CIFI STLEONARDS & GREATON ST LEONARDS HOLDINGS –

AREAS 18,19 & 20
BERRY & RIVER ROADS AND HOLDSWORTH AVENUE, ST LEONARDS SOUTH

Statement of Environmental Effects

Submitted to:
Lane Cove Council
Sydney North Planning Panel

May 2022

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Areas 18,19 & 20
Berry and River Roads and Holdsworth Avenue, St Leonards South

Statement of Environmental Effects

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Executive Summary

This report constitutes a Statement of Environmental Effects (SEE) and accompanies a Development Application under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) which seeks consent for the development of land at 22-34 Berry Road, 21-31 Holdsworth Avenue and 42-46 River Road, St Leonards South (the site) for the purposes of 5 multi-storey residential flat buildings and associated works. The land comprises the entirety of Areas 18, 19 and 20 as identified under *Lane Cove Environmental Plan 2009 (LCLEP 2009)* to which specific incentive provisions apply.

The purpose of this report is to:

- describe the components of the proposal
- discuss the potential environmental effects of the proposal
- draw conclusions as to the significance of any impacts, and
- make a recommendation to Lane Cove Council and the Sydney North Planning Panel as to whether the development application should be approved.

The value of the proposed works is $138,059,712 including GST (refer QS Report at **Appendix 12**). The Sydney North Planning Panel is therefore the consent authority for the proposed works as the application has a value of more than $30 million and therefore comprises regionally significant development in accordance with the provisions of *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP).

The Site

The site is part of the St Leonards South redevelopment area which comprises that part of the suburb located to the south of the Pacific Highway bounded by the railway line to the east, River Road to the south and Park Road to the west.

The subject site has a total site area of 8,758m^2 and is made up of properties at 22-34 Berry Road, 21-31 Holdsworth Avenue and 42-46 River Road, St Leonards. This comprises the entirely of Areas 18, 19 and 20 as defined by the LCLEP 2009.

Description of the Proposal

The proposal comprises the following key elements:

- Demolition and site preparation works;
- Construction and use of five (5) residential flat buildings (ranging in height from 3 to 9 storeys) totalling 22,770m^2 GFA (2.6:1 FSR) and that include:
  - A total of 245 residential apartments (82 x 1 bedroom (33%), 114 x 2 bedroom (47%) and 49 x 3 bedroom (20%);
  - A total of 2,411m^2 of communal open space (28% of the site area) including a central north south 'green spine' including swimming pool (with kids paddle pool, water lounge, stepping stone crossing and water cascade) with an area of 2,189m^2;
  - A 4 storey + mezzanine basement with a total of 418 car parking spaces, motorcycle and bicycle parking;
  - Vehicular access provided from Holdsworth Avenue via a single egress/ingress point;
- Tree removal and replacement planting;
- A 9m wide 'public' east west through-site link connecting Holdsworth Avenue and Berry Road; and
- Associated landscape works.

Strategic and Statutory Context

Section 4 of the SEE considers all applicable legislation, strategies and policies which apply to the proposal. The proposal is consistent with the requirements of all relevant policies, SEPPs, the *Lane Cove Local Environmental Plan 2009* and the *Lane Cove Development Control Plan 2009*. No significant non-compliances with planning instruments have been identified.

Environmental Assessment

The SEE assesses and responds to the potential environmental impacts of the proposed development. Key issues that are addressed include:

- Built form and Design Excellence
- Visual impact
- Overshadowing
- Landscaping and open space
- Traffic and transport
- Accessibility
- Economic impacts
- Social impacts, and
- Ecologically sustainable development.

The SEE and supporting specialist reports provide a detailed assessment of the proposal in relation to these matters and demonstrate that the proposal will have minimal adverse environmental impact, will achieve design excellence and is entirely consistent with Council's vision for the future of the South Leonards South redevelopment area.

Conclusion

The proposal is consistent with all applicable State Environmental Planning Policies, including SEPP 65 and the Apartment Design Guide, as well as the zoning of the site and all relevant provisions contained within the *Lane Cove Local Environmental Plan 2009*. Further it is also generally consistent with the *Lane Cove Development Control Plan 2009* and in particular Part C - Locality 8 provisions which apply to the St Leonards South Precinct with only minor variations proposed.

In a broader strategic context, the proposed development is consistent with the *Greater Sydney Region Plan: A Metropolis of Three Cities*, the *North District Plan*, the *St Leonards Crows Nest 2036 Plan* and local strategic plans including Council's *Local Strategic Planning Statement (March 2020)*.

The assessment concludes that there are no significant environmental constraints on the site that preclude the proposed development and that the development will not give rise to any significant adverse impacts.

The proposed development represents a significant investment in the redevelopment and revitalisation of the St Leonards South area to meet the changing demographic and housing needs of the community. It will facilitate the delivery of a high density, high quality, residential development of design excellence on the site , increasing the amount and variety of housing in the Lane Cove Local Government Area within close proximity of public transport and services. This is in accordance with local and State government policies which have identified the St Leonards South Precinct as suitable for higher density residential uses given its proximity to jobs, services and transport infrastructure.

Having regard to the above assessment it is concluded that the proposed development is appropriate on the site and within the locality and should therefore be approved.

1. INTRODUCTION

This report constitutes a Statement of Environmental Effects (SEE) and accompanies a Development Application under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) which seeks consent for the development of land at 22-34 Berry Road, 21-31 Holdsworth Avenue and 42-46 River Road, St Leonards South (the site) for the purposes of 5 multi-storey residential flat buildings and associated works. The land comprises the entirety of Areas 18, 19 and 20 as identified under *Lane Cove Environmental Plan 2009 (LCLEP 2009)* to which specific incentive provisions apply.

The subject application relies on the incentive provisions for St Leonards South as detailed in Part 7 of Lane Cove Environmental Plan 2009. The provisions allow building height and floor space incentives for residential development within the St Leonards South Area that provides for

(a) community facilities, open space, including communal open space, and high quality landscaped areas, and

(b) efficient pedestrian and traffic circulation, and

(c) a mix of dwelling types in residential flat buildings, providing housing choice for different demographics, living needs and household budgets, including by providing affordable housing, and

(d) the amalgamation of lots to prevent the fragmentation or isolation of land.

The subject proposal complies with all preconditions outlined in Part 7.

This SEE includes an assessment of the proposed works in terms of the matters for consideration as listed under Section 4.15(1) of the *Environmental Planning and Assessment Act 1979* (EP&A).

Pursuant to section 4.46 of the EP&A Act, the proposed development is considered Integrated Development as it is likely that it will require an aquifer interface activity. It will therefore require concurrence from the Natural Resources Access Regulator (Water NSW) under section 91(3) of the *Water Management Act 2000*.

This report should be read in conjunction with information annexed to this report as outlined in the Table of Contents.

1.1 Purpose of the report

The purpose of this report is to:

- describe the components of the proposal
- discuss the potential environmental effects of the proposal
- draw conclusions as to the significance of any impacts, and
- make a recommendation to Council and the Sydney North Planning Panel as to whether the development application should be approved.

The development proposal has been assessed based on the characteristics of the site and locality, the applicable planning controls and strategic policies, and the requirements of section 4.15 of the EP&A Act.

The value of the proposed works is $138,059,712 including GST. The Sydney North Planning Panel is therefore the consent authority for the proposed works as the application has a capital investment value of more than $30M and constitutes regionally significant development in accordance with clause 2.9 and Schedule 6 of *State Environmental Planning Policy (Planning Systems) 2021*.

1.2 Supporting documents

This SEE has been prepared by MG Planning Pty Ltd on behalf of the applicant, CIFI St Leonards Pty Ltd and Greaton St Leonards Holdings Pty Ltd. It should be read in conjunction with the following relevant accompanying material:

Appendix 1	Survey plans	LTS Lockley
Appendix 2	Owner's consent	SJD Property Group
Appendix 3	Architectural Plans	Koichi Takada Architects
Appendix 4	Architectural Design Report	Koichi Takada Architects

Appendix 5	Landscape Plans	Aspect Studios
Appendix 6	Landscape Design Report	Aspect Studios
Appendix 7	Arborist Report	Laurence & Co
Appendix 8	Preliminary Public Art Strategy	UAP Company
Appendix 9	ESD Report	JHA
Appendix 10	Operational Waste Management Plan	Waste Audit
Appendix 11	Public Benefit Offer and Draft VPA	CIFI St Leonards Pty Ltd and Greaton St Leonards Holdings Pty Ltd.
Appendix 12	QS Report	Quantex
Appendix 13	Traffic, Parking and Access Study	SCT Consulting
Appendix 14	Preliminary Site Investigation	JK Geotechnic
Appendix 15	Civil Plans	Robert Birds
Appendix 16	Stormwater Report	Robert Birds
Appendix 17	BASIX Certificate	JHA
Appendix 18	Geotech Report	JK Geotechnic
Appendix 19	LCDCP 2009 Compliance Table	MG Planning
Appendix 20	NSROC DEX Minutes	Lane Cove Council
Appendix 21	Acoustic Report	PKA
Appendix 22	Access Report	ABE
Appendix 23	BCA Report	City Plan
Appendix 24	Site Waste Minimisation and Management Plan	Waste Audit
Appendix 25	Draft 88B Instrument	LTS Lockley
Appendix 26	Preliminary Groundwater Investigation	Geo-Logix

Figure 1: St Leonards South Redevelopment Area Aerial Photo looking north west

2. SITE DESCRIPTION

2.1 The site

The subject site is located within the suburb of St Leonards which is located at the junction of Lane Cove (south), North Sydney (north and east) and Willoughby (north) Local Government Areas (LGAs). The site is part of the St Leonards South redevelopment area, as defined by LCLEP 2009, which comprises that part of the suburb located to the south of the Pacific Highway bounded by the railway line to the east, River Road to the south and Park Road to the west (refer Figure 2).

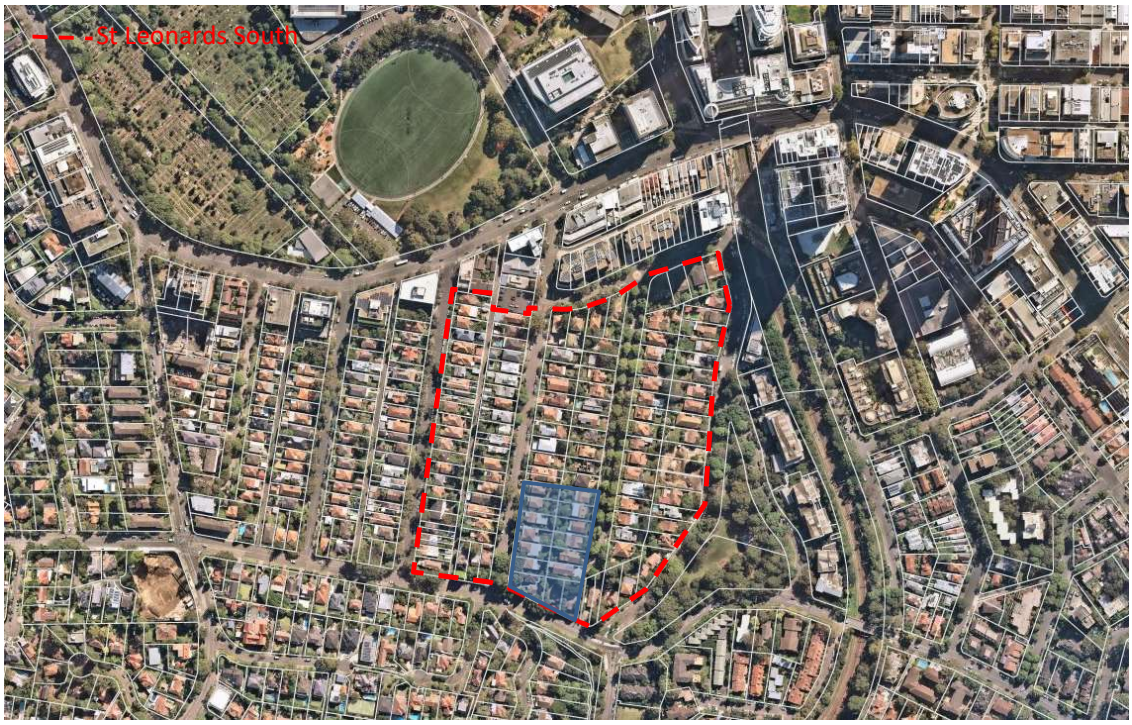


Figure 2: Site in the context of St Leonards South Redevelopment Area (Source: Nearmap, map date 3 April 2022)

The subject application relates to the entirety of Areas 18, 19 and 20 of the St Leonards South redevelopment area as defined by the LCLEP 2009 Key Sites Map (refer Figure 3 below).

The subject site has a total site area of 8,758m^2 and is made up of 22-34 Berry Road, 21-31 Holdsworth Avenue and 42-46 River Road, St Leonards. The location of the site is shown in Figure 4.

The site is bounded to the north by two detached dwellings 19 Holdsworth Avenue and 20 Berry Road (which form part of Areas 16 and 17 and have been amalgamated for separate redevelopment) and to the south by the River Road roadway and footpath. To the east the site is bounded by Holdsworth Avenue and to the west Berry Road with each street frontage accommodating an existing footpath. In the south east the site is bounded by a pedestrian footpath that extends from the termination of Holdsworth Avenue through to River Road via a stair and ramp arrangement.

The site currently accommodates fourteen (14) single storey and two (2) two storey detached dwellings of brick construction. It includes a number of trees primarily along the street frontages and in the rear yards of existing dwellings.

Figure 3: Site as defined on LCLEP 2009 Key Sites Map

The site falls steeply from the north west to the south east with an approximate maximum fall of 22.75m.

Existing services are located in the road reserve of Berry Road, Holdsworth Avenue and River Road and an existing sewer service traverses the site in the rear yards of properties fronting Berry Road centrally within the site. Survey plans are provided at **Appendix 1**.

