net	375	317			
Pop per hectare gross	543	365	245	750	467
Popper hectare net	787	731			
Open Space	0.4		35%/3.8 hectares	35%/2.8 hectares	

Gross precinct area is total area including streets and half streets on perimeter

Net precinct area is exclusive of streets and open space

Carter Street Larger precinct, less well served with transport. It has a lower density, retail, open space and a school.

Discovery Point (Wolli Creek) has heavy rail, open space, retail

Ashmore Estate Inner City

### Open Space

- There is insufficient open space in St Leonards South and in the St Leonards / Crows Nest precinct for the proposed population. The shallow street blocks and the building arrangement, heights and density limit the amount of communal open space that can be accommodated on each site. Basement car parking and level changes will also impact on the capacity of the site to provide 'at ground' communal open space.

- The precinct requires a minimum public open space of 15% - 20% of 9.27 hectares = 1.4 hectares to 1.8 hectares. The planning proposal provides 0.4 hectares excluding the Berry Road and Holdsworth Avenue rezoning. Berry Road and Holdsworth Avenue are needed to provide a street address for every building and to maintain connectivity. It is disingenuous to rezone public street as public park and include these areas in the open space calculations.

- Open space must be assessed against the total population of the area. Newlands Park cannot be assumed to supply all the needs of the existing population and the proposed population in the wider precinct. Open space additions need to include playing fields and as well as passive open space.

### Distribution of Density

- The floor space and height are distributed in decreasing capacities and distances from St Leonards Station. The highest density and corresponding heights are located on the north and at the top of slope and lower heights and floor space at the southern end of the precinct. This reflects the planning approach of a TOD. There is no evidence that there is a greater use of public transport if you are 100m or 200m / 400m closer to transport Density and heights should be more evenly distributed to respond to the context and site conditions.

- The main influence of car use is whether car parking is available at the place of work. In Sydney the wide distribution of schools (unlike the USA and Europe) also impacts on car use. There is evidence related to journey to work that people will walk *down* to transport in mornings and /or use other modes/ stations that may let them walk *down* at night. Car ownership is lower near heavy rail stations.

### **Orientation**

- The location of the taller buildings to the north of the south facing slope will result in overshadowing for most of winter.

### **Built Form and Building Heights**

- The apartment buildings are indicated are 'slab' buildings ranging in height from 19 storeys on the north to 8 storeys and 4 storeys along River Road frontage. As previously raised large footprint buildings should not be located across the contours. Length of the buildings appear to be random based on how many lots are in one ownership.

- Perimeter block building forms should not exceed 6-8 storeys maximum. Above this height buildings should be stand-alone towers or have a podium. In both cases generous set-backs are required. Building footprints should not exceed 1000m<sup>2</sup> Gross Building Area (GBA) and Gross Floor Area (GFA) should be a maximum of 75% of GBA. Tower lengths should not exceed 45m or 30m if a square footprint.

- Heights should be proportional to the street width. 19 storeys and 10 storeys are not appropriate for 20m wide streets in non CBD locations. An 8 storey street wall for streets 300 m long are not acceptable.

- The height map indicates a maximum height to the street boundary. This implies that:

- There are no street set-backs.
- There is no deep soil street setbacks
- Basement car parking structures could extend to the street boundary

- The height map indicates a height of 2.5m over the whole of the lot. This implies that:

- Basement car parking structures could cover the whole of the lot and extend out of the ground up to a height of 2.5m
- There would be no deep soil

- All trees at the rear of the lots would be lost because of the shallow depth of the blocks.
- There is no 'green link' at the rear of the blocks.( As stated in the Master Plan)
- The heights nominated almost exactly equate to a number of storeys for a residential building @ 3.1m floor to floor. They do not address the considerable topographical differences on some of the lots. The heights in metres should relate the number of storeys to the slope of the land to avoid stepping buildings, major benching and retaining walls. They must also relate to the prescribed floor space. There is not enough information to test these.

### **Street Block Dimensions related to Apartment Buildings and Street Set-Backs**

- Building setbacks to the street should be a minimum of 5m / 6m to allow for canopy planting and deep soil within the site. This contributes to the landscape setting of the buildings, provides transition between private and public realms and assists in achieving visual privacy to apartments. Generous set-backs also allow for the navigation of level changes (ramps steps) that may be required .
- The widths of the blocks between Holdsworth Avenue to Berry Road and Berry Road to Park Road do not enable the apartment buildings to meet the required separation distances and provide street set-backs.
- The minimum overall dimension for apartment blocks and the separation distance between them is 68m if above 8 storeys, 18m up to 8 storeys . (22m, 18m or 24m, 22m)
- The depth of the street block from Holdsworth Avenue to Berry Road approximately 73m and Berry Road to Park Road approximately 72 m. . These blocks can only provide 1m – 3m set-backs to the street.
- The depth of the street block from Canberra Avenue to Holdsworth Avenue is approximately 79-86m. This allows a street setback of 5.5m to 8.5m. The minimum requirements of 5-6m can be met.

### **Perceived Density**

Building organisation and topography impact on 'perceived' density. Higher density precincts should use techniques to minimise the visual impacts of the buildings so that people do not feel overwhelmed.

- Height should be located along the sides of streets not at the ends of streets. In this proposal locating an 8 storey building at the end of Holdsworth Avenue encloses all views within Holdsworth Avenue and removes any opportunity of orientation in the landscape. It is a basic tenant of higher densities to keep the ends of streets clear of buildings for their full width.
- Buildings should present with a clear sky line so that one building is not seen against another and the streets and spaces between the buildings read most strongly. The proposed organisation of heights and loss of trees in the centres of the blocks will exacerbate the high perceived density when viewed from the south.

### **CONCLUSION**



The St Leonards South precinct is a suitable precinct for an increase in density based on its proximity to public transport, RNS, the Sydney CBD and North Sydney CBD.

However the precinct has natural characteristics that make it difficult to accommodate very high densities successfully. Crows Nest and St Leonards north / east of the rail and Pacific Highway have a mix of uses, flatter topography and most importantly a connected street network. The St Leonards South precinct has poor connectivity externally and internally, south facing steeply sloping topography, shallow street blocks and mid-block tree canopy. The density of dwellings and population is too great for these characteristics .

The precinct design should provide an urban form that is not an ad hoc arrangement of buildings based on predetermined floor space and separation distances. The precinct must be organised to establish specific character related to street hierarchies , respond to topography, open space and to minimise perceived density from within and from without the site.

Different housing typologies should be introduced where they reinforce the street network, provide edges to define and face open space, streets and pedestrian paths, relate to the subdivision pattern and site dimensions, provide choice and optimise land use.

The following is a very apt quotation and applies to Planning Proposal 25

*“ We live at a time where more people are trying to shape reality than report it’*

John Lyons ‘Balcony over Jerusalem’