Figure 4: Site location (Source: Nearmap, map date 3 April 2022)

Site surrounds

The site adjoins two residential lots at 20 Berry Road and 19 Holdsworth Avenue which currently accommodate detached residential dwellings however which have been purchased and consolidated for future development as part of Areas 16 and 17.

Land to the east comprising Areas 7, 8, 9, 10 and 11 received approval for redevelopment from the Sydney North Planning Panel on 2 March 2022. Approval was granted for "demolition of existing structures and construction of five (5) residential flat buildings (ranging from 6 to 10 storeys) comprising a total of 330 apartments and basement parking for 372 vehicles".

To the south the site is adjoined by River Road which forms the southern boundary of the St Leonards South redevelopment area. Further to the south detached residential dwellings front River Road with their private open space located to the south (rear) of the dwellings.

The site is located in the following context:

- Immediately to the north of River Road
- 280m south of the Pacific Highway
- 560m to the south west of the St Leonards Railway Station and St Leonards Commercial Centre
- 580m to the west of the future Crows Nest Metro Station
- 590m to the north of Wollstonecraft Station
- 560m to the south of Royal North Shore Hospital, and
- 780m to the west of Crows Nest village.

St Leonards Commercial Centre and Train Station

The St Leonards Commercial Centre is located approximately 560m from the Site, anchored by the St Leonards train station.

Retail uses in St Leonards are clustered around the station and along Pacific Highway, where there is a co-location of retail (generally food and beverage, or specialty stores) and small-scale business operators, particularly on the western side of the highway. The St Leonards Forum Plaza is a mixed-use development built over the train station,

and offers a range of retail facilities, which include a Coles Supermarket, Priceline Pharmacy, McDonalds and specialty retail stores.

St Leonards is a major office market in Sydney's north shore, with purpose built commercial buildings mostly clustered around the train station and along the Pacific Highway. The majority of current office stock is of slightly older quality (secondary grade stock), mostly accommodating businesses who operate in the media and technology and health care sectors however new construction is altering this offering.

As a transport interchange, St Leonards also provides bus connections to the locality and neighbouring suburbs including Artarmon, Crows Nest and Mosman.

Crows Nest Village and Metro Station

Crows Nest Village is approximately 780m from the site and provides a range of retail and non-retail uses, anchored by the 'eat street' on Willoughby Road and the recently redeveloped Woolworths Crows Nest. Whilst the majority of business activity in Crows Nest is comprised of population-serving and hospitality-based businesses (including financial institutions, liquor stores, personal services and specialty stores), many commercial offices are observed to co-locate with retailers in mixed used developments. Smaller, design-based businesses seeking a smaller office space are the common occupiers in commercial offices in Crows Nest.

Whilst Crows Nest does not currently have a train station, existing bus links provide connections to St Leonards Station and the Sydney CBD. A future station at Crows Nest, approximately 580m from the site, will be delivered as part of the Sydney Metro City and Southwest and is currently under construction. The station will provide residents and workers with a metro rail line connecting Crows Nest to the Sydney CBD and Sydney's north-west suburbs.

Royal North Shore Hospital

The Royal North Shore Hospital (RNSH) campus is located along Westbourne Street with a site area of nearly 13 hectares. It is located approximately 560m from the site. The RNSH is an A1 principal referral hospital and NSW trauma centre, being the principal hospital for the North Sydney Local Health District and provides a variety of specialist clinical services State-wide. The RNSH is also a major teaching hospital.

2.2 Site photographs

The site and its surrounds are shown in Photos 1 - 6 below:

Photo 1: Berry Road looking south east (Source: Google Street View)

Photo 2: Berry Road looking south to River Road (Source: Google Street View)

Photo 3: River Road frontage looking east (Source: Google Street View)

Photo 4: Existing pedestrian link from River Road to Holdsworth Ave (Source: Google Street View)

Photo 5: Holdsworth Ave looking north (Source: Google Street View)

Photo 6: Holdsworth Ave looking south (Source: Google Street View)

2.3 Land ownership and legal description

The legal description of the lots that make up the subject site are identified in Table 1 below. All lots are owned by CIFI St Leonards Pty Ltd and Greaton St Leonards Holdings Pty Ltd with the exception of 21 Holdsworth Avenue and 22 Berry Road which are currently owned by SJD Property Group and are under contract for sale to the applicant. SJD Property Group has provided its owner's consent for the lodgement of the subject development application (refer **Appendix 2**).

Table 1: Legal description of site lots

ADDRESS	LOT AND DP	AREA (m^2)
22 Berry Road	Lot 29, Section 2, DP 7259	557.3
24 Berry Road	Lot 28, Section 2, DP 7259	557.3
26 Berry Road	Lot 27, Section 2, DP 7259	557.3
28 Berry Road	Lot 26, Section 2, DP 7259	557.3
30 Berry Road	Lot 25, Section 2, DP 7259	557.3
32 Berry Road	Lot 24, Section 2, DP 7259	556.6
34 Berry Road	Lot 1, DP 1037926	413.4
21 Holdsworth Avenue	Lot 15, Section 2 DP 7259	557.3
23 Holdsworth Avenue	Lot 16, Section 2, DP 7259	557.3
25 Holdsworth Avenue	Lot 17, Section 2, DP 7259	557.3
27 Holdsworth Avenue	Lot 18, Section 2, DP 7259	557.3
29 Holdsworth Avenue	Lot 19, Section 2, DP 7259	557.3
31 Holdsworth Avenue	Lot 20, Section 2, DP 7259	557.5
42 River Road	Lot 21, Section 2, DP 7259	672.8
44 River Road	Lot 22, Section 2, DP 7259	568.8
46 River Road	Lot 2, DP 1037926	416.0
TOTAL		8,758

3. DESCRIPTION OF THE PROPOSAL

3.1 Overview of the Proposal

The proposal comprises the following key elements:

- Demolition and site preparation works;
- Construction and use of five (5) residential flat buildings (ranging in height from 3 to 9 storeys) totalling 22,770m^2 GFA (2.6:1 FSR) and that include:
  - A total of 245 residential apartments (82 x 1 bedroom (33%), 114 x 2 bedroom (47%) and 49 x 3 bedroom (20%);
  - A total of 2,411m^2 of communal open space (28% of the site area) including a central north south 'green spine' including swimming pool (with kids paddle pool, water lounge, stepping stone crossing and water cascade) with an area of 2,189m^2;
  - A 4 storey + mezzanine basement with a total of 418 car parking spaces, motorcycle and bicycle parking;
  - Vehicular access provided from Holdsworth Avenue via a single egress/ingress point;
- Tree removal and replacement planting;
- A 9m wide east west through-site link connecting Holdsworth Avenue and Berry Road; and
- Associated landscape works.

The proposed development designed by Koichi Takada Architects will deliver an innovative, sustainable residential outcome. The site is ideally positioned on the southern edge of St Leonards in Sydney's inner north and sits within the newly proposed St Leonards South masterplan.

The overall vision for the project is a high-quality residential development that adds value to its site, locality and region by delivering a development of scale consistent with the St Leonards South masterplan, providing investment and local housing.

Koichi Takada Architect's design incorporates five residential buildings with common amenities that aim to create a community and maximise resident experience on site. The proposal relates to the neighbouring dwellings along River Road and enhances the proposed streetscape for the St Leonards South precinct. All apartments enjoy access to multiple communal open spaces in order to promote a diversity of use while private balconies and terraces overlook the landscaped 'green spine' connection (north to south).

Koichi Takada Architect's has produced a design that enhances both public and residential amenity through use of high-quality materials and careful consideration of form and articulation. The proposal seeks to strengthen the key 'green spine' connection and pedestrian connectivity through the site.

The architectural drawings at **Appendix 3** and Architectural Design Report at **Appendix 4** prepared by Koichi Takada Architects provide a full description of the proposal.

Figure 5: Looking north west on River Road (Source: Ivolve Studios)

Figure 6: Looking south east on Berry Road (Source: Ivolve Studios)

Figure 7: Looking south on Holdsworth Avenue (Source: Ivolve Studios)

Figure 8: Looking south from Green Spine (Source: Ivolve Studios)

The design philosophy on which the proposal is based, as outlined by the architects is as follows:

> *The proposal sets out to meet the requirements of the St Leonard's masterplan and stated project objectives, ensuring buildings of scale have meaning and are appropriate to site and locality. The principal design approach was to create an intrinsic relationship between architecture and nature while maintaining pedestrian connectivity across the steep grade of the site. The buildings incorporate large-scale passive design strategies at a fundamental level well beyond that of a typical commercial development.*
>
> *The design for St Leonards South East Quarter provides for landscaping, natural ventilation, solar access and harvesting of renewable energies. The integrated landscape provides a physical and visual layering which insulates interiors from the sun, wind and rain. The design intent is to create a cohesive look and feel for the site, responding to the guidelines of the St Leonards South masterplan.*
>
> *The pedestrian is prioritised on site, with vehicle entrances carefully considered. Remaining open space on site is fully landscaped and dedicated to pedestrian use, inviting community events, socialising and physical activity. The 'green spine' features a series of floating stairs integrated in to the slope of the topography, natural store paving and a layering of mature trees to create a lush and dense landscaped environment. The through-site link connects to proposed pedestrian pathways and pocket parks. The project looks to inspire a 'zero carbon mindset' in it's residents, promoting a healthy, sustainable lifestyle.*
>
> *Swooping, organic timber-look awnings give architectural identity to the development and mark building entrance points, enhancing streetscape legibility for residents.*
>
> *The main residential entries are located on Berry Road and Holdsworth Avenue to allow an east-west connection. The building form is permeable at these points, breaking down the mass and creating articulation along the street wall. These breaks create a visual and physical connection through the site from east to west, allowing the two adjacent pocket parks to be visually connected.*
>
> *A generous 'green spine' of communal open space programmed with residential amenities runs through the core of the masterplan.*
>
> *The green spine is open to the sky with deep soil area that facilitates the overall masterplan vision of landscaped connections, CBD vistas and a mature tree canopy within a large area of communal amenity. The deep soil zone is located towards River Road to create a more sensitive transition to the built form. The area has been maximized, exceeding the ADG requirement for 7%. Layering of the planting from low level to tall mature trees allows for clear sightlines across the site.*
>
> *The planning of the green spine balances private, semi-private and communal space, deliberately setting out to activate a sense of place and feeling of community. Health and wellbeing benefits are enhanced by a design that increases occupant connectivity to the natural environment through use of direct and indirect nature.*
>
> *Landscape is integral to the facade design and masterplan identity, providing 'green breaks' in the building form.*
>
> *These perimeter planters reduce overlooking and increase privacy between levels. The horizontal planting reinforces streetscape setbacks, aligning the proposal to the overall masterplan vision. Integrated landscape mitigates heat island effects, promoting wellbeing for occupants and maximizing planted area on site. Landscaping will feature plants from native species, bringing benefits such as improved air quality, natural insulation and shielding from harsh environmental conditions.*
>
> *The facade incorporates integrated shading to ensure visual privacy and allow daylight to enter bedrooms and living rooms without excessive heat gain through the building envelope.*
> *The layout of typical residential levels maximises available solar access by locating the living room glazing to the building perimeter. Tapered slab edges and battens have been purposefully positioned to attain a minimum of 2 hour solar access to living rooms and private open spaces. Rooftop solar panels generate energy on site for the building's energy needs.*

The sandstone base includes terraces on River Road with a unique typology differentiated from the rest of the project in materiality and aesthetic. The sandstone base includes terraces on River Road with a unique typology differentiated from the rest of the project in materiality and aesthetic.

The five buildings contain a mix of accommodation types and sizes appropriate to the location which support a variety of price points accessible to a wide range of socioeconomic groups. Planning optimizes residential amenity and incorporates one to three bedroom apartments in a varied residential mix. Adaptable units will be provided in accordance with the applicable standards as well as the 20% benchmark incorporating the Liveable Housing Guideline's silver level universal design features.

The layout of typical residential levels maximises available solar access by locating the living room glazing to the building perimeter. Natural cross-ventilation has been maximised on the first nine storeys to reduce reliance on mechanical ventilation, with provision of dual aspect units wherever possible. All units achieve a high level of amenity by attaining some direct solar access to the living spaces and there are no south-facing single aspect dwellings.

A unique architectural language is employed for the penthouse units with deep overhangs that give additional visual privacy and create large, outdoor entertaining spaces with views of the Sydney CBD.

Residential amenities include a communal workspace, indoor lounge, swimming pool, gym and extensive landscaped outdoor seating and play areas.

Sustainability
Sustainability measures incorporated into the design include:

- *Rooftop solar photovoltaic system*
- *Integrated shading reduces solar heat gain in Summer while maintaining daylighting in units*
- *Natural ventilation to public corridors*
- *Maximised views and daylight to all living areas and bedrooms*
- *Integrated Facade Greening*
- *Modular and unified unit types to reduce material waste during construction*
- *Low carbon materials for interior finishes*
- *Energy efficient LED lighting*
- *Control systems to maximise building performance*
- *WELS star rated fixtures*
- *Outdoor motion activated misters and water features*
- *Provision/capability for electric vehicles and supplemental bike parking*

Despite the steep grade of the site, the green spine has been designed to be fully accessible. Ramps maintain an accessible path of travel throughout the development.

Parking Access Strategy
Vehicular access to the site has been designed to minimise impacts on the existing road network and public domain. All vehicles access underground basement levels from a single entry point on Holdsworth Avenue. The proposal aligns with best practice for transit-oriented development by providing a single, consolidated access driveway, prioritising the movement of pedestrians and cyclists at street level.
Providing access from the northeast corner off Holdsworth Avenue is considered preferable from a traffic perspective and will minimise impacts on existing street parking and trees. The cul-de-sac of Holdsworth Avenue generates little through-traffic, ensuring good access efficiency for development traffic. This access point also has nil impact on the proposed pocket park off Holdsworth Avenue, promoting a pedestrian friendly environment.

Waste Collection Strategy
Each resident is responsible for transferring their household waste to a central room at the core on each level where rubbish chutes and 240L bins for recycling are located. Recyclables will be transported to the waste storage areas in the basement by Building Management on an as needed basis. The waste holding areas and chute rooms are located on the basement mezzanine (Buildings B and C) and basement 01 levels (Buildings A and D). These areas will be designed to prevent unauthorised access and to contain any spilt materials and will have signage to remind residents of the correct separation of waste and recyclables.

In keeping with the best practices for sustainable design, all waste areas and waste/recycling bins will be clearly differentiated through appropriate signage and colour coding to Australian Standards. Each stream will be located in a designated area. Waste and recycling collection services will be provided by Lane Cove Council.

Basement Parking Layout

A single carpark entry/exit point provides internal access to three full and two partial basement levels cut in to the topography of the site and located under building footprints. A centrally located internal ramp provides vehicular access between levels.

Accessible carparks are located adjacent to the relevant lift cores and visitor parking is located at the arrival point to the basement. Residential storage cages are located in a half-level (lower ground) underneath Building B.

Bicycle Parking

Bicycle parking has been given equal consideration to pedestrian and vehicle access consistent with best practice transport-oriented development. Secure underground bicycle parking is consolidated on Basement Level 1 in an enclosed room accessible via residential lift lobbies. This allows cyclists to safely park their bikes without compromising other transport modes. Above ground outdoor bike parking is located on site in the through-site link.

Refer Design Statement at **Appendix 4** for further detail.

Figure 9: North Elevation (Source: KTA)

Figure 10: South (River Road) Elevation (Source: KTA)

Figure 11: East Elevation (Source: KTA)

Figure 12: West Elevation (Source: KTA)

3.2 Key statistics

The key components of the proposal are summarised in Table 2.

Table 2: Key Statistics

SPECIFICATION	PROPOSED DEVELOPMENT
Site area	8,758m^2
GFA	22,770m^2
FSR	2.60:1
Solar access (ADG min. 70% with 2 hours to living areas)	70% (171/245)
(ADG max. 15% no solar)	6% (14/245)
Natural Cross ventilation (ADG Min. 60%)	61% (149/245)
Deep Soil (ADG 7% of site area – 613m^2)	23% (1,984m^2)
Communal and Public Open Space (ADG 25% of site area)	28% (2411m^2) Facilities provided: • Swimming Pool (with kids paddle pool, water lounge, stepping stone crossing and water cascade) • Outdoor BBQ and spread out space • Community lounge (with shelter, picnic setting) • Outdoor working space • Community Plaza to internal amenity space • Kids play space • Lawns and sensory gardens • Etc.
Green Spine • Width (24m required) • Area (2,140m^2 required) • Deep Soil (50% or greater)	 • 24m • 2,170m^2 • 1,238 (57%)
Through site link (6m width required)	9m provided
Landscape Area	50% of site area
Unit Mix	1 bdrm – 82 (33%) 2 bdrm – 114 (47%) 3 bdrm – 49 (20%)
Building A • Maximum Height • Maximum Storey Height • Street Wall Height	 • 31.0m (RL92.85) • 8 storeys • 5 storeys

SPECIFICATION	PROPOSED DEVELOPMENT
• Building Depth (max. 22m) • Units	• 20.550m • 53 units
Building B • Maximum Height • Maximum Storey Height • Street Wall Height • Building Depth (max. 22m) • Units	 • 30.90m (RL97.05) • 8 storeys • 4-5 storeys • 20.550m • 54 units
Building C • Maximum Height • Maximum Storey Height • Street Wall Height • Building Depth (max. 22m) • Units	 • 30.91m (RL96.15) • 9 storeys • 6 storeys • 20.550m • 59 units
Building D • Maximum Height • Maximum Storey Height • Street Wall Height • Building Depth (max. 22m) • Units	 • 30.08m (RL91.60) • 8 storeys • 5 storeys • 20.550m • 65 units
Building E • Maximum Height • Maximum Storey Height • Street Wall Height • Building Depth (max. 22m) • Units	 • 13.68m (RL66.85) • 3 storeys • 3 storeys • 20.550m • 14 units
Parking spaces	Residents – 351 and 49 accessible spaces (20%) Visitors – 62 (including 2 accessible space (1/50)) Motorcycles – 28 (1/15) Bicycles – 66 for residents (1/4 units) plus 26 for visitors (1/10 units) EV charging stations - 5

3.3 Detailed Description

The proposed development comprises five (5) residential flat buildings located above a common 4 level carparking and services basement. Cumulatively, these buildings will provide 245 new residential dwellings set within extensive communal landscape gardens and open space areas.

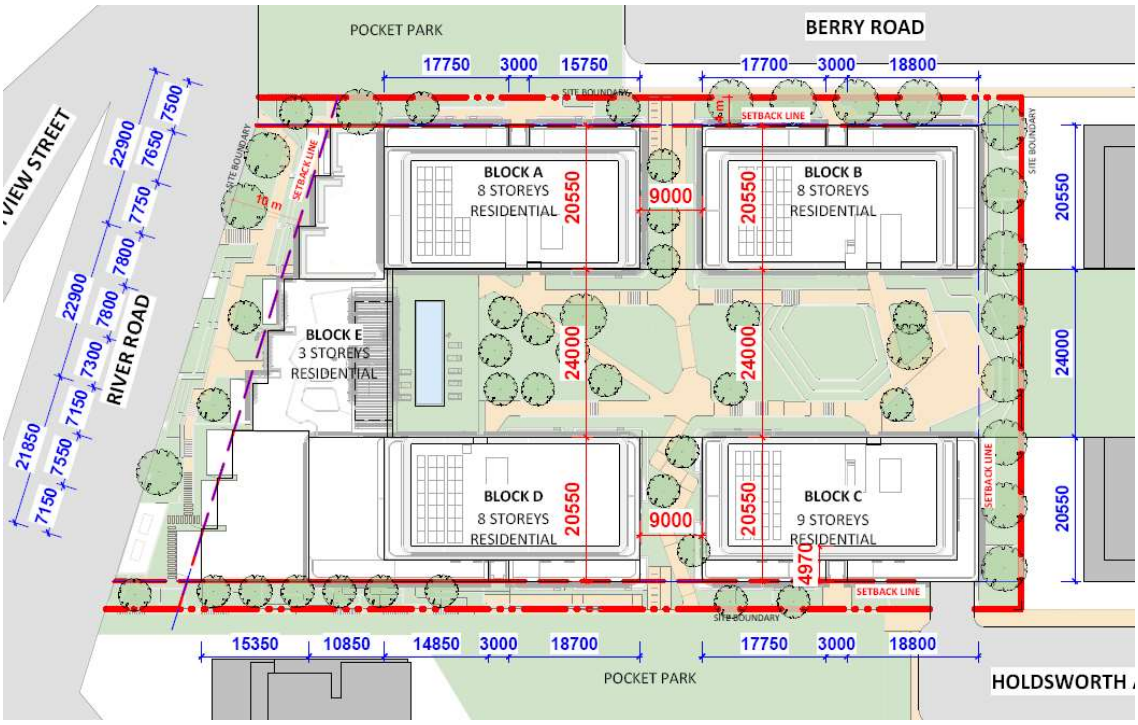


Figure 13: Site Plan (Source: KTA)

A description of each building is provided below.

Building A and B

Building A and Building B address Berry Road to the west and the internal Green Spine. The characteristic swooping, organic timber-look awnings give architectural identity to the buildings and mark building entrance points, enhancing streetscape legibility for residents. Both buildings present with a strong street wall height and base element with lighter upper levels setback from the street frontage. High quality materials are used to create visual interest and reflect the existing character and topography of the St Leonards South Precinct.

Building A has a total of eight levels inclusive of a five storey street wall and three upper levels and steps down to the lower three storey Building E to the south along River Road. Building B comprises 8 residential storeys (including 1 part LG storey) made up of the four – five storey street wall and upper levels, plus a part lower ground level. Together the buildings reflect a stepping down of height to the south toward River Road presenting a consistent street wall height to Berry Road.

Building C and D

Building C and Building D address Holdsworth Avenue to the west and the internal Green Spine. As with Buildings A and B the swooping, organic timber-look awnings give architectural identity to the buildings and mark the building entrance points, enhancing streetscape legibility for residents. Both buildings present with a strong street wall height and base element with lighter upper levels setback from the street frontage. High quality materials are used to create visual interest and reflect the existing character and topography of the St Leonards South Precinct.

Building C has a total of nine levels, at the north of the site, inclusive of a five - six storey street wall and three upper levels. The upper levels of the building are set back further from the street and lightweight material used to ensure this light building element is not dominant. Building D comprises 8 residential storeys made up of the five storey street wall and upper levels. Building D steps down to the south to six storeys adjacent to the lower Building E to the south and consistent with the lower height limit adjacent to River Road.

Building E

Building E is orientated to River Road being 3 storeys in height with town house style units having direct access to River Road via a ground level access pathway. A central entrance is provided with accessible access via lift to the communal facilities including pool and outdoor garden bed, BBQ and outdoor working space on Level 1 at the southern end of the site at the termination of the green spine.

The Building E units are 2 storey townhouse type units configured with private terraces / courtyards fronting River Road and separate entries. Units step with the fall of the land to the south eastern corner of the site.

The building form on River Road presents as three storeys setback 10m from the street frontage to provide substantial separation and a transition to lower density development to the south minimising any potential shadow impacts.

Overall, in a northerly direction the buildings step up from 3 storeys at River Road, 6 storeys (Building D) setback 24m from the River Road frontage and then stepping up to 8 storeys further north with 9 storeys proposed for Building C only.

The design enhances and works with the site's natural sloping topography to deliver a visually interesting built form with a high level of accessibility throughout the development.

3.4 Materials and Finishes

The aesthetics of proposal have resulted from close consideration of its local context and the desire future character of the area. These elements informed the articulation of the building, scale, form and materiality.

The three main design features of the building include the horizontal slab edges detailed with a thin edge with timber look screens, combined with soft edges and curves that provide an organic and complimentary residential building. A continuous and contrasting coloured banding emphasises the curves and the horizontality along the façade. The culmination of the curved balcony corners, timber screens and feature awning all create a warm and inviting residential architectural expression that helps to reduce the perceived bulk and scale and enhance the landscape character that is prevalent in the master-plan.

The natural material palette is comprised of sandstone utilised to define the interface with the site and ground the design into the steeply sloping terrain. The timber look screening in an oak texture and colouring creates a subtle correlation to the landscaped surrounds. The horizontal planters are integrated at the Level 1 awning, providing increased privacy to the units, and defining the ground level lobby entries. The feature timber awning, turning 90 degrees, strengthens the vertical breaks in the form, creating a slot that effectively divides the towers in two parts. The building steps back above the fifth storey enhanced with a perimeter planter.

The top level of the towers is recessed from the floors below and takes on a lighter façade expression. With a thin roof overhang, and large expanses of glass, the top level units enjoy district views and large wrap around.

The sandstone base includes the terraces on River Road which have a unique typology differentiated from the rest of the project in materiality and aesthetic.

The proposed materials are detailed in the Design Report at **Appendix 4** as illustrated below:

BAL-01	Horizontal Steel plate balustrade on dark painted concrete upstand
BAL-02	Vertical steel post balustrade
BAL-03	Glass Balustrade
CN-01	Concrete Look Render
GL-01	Clear Glass
GL-02	Colourback Glass
GL-03	Operable Glass Louvers
GL-04	Colourback Glass
GL-05	High Performance Clear Glass
GL-06	Clear Glass Common Areas
MF-01	Metal Finish Banding Light Powdercoat Finish
MF-02	Metal Finish Roof Light Powder Coat Finish
PT-02	Dark Painted Concrete
SC-01	Light Timber Look Aluminium Batten Screen
SC-02	Dark Finish Powdercoat Aluminium Batten Screen
SC-03	Dark Finish Powdercoat Aluminium Plant Screen
ST-01	Sandstone Cladding

Figure 14: Materials Pallet (Source: KTA)

3.5 Landscape and Open space

The proposal includes high quality public domain and landscape areas in the form of a central connecting green spine which extends through the centre of the site to realise Council's vision for the area and to retain the leafy character of the neighbourhood, street tree planting and roof top gardens. . It also includes an extensive landscaped setback (10m wide) on the River Road frontage to provide a significant expansive transition from the development to low scale residential development across River Road to the south.

The landscape design intent is as follows:

- Provide a high quality public domain and landscape areas in the form of a central connecting green spine which extends through the centre of the site to realise Council's vision for the area and to retain the leafy character of the neighbourhood, and roof top gardens. Landscaping is proposed to comprise approximately 50% of the site area with 35% deep soil zone. Sufficient soil depth is provided above the basement in the green spine area to ensure sustainable growth of proposed planting.
- The landscape design reinforces existing strategic objectives of NSW government policy and Council visions for the St Leonards South precinct including the principles and design vision of the St Leonards South Landscape Master Plan and Lane Cove DCP. It will provide a level of comfort, familiarity for local residents, and a place that will be distinctive and an attractive asset to the development and local community.
- The project draws inspiration from this distinct landscape and land forms of the Sydney landscape and specifically, the unique micro-climates of the St Leonards and Crows Nest region. The existing landscape of the St Leonards South areas shifts from an open woodland landscape typology at its ridge (Pacific Highway) and transitions into a wet, gully landscape (Smoothey Park/Berrys Creek). By reflecting this transition of landscape, we create an inspiring and contextually rich landscape character to the St Leonards South residential development.
- A distinct palette and arrangement of materials and planting within the Green Spine reflect the changing landscape experiences, moving between open woodland spaces with large trees and open grass areas, to a more intimate, dense gully environment with steep escarpments and dense understorey planting.
- The Proposal provides for a 9m wide pedestrian link through the site, which will provide a pedestrian connection from Berry Road to Holdsworth Avenue and will connect to pocket parks planned for the southern end of Holdsworth Avenue and Berry Road. Ramped access is provided to ensure the connection is accessible by all.

The landscape plans are illustrated in Figures 15 and 16 below and provided at **Appendix 5**. Further details of the landscape philosophy are provided in the Landscape Design Report at **Appendix 6**.

Replacement planting is proposed at a rate of 1:1.8 and the Green Spine is proposed to have a mature tree canopy coverage of 65%. Approximately n50% of the site is proposed as landscape area with 29% being plantings. 60% of the Green spine is planting area.

Figure 15: Landscape Plan (Source: Aspect Studios)

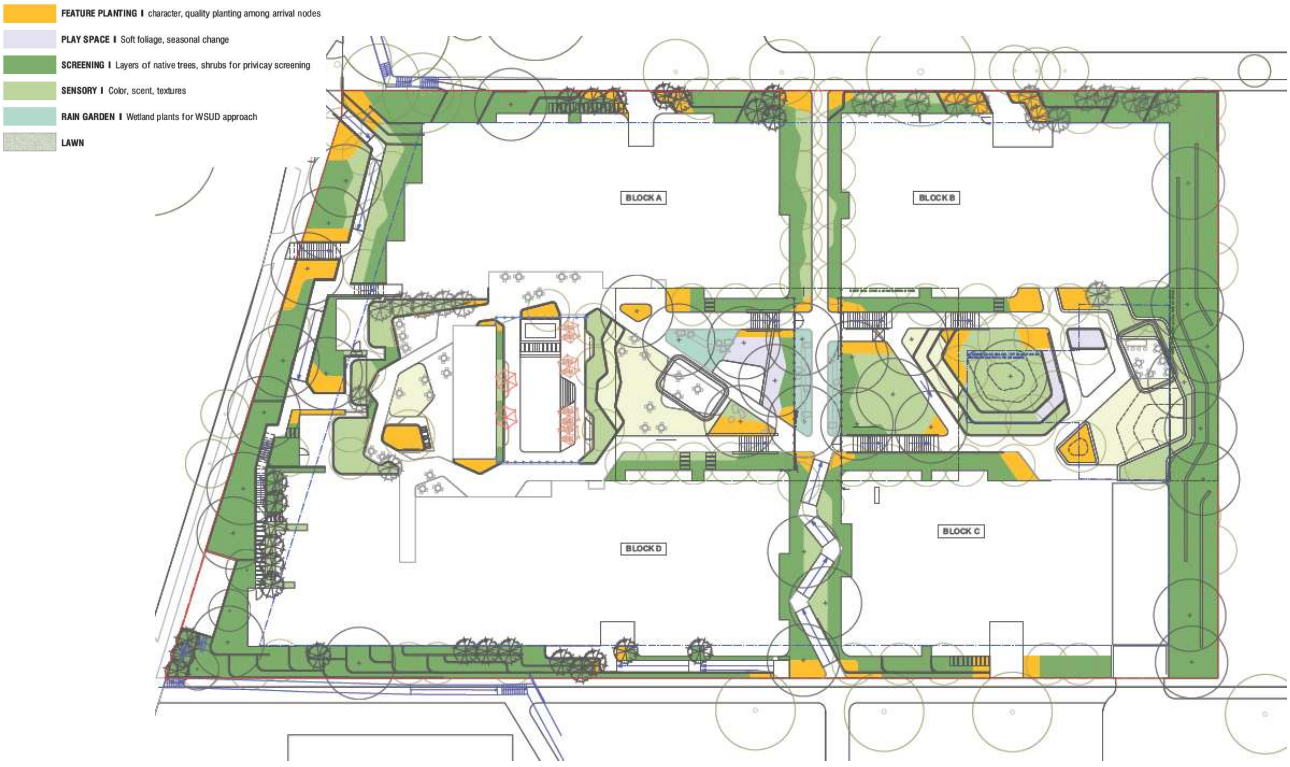


Figure 16: Landscape Planting Zones (Source: Aspect Studios)

3.6 Pedestrian and Bicycle access

The proposal incorporates a new direct 9m wide public pedestrian through site link running in an east west direction and connecting Holdsworth Avenue and Berry Road. In this regard it is noted that Council's controls require a 6m wide link however a 9m wide link is provided for greater amenity as well as improved building separation. The link is to be located to the north of Buildings A and D and to the south of Buildings B and C and will provide a high quality landscaped connection that is accessible and that has been designed having regard to CPTED principles. To facilitate accessibility the path zig zags with a 1:14 slope to the east and 1:20 slope to the west to account for the significant land fall. The path will be constructed to Council's standards and specifications.

The new through site link will link the future pocket parks planned by Council at the southern termination of both Berry Road and Holdsworth Avenue and will connect in to the wider pedestrian / cycle network planned by Council that will ultimately connect the area to the east to the new Crows Nest Metro Station and to the north.

Controlled pedestrian access for residents will also be provided through the site in a north south direction through the proposed 'green spine' connecting through Building E via lift to River Road in the south.

3.7 Vehicular Access, Parking and Servicing

The proposal provides access via a single crossover into a connected basement off Holdsworth Avenue at the north eastern boundary of the site. This location both takes account of the fall of the land and minimises the potential impact of vehicular access to the site on the proposed new pocked parks planned at the southern termination of both Berry Road and Holdsworth Avenue.

The proposed crossover will provide access to a basement mezzanine level in the north western corner of the site which will provide a loading dock for 2 x medium rigid vehicles (MRV), waste room, waste holding area and visitor parking with a head height of 4.6m to accommodate service vehicles. Entry to and from this area for a MRV is provided in a forward direction.

The basement configuration will provide parking as outlined below:

Table 3: Basement parking configuration

BASEMENT LEVEL	PARKING PROVISION	SPACES
Mezzanine	Loading Bays	2
	Resident	0
	Visitor	18
	Accessible	1
Basement 1	Resident	49
	Visitor	44
	Accessible	15
	Visitor accessible	1
	Motorcycle	15
	Bicycle	66
	Short term loading	1
Basement 2	Resident	105
	Visitor	0
	Accessible	18
	Motorcycle	12
Basement 3	Resident	112
	Accessible	17
	Motorcycle	1
Basement 4	Resident	28
	Carwash	5
	EV Charging	5
TOTAL	Loading Bays	2
	Resident	351
	Visitor	62
	Accessible	51 (included 49 residents and 2 visitor)
	Car wash	5
	EV charging	5
	Motorcycle	28
	Resident's bike	66
	Visitor's bike	26

All parking spaces are able to be converted to EV charging.

3.8 Tree Removal and planting

A total of 131 trees on site and in the vicinity have been assessed in the detailed Arboricultural Impact Assessment at **Appendix 7**.

The proposal includes the removal of a total of 103 to facilitate the proposed development and retention of 28 trees primarily on the perimeter of the site. The proposed tree removal includes 6 street trees which are in poor condition, and which are proposed to be replaced with mature specimens as part of the proposed works.

Replacement tree planting is proposed at a rate of 1:1.8 and a mature canopy coverage within the Green Spine of 65% is proposed.

3.9 Public Art

The proposal includes a preliminary public art strategy at **Appendix 8** which provides for public art to be provided as part of the proposal to the value of 0.1% of the development construction value in accordance with the LCDCP 2009 requirement. Public art will be provided at the entrance to the pedestrian through site link on Holdsworth Avenue. This site has been selected as it is highly accessible and:

- facilitates access to a green spine corridor
- is adjacent to the public pocket park which bounds the site
- offers potential to provide maximal opportunities for community engagement, and contribute to placemaking, and

- could effectively sit within a broader network of public art being developed in other Areas in St Leonards South, encouraging movement throughout the burgeoning new precinct.

3.10 ESD

The aim of the project is to revitalise the Lane Cove precinct with a strong focus on sustainability to promote a healthier way of living not just for the present but in the years to come as well. The proposed design incorporates the following embedded sustainability initiatives:

- Passive design ensuring minimum 6 Star NatHERS rating
- Energy efficient LED lighting
- Control systems tuned to maximise building performance
- Solar photovoltaic system
- WELS star rated fixtures
- Supplemental bicycle parking spaces
- Outdoor motion activated misters and water features to provide relief on hot days, and
- Activated public and communal open space with inclusive, passive, active and growing zones.

Project commitments are outline in the ESD report at **Appendix 9**.

3.11 Waste management and servicing

An Operational Waste Management Plan prepared by Waste Audit is provided at **Appendix 10**. The Plan outlines the estimate waste to be generated by the development during its operational phase and the proposed waste collection and storage methods.

The plan identifies that the primary sources of waste will consist of:

- General waste
- Paper recycling, and
- Comingled recycling.

Each individual level will include a waste chute and recycling bin. Residents will be responsible for disposing their recycling via the chute system located on each level. The building caretaker will be responsible for transporting recycling. Appropriately sized waste storage rooms are provided in the basement beneath each building and a bulky waste storage area provided in the loading dock along with the waste holding area. Further details are provided at **Appendix 10**.

3.12 Infrastructure and Services

All required services exist within the site and are understood to have capacity to accommodate the proposal development.

Existing infrastructure and services on site will be decommissioned, demolished and removed as part of the proposed works. The proposed works will include the replacement and augmentation of this infrastructure including the installation of a new electricity kiosk to service the development on the River Road frontage. Screening of the kiosk is proposed as outlined on the architectural plans at **Appendix 3**.

In terms of wider infrastructure, the subject application includes a Draft VPA proposing section 7.11 contributions in accordance with Council's Draft Contributions Plan for St Leonards South (refer **Appendix 11**).

3.13 Demolition and Excavation

Site preparation works will include:

- Site clearing and the demolition of all existing buildings and structures
- Excavation to provide for the construction of the basement
- Implementation of erosion and sediment controls measures, and
- Associated earthworks.

A detailed Construction Management Plan will be prepared prior to the construction phase.

4. STRATEGIC AND STATUTORY CONTEXT

4.1 Strategic planning policies

4.1.1 Greater Sydney Region Plan - A Metropolis of Three Cities

The Greater Sydney Region Plan – A Metropolis of Three Cities was released on 18 March 2018 and presents a vision and actions for managing Greater Sydney's growth and enhancing its status as one of the most liveable global cities. It has been prepared concurrently with Future Transport 2056 and the State Infrastructure Strategy, aligning land use, transport and infrastructure planning to reshape Greater Sydney as three unique but connected cities.

The Greater Sydney Region Plan sets a 40-year vision and a 20-year plan to manage growth and change for Greater Sydney in the context of economic, social and environmental matters. The vision seeks to meet the needs of a growing and changing population by transforming Sydney into a metropolis of three cities – the Western Parkland City, the Central River City and the Eastern Harbour City. The site is located within the Eastern Harbour City and more specifically within the North District.

The St Leonards area forms part of the eastern economic corridor and St Leonards Strategic Centre and Health and Education Precinct. The Plan identifies the vision of the Eastern Harbour City as being a City that is well established, well serviced and highly accessible by its radial rail network with further significant rail projects including the Sydney Metro Northwest. The site also forms part of the Eastern Economic Corridor from Macquarie Park to Sydney Airport which the Plan notes as the State's greatest economic asset contributing two-thirds of NSW's economic growth in the 2015-2016 financial year with strong financial, profession, health, education and innovation sectors.

A housing target is set out in the Plan for the North District of 25,950 dwellings in the 5-year period 2016-2021 and 92,000 in the 20-year period 2016-2036. The St Leonards / Crows Nest area is identified in the Plan as an urban renewal area. Accordingly, it is intended to contribute to the achievement of the stated dwelling targets.

The proposed development is consistent with the Greater Sydney Region Plan, in particular "Housing the city" Objective 10 *Greater housing supply* and Objective 11 *Housing is more diverse and affordable*. The Plan recognises that providing ongoing housing supply and a range of housing types in the right locations will create more liveable neighbourhoods and support Greater Sydney's growing population. Further, the Plan states that it is important that the supply of housing delivers the type of housing that communities and places need as they grow and change. Homes need to respond to people's changing needs as they transition through different stages of life. A diversity of housing types, sizes and price points can help improve affordability. Increasing the supply of housing that is of universal design and adaptable to people's changing needs as they age is also increasingly important across Greater Sydney.

The proposed development provides increased housing supply and contributes to a liveable neighbourhood by providing housing in close proximity to public transport, shops and walking and cycling options. It provides for the supply of 245 new dwellings in the form of transit-oriented development within walking distance of the St Leonards Station, new Crows Nest Metro Station and Wollstonecraft Station. It will provide housing choice in a highly accessible location and will hence contribute to the goal of achieving a 30 minute city and optimising infrastructure use. It will also provide for compact development and contribute to a low carbon future for Sydney.

The proposal also incorporates universal design and adaptability features and a range of unit sizes. It is therefore consistent with the relevant objectives, targets and strategies of 'A Metropolis of Three Cities'.

4.1.2 North District Plan

The North District Plan was also released in March 2018 and sets out a 20-year vision for the North District, which includes the Ryde, Hornsby, Hunters Hill, Ku-ring-gai, Lane Cove, Mosman, North Sydney, Northern Beaches and Willoughby local government areas.

Consistent with the Greater Sydney Region Plan, the North District Plan identifies the St Leonards / Crows Nest area as a transit oriented development and planned precinct with St Leonards itself being a Strategic Centre. The Plan identified districts housing targets (25,950 dwellings in 0-5 years including 1,900 dwellings within the Lane Cove LGA) also noting the to meet housing demand over 20 years requires a longer term outlook.

The proposed development is consistent with the North District Plan, in particular Planning Priority N5 *Providing housing supply, choice and affordability, with access to jobs, services and public transport* which gives effect to Objective 10 and 11 of the Greater Sydney Region Plan.

The proposal will provide housing close to public transport and employment in support of the 30 minute city concept promoted by the Greater Sydney Commission and is consistent with relevant directions and actions outlined in the North District Plan. The development will contribute 245 new dwellings in the Lane Cove area, in a highly accessible location near to public transport. It is therefore consistent with the North District Plan.

4.1.3 St Leonards and Crows Nest 2036

Following designation of St Leonards / Crows Nest as a planned precinct, the *St Leonards and Crows Nest 2036* Plan (2036 Plan) was finalised by the Department in August 2020. The Plan covers three Council areas (North Sydney, Willoughby, Lane Cove) and includes the suburbs of St Leonards, Greenwich, Naremburn, Wollstonecraft, Crows Nest and Artarmon, encompassing the St Leonards railway station, new Crows Nest Metro Station (under construction) and the St Leonards South area.

The Plan identifies a vision for the area as a major centre for workers, residents, students and visitors, offering a variety of homes, jobs and activities for the diverse local population. Specifically in relation to housing the Plan identifies a desire to see more affordable housing and a greater variety of housing types within the area and provides a capacity for up to 7,525 new dwellings, although notes that in terms of feasibility the market may only deliver 6,800 of these dwellings by 2036 under current market conditions.

The 2036 Plan includes the St Leonards South area, and notes that the Minister's delegate determined to approval the Planning Proposal for the land in August 2020. It notes that the new planning framework (amendment to LCLEP 2009) changes the existing land use from R2 Low Density Residential to R4 High Density Residential and enables residential development between 4 and 19 storeys. In essence is reflects the LEP amendment for the purposes of the St Leonards South Area. Accordingly, as the subject application is consistent with LCLEP 2009 it is consistent with the 2036 Plan.

4.2 Local strategic plans

4.2.1 Lane Cove Local Strategic Planning Statement

The Lane Cove Local Strategic Planning Statement (LESPS) (March 2020) outlines the 20 year vision, planning priorities and actions for land use in the Lane Cove LGA. It translates the visions and strategies expressed in the Community Strategic Plan and related actions in the Delivery Program into specific land use planning priorities and actions.

The proposal is entirely consistent with the LSPS for the following reasons:

- The proposal is the result of extensive community consultation with Council (Planning Priority 3);
- Generous high quality communal areas are included and will foster the emergence of a socially connected community (Planning Priority 4);
- The proposal will deliver a diversity of housing types comprising units in a range of sizes and formats and varying price points thus increase housing choice and affordability (Planning Priority 5);
- The proposal will deliver a range of public benefits including additional housing, streetscape upgrades, a public through site connection, the revitalisation of an underutilized site and an appropriate dwellings mix that will contribute to meeting Council's housing targets (Planning Priority 5);
- The proposal will enhance the urban tree canopy by providing significant mature tree planting and proposing significant offset planting that is sympathetic to the surrounding landscape (Planning Priority 10); and
- The proposal meets and exceeds a range of ESD targets (Planning Priority 11).

4.3 Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* applies to the subject site. This Act requires approval from the Federal Minister for the Environment to carry out a 'controlled action' where it is likely to have a significant impact on a 'matter of national environmental significance'. Matters of National Environmental Significance include among other matters world heritage properties, national heritage properties, listed threatened species, ecological communities and migratory species.

There are no known matters of National Environmental Significance occurring on or in the vicinity. Therefore, referral of the application to the Commonwealth Minister for the Environment, to determine if it is a 'controlled action', is not required.

4.4 Environmental Planning and Assessment Act 1979

4.4.1 Section 1.3 of the EP&A Act - Objects

The objects of the EP&A Act are listed in section 1.3 of the Act as follows:

(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,

(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,

(c) to promote the orderly and economic use and development of land,

(d) to promote the delivery and maintenance of affordable housing,

(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,

(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),

(g) to promote good design and amenity of the built environment,

(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,

(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,

(j) to provide increased opportunity for community participation in environmental planning and assessment.

The proposed development is consistent with these objects as it:

- Allows for the orderly and economic use of the subject land to provide high quality, high density residential dwellings in a transit-orientated development
- Incorporates quality urban design principles to ensure a high level of amenity is afforded to both future residents of the site as well as protecting the amenity of neighbouring properties
- Is based on the principles of ecologically sustainable development, taking into account potential environmental, social and economic and providing for a development which will improve the subject site with a high quality built form and central open space which links to the broader open space network, and
- Seeks to provide the highest design quality and amenity within the built environment.

4.4.2 Section 4.15(1) of the EP&A Act - Evaluation

Section 4.15(1) of the EP&A Act specifies the matters which a consent authority must consider when determining a development application. The sections of this report that address the relevant matters are outlined in Table 4 below.

Table 4: Section 4.15(1) of EP&A Act Considerations

PROVISION	RELEVANT REPORT SECTION
Section 4.15(1)(a)(i) - Environmental planning instruments	Section 4.6
Section 4.15(1)(a)(ii) - Draft environmental planning instruments	n/a
Section 4.15(1)(a)(iii) - Development control plans	Section 4.7.1
Section 4.15(1)(a)(iiia) - Planning agreement	Section 4.4.4
Section 4.15(1)(a)(iv) - The Regulations	Section 4.5
Section 4.15(1)(b) - Likely impacts	Section 5
Section 4.15(1)(c) - Site suitability	Section 6.1
Section 4.15(1)(d) - Submissions	Section 6.2
Section 4.15(1)(e) - The public interest	Section 6.3

4.4.3 Section 4.46 of the EP&A Act – Integrated Development

The subject development application is "integrated development" as provided for under Section 4.46 of the EP&A Act, as an aquifer interference approval will be required for the construction of the future basement under section 91 of the *Water Management Act 2000*. In this regard it is noted that preliminary ground water testing has indicated that the proposed basement would intercept the groundwater levels on site (refer section 6.8). The future basement design will ensure no adverse impact however the application should be referred to Water NSW for its general terms of approval.

4.4.4 Section 7.4 of the EP&A Act – Planning Agreement

A voluntary planning agreement is proposed (refer **Appendix 11**) as part of the subject proposal. The VPA provides for the payment of section 7.11 contributions in accordance with Council's Draft St Leonards South Precinct Section 7.11 Contributions Plan.

4.5 Environmental Planning and Assessment Regulation 2021

Part 3 of the *Environmental Planning and Assessment Regulation 2021* prescribes certain procedures relating to development applications and other matters to be considered by a consent authority in its determination of a development application.

Clause 24 requires that a development application must contain all the information and documents required by an approved form and the Act and Regulation. The subject application is consistent with these requirements.

Clause 27 requires the submission of a BASIX certificate issued within 3 months with the lodgement of a DA for BASIX Development. The subject application is such development and is accompanied by a compliant certificate (refer **Appendix 9**).

Clause 29 requires that a development application for residential apartments to be accompanied by a statement by a qualified designer which verifies that he or she designed, or directed the design, of the development, and providing an explanation that verifies how the design quality principles are achieved. It must also demonstrate, in terms of the Apartment Design Guide, how the objectives in Parts 3 and 4 of that guide have been achieved. A design statement in accordance with this requirement is provided at **Appendix 4** and summarised at Section 3.1.

4.6 Environmental planning instruments

4.6.1 State and Regional Development SEPP

Part 2.4 and Schedule 6 of the *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP) nominates certain forms of development as "regionally significant" and provides that the relevant regional panel is the consent authority for that development application.

As this proposal has a capital investment value of more than $30 million (approx. $138 million – Refer QS Report at **Appendix 12**), it is classified as regionally significant development. The Sydney North Planning Panel is therefore the consent authority for the subject application.

4.6.2 Transport and Infrastructure SEPP

State Environmental Planning Policy (Transport and Infrastructure) 2021 (Transport and Infrastructure SEPP) provides the statutory planning framework for the delivery of government infrastructure and services across NSW.

Clause 2.121 and Schedule 3 of the Infrastructure SEPP set out those traffic generating developments that must be referred to the Roads and Maritime Service (RMS). As the proposed development provides for more than 200 car parking spaces, the development will need to be referred to RMS under this provision.

A Traffic, Parking and Access Study (**Appendix 13**) is provided with the development application which demonstrates that the proposed development will not result in more than minor impacts in terms of traffic and / or parking.

4.6.3 Resilience and Hazards SEPP

State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP*)* provides a State-wide planning approach to the remediation of contaminated land by requiring the consideration of whether the land is contaminated and, if it is contaminated, whether it can be made suitable for the proposed purpose.

A Preliminary Site Investigation (**Appendix 14)** has been prepared which notes that the site has been used for residential purposes from 1930 onward. It notes that site history information and a site walkover inspection identified the following areas of environmental concern (AEC): imported fill; potential application of pesticides; hazardous building materials in existing site structures and upgradient off-site land uses including a dry cleaner and several service station/motor garages. The report concludes that a Detailed Site Investigation should be undertaken however concludes that it has not identified contamination that would preclude the proposed development/use of the site.

Accordingly, it is considered that the requirements of the SEPP have been satisfied and that the site is suitable for the proposed residential use. A Detailed Site Investigation will be prepared prior to the issue of the construction certificate. A condition of consent to this effect is considered appropriate.

4.6.4 Biodiversity and Conservation SEPP

Chapter 2 of the *State Environmental Planning Policy (Biodiversity and Conservation) 2021* (Biodiversity and Conservation SEPP) aims to protect the biodiversity values of trees and other vegetation, and associated amenity values, by regulating the clearing of native vegetation on urban land.

Consent is sought for tree removal as part of the subject application in accordance with the requirements of the SEPP.

Chapter 10 of the Biodiversity and Conservation SEPP applies to land within the Sydney Harbour Catchment. The Lane Cove LGA falls within the catchment area, however the subject site is outside of the Foreshore and Waterways Area as defined. The planning principles set out in clause 10.10, for land within the Sydney Harbour Catchment, are therefore the only provisions required to be considered. An assessment of the proposal against the planning principles is provided in Table 5 below:

Table 5: Sydney Harbour Catchment Principles Assessment

PLANNING PRINCIPLES	RESPONSE
(a) development is to protect and, where practicable, improve the hydrological, ecological and geomorphological processes on which the health of the catchment depends	The proposed development will not result in any impact in terms of the hydrological, ecological and geomorphological processes associated with the Sydney Harbour Catchment. Appropriate measures to mitigate impact in terms of stormwater management and excavation have been incorporated in to the proposal as outlined in the civil plans at **Appendix 15** and stormwater report at **Appendix 16**.
(b) the natural assets of the catchment are to be maintained and, where feasible, restored for their scenic and cultural values and their biodiversity and geodiversity	The proposed development relates to land that is already developed for urban purposes and will not affect any natural assets significant to the Sydney Harbour Catchment area.

PLANNING PRINCIPLES	RESPONSE
(c) decisions with respect to the development of land are to take account of the cumulative environmental impact of development within the catchment	The proposed development will not give rise to any cumulative environmental impacts within the catchment.
(d) action is to be taken to achieve the targets set out in Water Quality and River Flow Interim Environmental Objectives: Guidelines for Water Management: Sydney Harbour and Parramatta River Catchment (published in October 1999 by the Environment Protection Authority), such action to be consistent with the guidelines set out in Australian Water Quality Guidelines for Fresh and Marine Waters (published in November 2000 by the Australian and New Zealand Environment and Conservation Council),	The proposed development is not likely to give rise to any impacts on water quality flow or targets however as noted above measures to mitigate impact in terms of stormwater management and excavation have been incorporated in to the proposal (refer **Appendix 15 and 16**).
(e) development in the Sydney Harbour Catchment is to protect the functioning of natural drainage systems on floodplains and comply with the guidelines set out in the document titled Floodplain Development Manual 2005 (published in April 2005 by the Department),	The subject site is not located with a floodplain. Appropriate measures to mitigate impact in terms of stormwater management and excavation have been incorporated in to the proposal (refer **Appendix 15 and 16**).
(f) development that is visible from the waterways or foreshores is to maintain, protect and enhance the unique visual qualities of Sydney Harbour,	Development on site would not be visible from the waterways or foreshores of Sydney Harbour given intervening distance and topography. Therefore, no significant visual impacts would result from the proposed development.
(g) the number of publicly accessible vantage points for viewing Sydney Harbour should be increased,	Not applicable
(h) development is to improve the water quality of urban run-off, reduce the quantity and frequency of urban run-off, prevent the risk of increased flooding and conserve water,	Appropriate measures to mitigate impact in terms of stormwater management and excavation have been incorporated in to the proposal (refer **Appendix 15 and 16**).
(i) action is to be taken to achieve the objectives and targets set out in the Sydney Harbour Catchment Blueprint, as published in February 2003 by the then Department of Land and Water Conservation,	Not applicable
(j) development is to protect and, if practicable, rehabilitate watercourses, wetlands, riparian corridors, remnant native vegetation and ecological connectivity within the catchment	Not applicable
(k) development is to protect and, if practicable, rehabilitate land from current and future urban salinity processes, and prevent or restore land degradation and reduced water quality resulting from urban salinity,	Not applicable
(l) development is to avoid or minimise disturbance of acid sulfate soils in accordance with the Acid Sulfate Soil Manual, as published in 1988 by the Acid Sulfate Soils Management Advisory Committee	The subject land is not affected by acid sulfate soils as identified on Council's LEP map.

4.6.5 SEPP 65

State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development (SEPP 65) states that a consent authority is to give consideration to the design quality principles outlined in the SEPP and the *Apartment Design Guide* (ADG) in determining a development application for a residential flat building.

The design matters specified including height, FSR, setbacks, access and solar access etc. have been considered in the proposed design. The proposed development is consistent with SEPP 65 and the guiding elements of the ADG, in particular those relating to building separation, building depth, solar access and natural ventilation for residential flat buildings.

A Design Verification Statement has been prepared by Koichi Takada Architects (**Appendix 4**) which includes an assessment of the proposal against the design quality principles of SEPP 65 which is replicated at Table 6 below.

Table 6: Consideration of proposal against SEPP 65 principles (Koichi Takada Architects)

PRINCIPLE	ASSESSMENT
Principle 1: Context And Neighbourhood Character Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions. Responding to context involves identifying the desirable elements of an area's existing or future character. Well-designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change	Located with the new St Leonards precinct, the site is characterized by the future/masterplan vision for a new residential precinct that integrates landscape and built form. The site is well positioned between Willoughby and St Leonards Station, as well as the planned nearby Crows Nest Metro, with new cycleways and walkways offering green travel alternatives. The design works with the masterplan objectives, building on the proposed pocket parks and landscaping enhanced by a 24m Green Spine landscaping.
Principle 2: Built Form And Scale Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings. Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.	The height, bulk and scale is generally consistent with the precincts' masterplan for the area as well as the wider context. The proposal respects the lower scale nature of the residential properties to River Road through a transition from a 3-storey street wall and terracing upwards to the 8-9 storey component. The gradual stepping reduces the perceived bulk and scale from River Road and is more aligned with the natural topography of the site. The building form has been broken into distinct forms to break down the mass and create articulation along the building mass. A 3m x 3m slot in each building is utilised to divide the form into two and provide a better amenity to the units. The slot facing the street allows natural light to the study layouts, while the internal slot provides natural light and ventilation to the common lift lobby. The 9m wide Through-Site Link creates a visual and physical connection east/west through the site, allowing the two adjacent pocket parks to be visually connected.
Principle 3: Density Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context. Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.	The site is located within the R4 - High Density Residential zone and is a transitional zone from the higher density mixed-use developments of St Leonards Station to the R2 Low density residential. The Department of Planning projects an increase of residential population and a desire to see more affordable housing and a greater variety in the area. As such, the proposed development plays an integral role as part of the precinct and responds accordingly to the availability of infrastructure, transport, demand and environmental quality. The sustainability of the proposed development is further supported by the proposal of new active transport links, cycle ways and the neighbouring Crows Nest Metro station. New green spaces and community facilities will service the new local community including the nearby Council park and pocket parks proposed to the ends of Berry and Holdsworth Roads. The St Leonards residents will enjoy the new local open spaces as well as the nearby local community facilities.

PRINCIPLE	ASSESSMENT
Principle 4: Sustainability Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials and deep soil zones for groundwater recharge and vegetation.	The proposed building is designed to satisfy energy and efficiency performance standards designed to achieve verification for water conservation, thermal comfort and energy efficiency. Natural light and cross ventilation are provided to all common corridors on all levels via passive systems. The proposed mixed use development aims to revitalise the heart of Lane Cove and create a community that is healthy, safe and resilient. The core tenets of environmental, social and economic sustainability are placed front and centre as a design response to this vision. The project incorporates ESD initiatives that go above and beyond regulatory requirements to produce a site that will consist of comfort living condition, energy efficient, water efficient and pleasant living environment. The unit layouts encourage less reliance on mechanical systems with good cross flow ventilation and shading, as well as integrating power generation by way of PV's. A solar photovoltaic (PV) system is proposed to be installed on the rooftop of each high-rise building. The current area achieves a system size of 30kW or greater. Embedded in the design are the following sustainable initiatives: • Passive design ensuring minimum 6 Star NatHERS rating • Energy efficient LED lighting • Control systems tuned to maximise building performance • Solar photovoltaic system • WELS star rated fixtures • Supplemental bicycle parking spaces • Outdoor motion activated misters and water features to provide relief on hot days • Activated public and communal open space with inclusive, passive, active and growing zones
Principle 5: Landscape Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well-designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood. Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values and preserving green networks. Good landscape design optimises useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long term management.	The principal design approach was to create an intrinsic relationship between architecture and nature while maintaining pedestrian connectivity across the steep topography. The green spine combines communal areas with private terraces, negotiating a steep level change. There is appropriate screening to ensure visual privacy, while creating a lush and green environment. A fully accessible path in the green spine ensures equitable access and enjoyment of the key landscape spaces in the Green Spine. Landscaping on the façade reinforces the architectural language, strengthening the setbacks levels, terraces and slots. The architectural de-sign incorporates façade planters and planted green roofs on the lower levels to facilitate a strong connection to landscape. The biophilic design increases user comfort, wellbeing and amenity. Deep soil area on site has been maximized, exceeding the Apartment Design Guide's (ADG) requirement for 7%. This allows mature trees to be planted on-site and raised planters will be used where there is basement underneath.
Principle 6: Amenity Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity	The new building optimises residential amenity and incorporates a range of 1 Bed, 2-Bed and 3-Bedroom apartments providing a varied residential mix. Corner units are maximised in order to provide the opportunity for maximising views and cross ventilation. Living rooms are pushed to the

PRINCIPLE	ASSESSMENT
contributes to positive living environments and resident well-being. Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility.	building extents where possible in order to maximise on solar access into both the internal living room and private open space. Façade screens, a feature awning and landscaping are used to address visual privacy between the units and the green spine open space. Canopy trees aid in providing privacy from the communal uses in the green spine. Visual and acoustic privacy is further achieved for the residential apartments by adhering to the ADG building separation guidelines.
Principle 7: Safety Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety. A positive relationship between public and private spaces is achieved through clearly defined secure access points and well-lit and visible areas that are easily maintained and appropriate to the location and purpose.	Main pedestrian entries to the development are accessed from both Berry Rd and Holdsworth Ave, and from the Through-Site link, to allow a continuous visual and physical link through the development. The alignment of the wider through-site link allows clear sight lines in order to create casual surveillance throughout. The ground level has been designed to make visible and attractive entries to the building. The entries are well lit, naturally during the day, and will have security surveillance and intercoms to identify visitors to the building complex. Access to the basement car parking will be secured by means of a roller shutter at all times. The typical apartments above have balconies along the perimeter that allow a level of casual surveillance of the surrounding public walkways. Direct access to the lift and stair from the car-park allows residents to drive and enter through a completely secured means.
Principle 8: Housing Diversity And Social Interaction Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets. Well-designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.	The proposed building is designed to respond to future vision of the St Leonards South precinct and to achieve a range of housing choice to suit a diverse demographic and needs of its future residents. The new residential proposal will contribute positively to the surrounding area, allowing an injection of new life into this transitional area, to align with the desired future character of the locality and the social needs were considered carefully. The proposal consists of one, two and three-bedroom apartment types of varying sizes to support a range of socioeconomic groups. The typical apartments aim to attract a variety of owner/occupiers and tenants. The design promotes social interaction between residents through its variety of communal outdoor spaces including the rooftop terraces and public green spine connections. These dynamic spaces are visually appealing but also encourage a place of social interaction through a range of activities and uses including outdoor kitchens, outdoor dining, sheltered areas and seating.
Principle 9: Aesthetics Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures. The visual appearance of a well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.	The three main design features of the building include the horizontal slab edges detailed with a thin edge with timber look screens, combined with soft edges and curves that provide an organic and complimentary residential building. A continuous and contrasting coloured banding emphasises the curves and the horizontality along the façade. The culmination of the curved balcony corners, timber screens and feature awning all create a warm and inviting residential architectural expression that helps to reduce the perceived bulk and scale and enhance the land-scape character that is prevalent in the master-plan. The natural material palette is comprised of sandstone utilised to define the interface with the site and ground the design into the steeply sloping terrain. The timber look screening in an oak texture and colouring creating a subtle correlation to the landscaped surrounds. The horizontal planters are integrated at the Level 1 awning, providing increased privacy to the units, and defining the ground level lobby entries. The feature timber awning, turning 90degrees, strengthens the vertical breaks in the form,

PRINCIPLE	ASSESSMENT
	creating a slot that effectively divides the towers in two parts. The building steps back above the fifth storey enhanced with a perimeter planter. The top level of the towers is recessed from the floors below and takes on a lighter façade ex-pression. With a thin roof overhang, and large expanses of glass, the top level units enjoy district views and large wrap around.

Given the above, it is considered that the proposal is consistent with design principles of SEPP 65 and will achieve design excellence.

Apartment Design Guide

SEPP 65 is accompanied by the Apartment Design Guide (ADG), which provides design criteria and general guidance about how development proposals can achieve the nine design quality principles identified in SEPP 65.

The Design Verification Statement at **Appendix 4** includes an assessment of the proposed development against the ADG criteria.

In summary, the proposed development complies with all ADG outcomes outlined in Part 3 and 4 including:

- Communal and public open space
- Deep soil zones
- Visual privacy
- Bicycle and car parking
- Solar and daylight access
- Natural ventilation
- Ceiling height
- Apartment size and layout
- Private open space and balconies
- Common circulation and spaces, and
- Storage.

No areas of non-compliance have been identified.

4.6.6 State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

BASIX was introduced to ensure new buildings containing residential dwellings (with staged introduction for dwellings, units and alterations and additions) reduced the consumption of water and energy, compared to average use. The required targets can be achieved by various design methods which are not prescribed, rather the outcome of reduced water and energy use is prescribed.

A BASIX Certificate dated 2 April 2022 (that is, within 3 months of lodgement) is provided at **Appendix 17**.

4.6.7 Lane Cove Local Environmental Plan 2009

The subject land is currently zoned R4 High Density Residential under *Lane Cove Local Environmental Plan 2009* (LCLEP 2009) as shown in Figure 17 below. Residential flat buildings are permissible in the R4 zone with consent.

The objectives of the R4 zone are:

- *To provide for the housing needs of the community within a high density residential environment.*
- *To provide a variety of housing types within a high density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To provide for a high concentration of housing with good access to transport, services and facilities.*
- *To ensure that the existing amenity of residences in the neighbourhood is respected.*
- *To avoid the isolation of sites resulting from site amalgamation.*
- *To ensure that landscaping is maintained and enhanced as a major element in the residential environment.*

The proposal is consistent with these objectives.

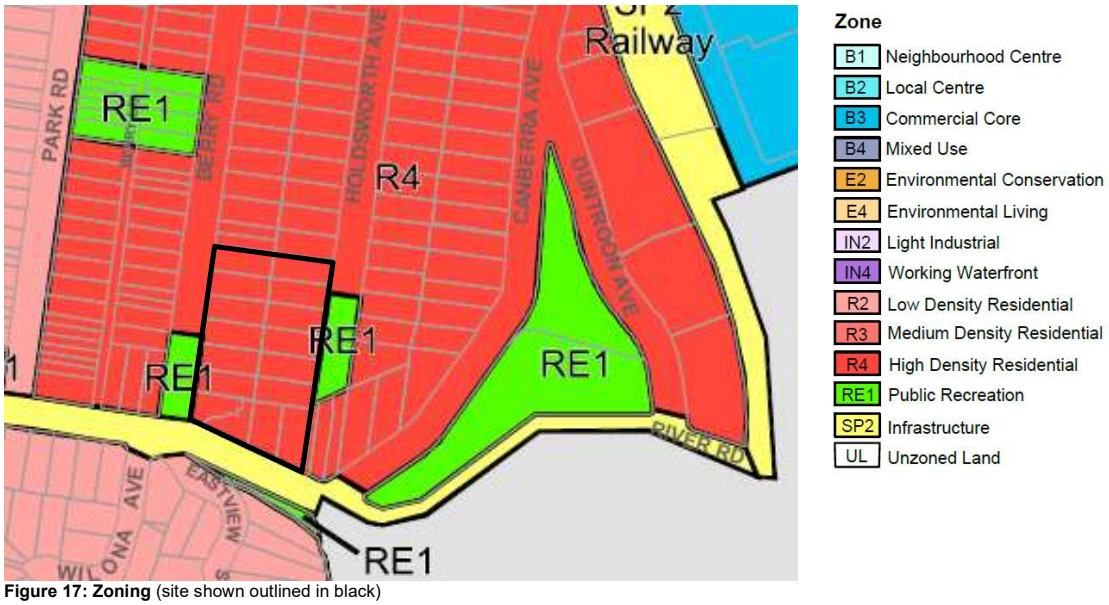


Figure 17: Zoning (site shown outlined in black)

The site is located with the St Leonards South Precinct to which incentive height and FSR provisions apply in accordance with Part 7 of LCLEP 2009.

The compliance of the proposal with the relevant provisions of the LCLEP 2009 is addressed in Table 7 below.

Table 7: LCLEP 2009 Compliance

CLAUSE	COMMENT	COMPLIES
Clause 4.3 Height of buildings	Maximum 'base' height limit of 9.5m. Overridden by Part 7 St Leonards South Precinct Incentive provisions (refer below)	**n/a**
Clause 4.4 Floor space ratio	Maximum 'base' height limit of 0.5 & 0.6:1. Overridden by Part 7 Incentive provisions (refer below)	**n/a**
Clause 6.1 Acid sulfate soils	This clause provides that consent is required for certain works on land classified as containing, or located in the vicinity of, acid sulfate soils. The subject site is not classified as containing acid sulfate soils and the proposed development does not entail works within 500m of any acid sulfate soils.	**n/a**
Clause 6.1A Earthworks	This clause generally requires development consent for earthworks and requires that the consent authority consider certain matters before granting consent for earthworks to ensure the works will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land. The proposed earthworks will not have a detrimental impact on environmental functions or surrounding lands (refer Erosion and Sediment Control Plan at **Appendix 15** and Geotech Report at **Appendix 18).**	**Complies**
PART 7 – Additional Local Provisions – St Leonards South Area **Clause 7.1 Development on land in St Leonards South**		
Clause 7.1(1) Objectives	This clause identifies that the objectives of this section is to promote residential development by providing height and FSR incentives in St Leonards South that provides for:	Complies

CLAUSE	COMMENT	COMPLIES
	(a) *community facilities, open space, including communal open space, and high quality landscaped areas, and* *(b) efficient pedestrian and traffic circulation, and* *(c) a mix of dwelling types in residential flat buildings, providing housing choice for different demographics, living needs and household budgets, including by providing affordable housing, and* *(d) the amalgamation of lots to prevent the fragmentation or isolation of land.* The proposal provides for residential development in accordance with the objectives.	
Clause 7.1(2) Development clause applies to	This clause applies to the subject development being for the erection of 5 residential flat buildings within the St Leonards South Area.	Applies
Clause 7.1(3) Incentive height and FSR provisions	This clause allows that despite clauses 4.3 and 4.4 the consent authority may consent to development on land to which this clause applies that will result in a building with a height that does not exceed the height identified on the Incentive Height Map and an FSR not exceeding the FSR identified on the Incentive FSR Map.	**Complies** Maximum incentive heights: Area 18: 31m Area 19: 31m Area 20: 15m & 31m Further discussion is provided at section 5.2.1 and **Appendix 4**. Maximum incentive FSR: 2.6:1 2.6:1 FSR proposed
Clause 7.1(4) Matters to be satisfied	Development consent must not be granted under this clause unless the consent authority is satisfied that: (a) *at least 20% of the total number of dwellings (to the nearest whole number of dwellings) contained in the development will be studio or 1 bedroom dwellings, or both, and* *(b) at least 20% of the total number of dwellings (to the nearest whole number of dwellings) contained in the development will be 2 bedroom dwellings, and* *(c) at least 20% of the total number of dwellings (to the nearest whole number of dwellings) contained in the development will be 3 or more bedroom dwellings, and* *(d) the development will provide appropriate building setbacks to facilitate communal open space between buildings, and* *(e) the development will comply with the requirements of clause 7.2 in relation to the minimum site area of the development, and* *(f) the development will, if applicable, comply with the requirements of clause 7.3 in relation to the minimum number of dwellings that will be used for the purposes of affordable housing, and* *(g) the development will, if applicable, comply with the requirements of clause 7.4 in relation to the minimum*	**Complies** The proposal is consistent with the required dwelling mix and will provide dwellings as follows: 1 bed – 33% 2 bed – 47% 3 bed = 20% A green spine with minimum width of 24m (as required is provided) Refer compliance with clauses 7.2, 7.3, 7.4 and 7.5 below.

CLAUSE	COMMENT	COMPLIES
	area that will be used for the purposes of recreation areas and community facilities, and *(h) the development will, if applicable, comply with the requirements of clause 7.5 in relation to the provision of pedestrian links and roads.*	
Clause 7.2 Minimum Site Area Requirements	The minimum site area is as follows: Area 18 – 1,500 sq. m Area 19 – 1,500 sq. m Area 20 – 5,200 sq. m	**Complies** The proposal complies with Council's required amalgamation pattern and the minimum site areas providing for a site totalling 8,758m^2 and comprising all lots in Areas 18, 19 and 20.
Clause 7.3 Minimum Affordable Housing Requirements	Not applicable to Areas 18, 19 and 20	**n/a**
Clause 7.4 Minimum Recreation Area and Community Facility Requirements	Not applicable to Areas 18, 19 and 20	**n/a**
Clause 7.5 Requirements for Pedestrian Links and Roads	Area 20 is required to provide a publicly accessible 6m wide pedestrian link to connect Berry Road and Holdsworth Avenue	**Complies** A 9m wide through site link is provided
Clause 7.6 Design Excellence – St Leonards South Area	Development consent must not be granted for development to which this clause applies unless the consent authority considers that the development exhibits design excellence. Matters to be considered in determining whether a development exhibited design excellence are included.	**Complies** A detailed assessment is provided at **Section 5.1 below.**

Having regard to the above it is concluded that the proposal is entirely consistent with the applicable development standards contained in LCLEP 2009 and in particular is consistent with all site specific provisions for St Leonards South including the incentive provisions.

There are no other relevant provisions contained in LCLEP 2009.

4.7 Other Polices and Plans

4.7.1 Lane Cove Development Control Plan 2009

Lane Cove Development Control Plan 2009 (LCDCP 2009) is the principle DCP that applies to the site. A detailed assessment of the application against the relevant provisions is provided at **Appendix 19**. Part C of the DCP provides the built form provisions for the St Leonard South Locality (Locality 8). Other general provisions also apply and are considered in the assessment.

The assessment concludes that the proposal complies with all relevant provisions with the exception of:

- Maximum storey height of 8 storeys – Building C has a maximum storey height of 9 storeys which does not comply with this DCP requirement however the building height fully complies with the height in metres as provided for under LCLEP 2009. Although the building does not comply with this DCP provision the LEP provision prevails. Further architectural treatments have been applied to the upper levels of the Building (Level 8 and 9) to ensure that these elements are lightweight, not highly visible and will not add to the bulk of the

building. These measures include high levels of glass, additional setbacks and lightweight materiality. Given these circumstances and the site slope it is considered that the proposed variation is acceptable in the circumstance.

- Soil depth over loading dock – The soil depth above the loading dock does not comply with the LMP requirements due to site slope and head height requirements. However, the area has been designed to incorporate planters to support appropriate planting and hardscape areas which will provide a high level of amenity to future residents.
- Through site link gradient – whilst the western end of the through site link achieves a grade of 1:20 the eastern achieves a grade of 1:14 due to the slope of the land and the desire to provide ramped access rather than stairs and chair hoist. This is considered appropriate given the site slope and the desirability of autonomous access arrangements.

In accordance with Section 4.15(3A) of the EP&A Act a consent authority is to be flexible in applying DCP provisions to development and to allow reasonable alternative solutions that achieve the objects of those standards for dealing with that aspect of the development. The proposed design will achieve the objectives of the storey control, soil depth and gradient controls via alternative means. Accordingly, it is considered that these variations are appropriate in the circumstances.

4.7.2 Lane Cove Section 94 Contribution Plan

The *Lane Cove Section 94 Contribution Plan* applies to the subject site.

However, it is noted that Council has prepared the *Draft St Leonards South Precinct Section 7.11 Development Contributions Plan* (March 2020) which has not yet come into force. In accordance with Council's requirements a VPA offer (refer **Appendix 11**) is provide with the subject application which proposes development contributions in accordance with the Draft Plan. This offer is in lieu of contributions under the existing Lane Cove Section 94 Contribution Plan.

5. ENVIRONMENTAL ASSESSMENT

This section provides an assessment of the likely impacts of the proposed development in accordance with section 4.15(b) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The potential environmental impacts and associated mitigation measures are also discussed below and in the supporting specialist reports provided as appendices.

5.1 Design Excellence

The proposed development will deliver the highest standard of architectural and urban design.

In accordance with LCLEP 2009, development within St Leonards South may utilise incentive height and FSR provisions in accordance with Clause 7.1 where the proposal is considered to achieve design excellence. In this regard it is noted that the proposal was been considered extensively by the North Sydney Regional Organisation of Councils (NSROC) Design Review Panel, most recently at its Design Excellence Meeting of 14 December 2021. Minutes of the meeting are provided at **Appendix 20**. At the meeting the Panel noted that it "appreciated that substantial professional effort had been directed toward reviewing the Panel's recommendations following the initial concept presentation on 9 March 2021" further noting that key design elements had been revisited and the initial concept substantially modified.

Key changes to the initial scheme considered at the December 2021 meeting included the provision of a 24m wide "green spine", the introduction of a three-storey townhouse boulevard form to River Road, the introduction of major communal facilities into the linear spine, vehicular access from Holdsworth Avenue rather than Berry Road and the introduction of clear address points to buildings within the subject site. The Panel supported these amendments.

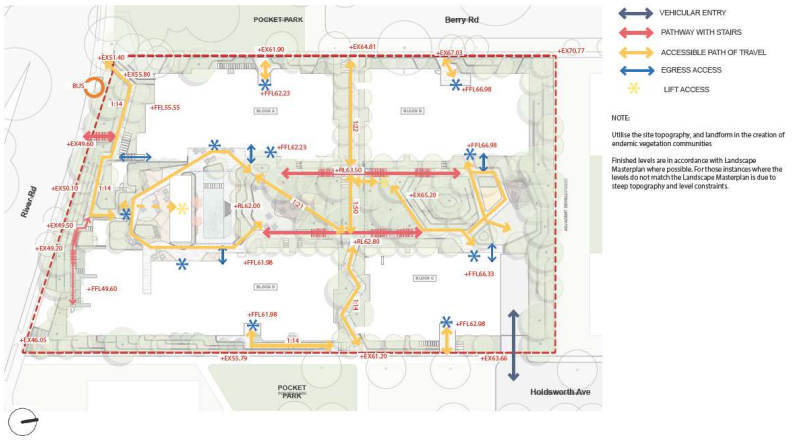
Further the Panel went on to assess the proposal against the nine design excellence principles including: (1) Context, (2) Built Form + Scale, (3) Density, (4) Sustainability, (5) Landscape, (6) Amenity, (7) Safety, (8) Housing Diversity + Social Interaction, (9) Aesthetics. In summary the Panel recommended that:

> *… the "pre-DA concept design is further refined in terms of enhancing the built form modulation to the streets and green spine, increased equity of access to communal open space and facilities, clarification of landscape elements (both vertical and horizontal) to reflect the 'street walls' and the visual linking of entry lobbies to the green spine.*

It further recommended that subject to addressing issues raised by the Panel, the subsequent DA documentation should be submitted to Council. Issued raised by the Panel included:

Table 8: DEX Issues Assessment

NSROC DEX PANEL RECOMMENDATION	DESIGN RESPONSE
Enhance built form modulation to the streets and green spine	As illustrated on the architectural plans the building form modulation has been increased from both the street frontages and the green spine. The building form has been broken into distinct forms to break down the mass and create articulation along the building mass. A 3m x 3m slot in each building is utilised to divide the form into two and provide a better amenity to the units. The slot facing the street allows natural light to the study layouts, while the internal slot provides natural light and ventilation to the common lift lobby. The buildings present with a strong street wall and upper levels setback 3m from the street frontage with the topmost levels setback a further distance of 4.750m – 5.250m from the street frontages and 1000mm – 1550mm from the green spine to ensure the upper level is recessive. The buildings also step back from their northern and southern alignment at the upper levels. Further a lighter façade expression is applied to the upper levels of the buildings to minimise height and bulk. As amended the proposed design is therefore highly modulated from all frontages both external and internal to the site.
Increase equity of access to communal open space and facilities	Equitably access have been provided to the communal open space and facilities as suggested by the Panel and indicated on the accessibility plan below (refer Landscape Design report at **Appendix 6** for further details).

NSROC DEX PANEL RECOMMENDATION	DESIGN RESPONSE
	
Clarify landscape elements (both vertical and horizontal to reflect the 'street walls' and the visual linking of entry lobbies to the green spine	The feature banding along the facade provides a soft green edge along the 1st & 2nd levels as it wraps the building. The setback levels provide perimeter planting defining the street wall. Each building entry is clearly legible from the street with a curved entry feature running vertically throughout a 3m x 3m inset, further articulating the vertical break within the building form. All buildings have direct physical access and visual connection to the green spine from the common lift lobbies.

An assessment of the proposal against the matters prescribed under Clause 7.6 is provided at **Appendix 4**. In summary the assessment confirms that the proposal exhibits design excellence.

5.2 Built form and Massing

The proposed built form ranges in scale from 3 storeys to generally 8 storeys (Building C being 9 storeys only) to provide a variety of urban scales stepping down the site consistent with the landform and to provide appropriate transitions to adjacent development including a 3 storey street wall height at the River Road frontage.

The built form is aligned to the edges of a permeable grid to create a legible and clear high-density urban development with a well-defined public realm. The building massing, scale and setbacks combine to provide good solar access and opportunities for natural cross ventilation for the apartments. The site has been planned to address the perimeter of the block to overlook streets, the green spine, public spaces and pedestrian links. Further, all units will have views of landscaped areas including streets, courtyards and public areas to provide high amenity and outlook.

More specifically, the building envelopes have been oriented and designed to:

- ensure adequate sunlight to apartments and solar access to the public domain, including streets and parks
- provide for appropriate separation and privacy between buildings
- create a strong street wall with upper levels stepping back to reduce bulk, height and scale
- respond to the topography, provide for accessibility and to take advantage of district views
- comply with the gross floor area consistent with LCLEP 2009
- reinforce the spatial definition of the streets and contribute to a high quality and engaging public domain, and
- allow for generous internal open spaces that add to the amenity of the apartments and to the pedestrian experience.

It is considered that the variety in building heights will create a diverse and interesting neighbourhood with the careful consideration of massing, materials, fenestration and building scale.

5.2.1 Height and floor space ratio

The subject application relies on the St Leonards South incentive provisions of LCLEP 2009 and will provide for a maximum height of 31m fronting Berry Road and Holdsworth Avenue and 15m fronting River Road. Further it is

consistent with the incentive maximum floor space ratio (FSR) that applies of 2.6:1. The maximum permissible height is illustrated on the architectural plans (**Appendix 3)** and a FSR calculation is also provided demonstrating compliance.

All buildings also comply with the maximum number of storeys as specified in LCDCP 2009 with the exception of Building C which comprising a total of 9 rather than 8 storeys notwithstanding that it remains within the maximum height in metres of 31m as specified by the LEP. The variation in storey height for this single building is considered appropriate as:

- the top level of the building is further setback behind the lower levels to reduce its perceived height and bulk
- it is located at the upper levels of the site and is therefore significantly separate from existing lower scale residential development to the south and
- will be read in the context of high buildings immediately to the north as buildings step down the precinct from north to south.

Further it is noted that constraining the building to 8 storeys in height would be inconsistent with section 3.43(5) of the EP&A Act which provides that a provision of a DCP has no effect to the extent that it is inconsistent or incompatible with a provision of an EPI. In this case the proposed height is consistent with the LCLEP numerical height notwithstanding non-compliance with the storey provision in the DCP.

The proposal also complies with the 2.5m height limit with no structures greater than this height proposed in the green spine or through site link areas.

5.2.2 Setbacks

The proposed building setbacks are varied in response to context, typology and amenity and are consistent with LCDCP 2009. A setback of 10m is provided along the River Road frontage for Building E which comprises a three storey form. Above this level Buildings A and D are setback a further 13.7m providing a total 23.7m+ setback from the River Road frontage to the taller building elements. This provides a substantial transition to lower density development across River Road to the south. A high quality landscape treatment is also proposed along this frontage with direct pedestrian access into the townhouse form units fronting River Road.

Other ground level setbacks comply with LCDCP 2009 requirements (4m setback to Berry Road and Holdsworth Avenue) with an additional 3m setback at Level 5 and above. The upper levels of the buildings are also further setback to minimise height and bulk.

The proposal will provide building separation consistent with the ADG requirements to ensure privacy between the buildings. 24m separation is provided between buildings across the Green Spine and 9m separation across the through site link. This is consistent with, or exceeds, the ADG requirements.

5.2.3 Building Length

LCDCP specifies that buildings are to be limited to 35m in length. The provision is predicated on the need to optimise solar access to buildings and open space and to minimise visual impacts. Notwithstanding, buildings may be greater than 35m where they are strongly articulated. The proposed building lengths exceed the minimum requirement (as outlined in the DCP Compliance Table at **Appendix 20**) however a 3m by 3m articulation slot in each building is utilised to divide the form of each building (with the exception of Building E) into two and thereby break down the building length. The slot also provides a better amenity to the units with the slot facing the streets allowing natural light to the study layouts, while the internal slot provides natural light and ventilation to the common lift lobby. Building E is a low (three storey) form which is highly articulated.

5.3 Residential Amenity

The proposal is consistent with the objectives and design criteria nominated by SEPP 65 and the associated ADG as outlined in the assessment at **Appendix 4** prepared by KTA. In summary the proposal complies with all relevant requirements.

5.3.1 Privacy

Privacy between buildings is minimised through the siting of buildings along the perimeter of the block with units addressing the street frontages and the green spine area. Further the green spine width of 24m ensures that no privacy issues arise in an east west direction within the development.

Generally potential privacy issues are limited to units with frontage to the proposed 9m wide through site link which runs east west. To address any potential privacy concerns rooms fronting the link to Level 5 (9m separation) are generally limited to bedrooms and service rooms with colourback glazing and screening utilised to ensure no privacy impacts arise. The southern façade of Buildings B and C employ colourback glazing and screening to these rooms while on the northern façade of Buildings A and D some clear glazing is provided as no privacy issues will arise across the interface. This provides for a habitable to non-habitable interface across the link which under the ADG requires a separation of 9m. This will ensure casual surveillance of the link whist also limiting privacy issues. Above Level 5 a non-habitable to non-habitable interface is proposed with windows screened or colourback glazing utilised to ensure no privacy issues. Operable glazing is protected by screening across all buildings as appropriate.

Section 4.11 of Design Report at **Appendix 4** provides further detail on the privacy measures proposed.

5.3.2 Solar access

The proposed units have been designed to maximise solar access to living rooms and private open space with primary living areas generally positioned adjacent to the building façade to optimise access to sunlight.

Sun eye diagrams (**Appendix 3**) and the unit schedule at section 7 of the Design Report at **Appendix 4** illustrate the solar access provision for all units.

In summary the proposal complies with the ADG requirements with 70% of units (171/245) receiving at least the minimum of 2 hours sunlight per day in midwinter as required. This represents the worst case situation with solar access provision increased throughout the remainder of the year.

Only 6% of units (14/245) will not receive any solar access in midwinter which is significantly less than the ADG maximum of 15%. These units are the townhouse style units fronting River Road which given the site configuration and slope have limited ability to access sunlight in midwinter. These units are however provided with additional amenity through their 2 storey layout, direct access to River Road and large private terraces. Further all residents will have access to significant areas of communal open space in the green spine which has good solar access in the middle of the day in midwinter (refer shadow diagrams at **Appendix 3**).

The proposed units will therefore provide a high level of amenity to future residents in terms of solar access.

5.3.3 Natural ventilation

The proposed units have also been designed to maximise natural cross ventilation as far as possible. The unit schedule at section 7 of the Design Report at **Appendix 4** illustrates the natural cross ventilation provision for all units.

In summary the proposal complies with the ADG requirements with 61% of units (149/245) achieving natural cross ventilation as required. Natural ventilation is also provided to public corridors and common lift lobbies. Corner units are maximised in order to maximise views and cross ventilation. The units also comply with the minimum depth requirements set out under Section 4D-3 – Apartment Layouts and the minimum ceiling height requirements established by Section 4C – Ceiling Heights of the ADG which will assist in maximising airflow.

5.3.4 Overshadowing

Shadow plans have been prepared by KTA and are included within the Architectural Plans at **Appendix 3**. The analysis demonstrates that the proposal will have minimal shadow impacts during the Winter Solstice (21st June) and is reasonable in the context of the proposed density.

With the exception of at 9am and 3pm, shadows from the proposal will be contained to within the site itself or adjacent roadways. At 9am some shadow impact will occur to land to the west across Berry Road however this will have moved off by 10am ensuring sunlight throughout the remainder of the day. At 2pm in mid-winter shadow from the proposal will impact the property to the east (Top Spring development) however no shadow impacts will occur before this time.

It is noted that pocket parks are proposed at the southern termination of both Berry Road and Holdsworth Avenue immediately adjacent to the site. The proposal provides that some overshadowing of these areas (current roadways) will occur in the am and pm respectively however throughout the middle of the day in midwinter these new parks will remain in full sunlight with shadows tracking southward.

Notably low density residential dwellings across River Road to the south will be not be impacted in terms of shadow by the proposed development.

Shadow plans are also provided for the Summer Solstice (21 December) and illustrate that the impact of the proposal is minimal in summer. The proposal will provide cooling shade to the central green spine before 11am and after 2pm. This will enhance the useability of this important communal space.

5.4 Landscaping and open space

Aspect has prepared the landscape scheme for the site which is outlined in the landscape plans at **Appendix 5** and landscape design report at **Appendix 6**. The proposed design has been prepared in accordance with Council's LMP for the St Leonards South Precinct.

The proposal is entirely consistent with the master plan and overarching design principles set out in the LMP including specifically providing:

- A 9m wide publicly accessible through site link between Buildings A and B and Buildings C and D embellished with landscape planting and consists of paving that is lined with trees and accent planting
- A multi-functional Green Spine in accordance with the LMP which is proposed to be embellished with a range of facilities including a community lounge, kids play space, WSUD rain garden, swimming pool (with kids paddle pool, water lounge, stepping stone crossing and water cascade), outdoor BBQ and spread out space seating areas, outdoor working space, community plaza adjacent to amenity space within the building, terraced turf relaxing areas, sensory garden and lawn space
- A high level of accessibility throughout the green spine and connecting all buildings to the communal areas and facilities via a series of ramps
- An extensive landscaped setback on the River Road frontage to provide a high quality 'green' transition from the development to low scale residential to the south
- Terracing to ensure a seamless transition to the site to the future development site to the north, and
- Extensive street tree planting with mature trees along all street frontages.

An assessment of the proposal against the LMP and DCP requirements is provided in the Landscape Design report at **Appendix 6 and Appendix 19**. Notably the proposal complies with, among other matters:

- Green Spine area – 2,140m^2 required, 2,170m^2 proposed
- Green Spine width – 24m required, 24m proposed
- Through site link – minimum 6m width required, 9m width proposed
- Deep Soil – 50%+ required, 57% proposed
- Green spine softscape – minimum 60% required, 60% proposed
- Green spine area for mature canopy tree cover – minimum 50% required, 65% proposed.

The only non-compliances identified are:

- Eastern section of through site link grade 1:14 rather than preferred 1:20 – note western section 1:20 however eastern section not able to achieve due to site slope
- Minimum soil depth of 1m not able to be achieved above loading dock due to site levels – rather are designed to provide hardscape community gathering and play space. Raised and terraced garden spaces also included to ensure minimum 350mm for lawn, 600mm for shrubs and groundcover, 900mm for small trees, 1,000mm for medium trees and 1,300mm for large trees.

These non-compliance are minor and considered acceptable in the circumstances.

5.5 Traffic and transport

A traffic, parking and access assessment of the proposed development has been prepared by SCT Consulting and is provided at **Appendix 13**. It outlines the traffic related implications of the proposal and addresses the proposal's compliance with the statutory parking controls. This section summarises the findings of the assessment.

It should be noted that Aimsun modelling has not been provided in the assessment as detailed Aimsun traffic modelling was undertaken by Lane Cove Council for the St Leonards South precinct considering the cumulative

traffic impacts arising from the proposed development totalling 2,400 dwellings prior to rezoning. Based on the site area and permissible Floor Space Ratio, Lot 18, 19 and 20 could accommodate approximately 325 dwellings under the original assumption. This is approximately 33 per cent more than the proposed 245 dwellings under this DA. Therefore, it is expected that the traffic impact of this DA would be far less than that originally assessed as part of the Aimsun modelling.

5.5.1 Traffic / trip generation

Vehicle trip generation was calculated in accordance with the traffic generation rates nominated by TfNSW (and agreed by Council) that is:

- 0.14 Vehicle trips per dwelling in the AM peak hour period (8am – 9am); and
- 0.07 vehicle trips per dwelling in the PM peak hour (5pm – 6pm).

The estimated trip generation as a result of the proposed development is outlined below:

Item	Existing residence	East Quarter	Net increase
Total dwellings	16 dwellings	245 dwellings	-
AM peak traffic generation rate	0.95 cars per dwelling*	0.14 cars per dwelling	-
AM peak total traffic	15 car trips	34 car trips	**+19 car trips**
PM peak traffic generation rate	0.99 cars per dwelling*	0.07 cars per dwelling	-
PM peak total traffic	16 car trips	17 car trips	**+1 car trips**

*Based on The Guide to Traffic Generating Developments Updated traffic surveys – Technical Direction TDT2013/04a

The total scale of traffic impacts for the proposed development is therefore less than 20 vehicles per hour in both peak periods.

Given the scale of other growth in the area, this DA represents approximately 12 per cent of the anticipated St Leonards South potential uplift and an even smaller proportion of the total uplift anticipated by the Land Use and Infrastructure Implementation Plan.

The distribution of this demand is expected to be:

- 10 additional peak hour trips on Pacific Highway
- 9 additional peak hour trips on River Road.

In terms of person trips, using the agreed mode share, the number of person trips / mode is estimated below. The person trip generation of the existing 16 residential dwellings has not been considered therefore the estimated trips are likely to be higher than actual with no reduction for existing trips.

Mode of travel	Mode share	East Quarter trips	
		AM peak	PM peak
Car	12.5%	34	17
Car as passenger	2.5%	7	3
Train	56%	154	77
Walk only	19%	52	26
Bus	6%	16	8
Other	4%	11	5
Total	**100%**	**274**	**137**

Public transport mode share is high in the St Leonards South area, with 30 per cent of peak hour trips occurring on trains and buses. The proposal would create an additional 180 trips predicted during the AM peak, and 85 trips predicted during the PM peak, using public transport. While the public transport network in the area is currently very close to capacity, the completion of the Crows Nest Metro planned service by 2024, in combination with current services, will be more than sufficient to accommodate for the increased capacity.

Proposed upgrades to the pedestrian and cycle networks include undertaking footpath and cycle path improvements, improving pedestrian crossings and creating East-West links to enhance connectivity within the

precinct. The number of walking trips generated during peak periods is 222 during the AM peak period and 111 during the PM peak period, which are relatively small figures. Therefore, the number of trips generated by the proposal during the peak periods is at a level able to be accommodated by the existing and planned services.

In summary the scale of additional vehicle trips in the network is less than 20 vehicles per hour in each peak period, which is small in comparison to the other proposed developments in the area. Previous traffic modelling by Lane Cove Council indicated that with improvements to the network, the cumulative impact of the growth (before the St Leonards Crow Nest Plan 2036) was manageable.

Accordingly, the proposed development is compliant with the Local Environmental Plan and Council's DCP in terms of land use type and floor space ratio, resulting in a permissible development yield and relatively small net traffic increase when the development is completed. Hence, it is expected that the trip generation of the development would be accommodated by the existing and planned infrastructure.

5.5.2 Parking Provision

The proposal is in accordance with the LCDCP rates for parking as set out below:

User group	Unit type	No. of units	Parking rates	Required spaces	Provided spaces
Residents	One bed	82 units	1 space per dwelling	82 spaces	-
	Two bed	117 units	1.5 spaces per dwelling	176 spaces	
	Three bed	46 units	2 spaces per dwelling	92 spaces	
Visitors	-	245 units	1 space per 4 dwellings	61 spaces	
Car wash	-	245 units	1 space per 50 dwellings	5 spaces	
Total	**-**	**245 units**	**-**	**416 spaces**	**417 spaces**

One disabled space for each adaptable housing unit and one disabled space per 50 visitor spaces is required. Accordingly, the provision of 51 disabled parking spaces is similarly compliant.

The rate of provision of motorcycle spaces under the Lane Cove Council DCP is 1 space per 15 car spaces for all types of development. The provision of 28 motorcycle parking is therefore sufficient.

Bicycle parking at a rate of 1 space per 4 dwellings for residents and 1 rack per 10 dwellings for visitors is required. 61 spaces for residents and 26 spaces for visitors is therefore required. The proposal provides for 66 on-site bicycle parking for residents and 26 spaces for visitors and therefore complies with these requirements.

One on-site removalist truck space per 100 residential units is required. Hence, the provision of two loading spaces is sufficient for the site.

Further the car park has been designed in accordance with relevant Council standards and a swept path analysis is provided at **Appendix 13**.

5.5.3 Construction Traffic Management

A detailed Construction Traffic Management Plan (CTMP), which will include a construction traffic control plan, will be prepared prior to commencement of construction and in accordance with the *Traffic Control at Work Sites Technical Manual* (2010). The CTMP will address the overall traffic management of the site during the construction phase, including provision for vehicular and pedestrian access, parking for construction vehicles and appropriate wayfinding. The vehicular movements and expected routes to and from the site will also be further quantified and defined.

Notwithstanding a preliminary assessment of impact has been undertaken and it is predicted that the number of trucks movements generated during the demolition stage would be approximately four trucks per day and approximately 10-11 trucks per day during the construction phase. Access routes to the construction compound will depend on the construction approach, which is yet to be determined however it is noted that there is no specific restriction on truck weight on the surrounding road network. The proposed haulage route would be via Pacific Highway and Berry Road.

To mitigate impacts it is proposed that worker traffic will be minimised by construction workers generally starting earlier and finishing earlier than the commuter peak periods and would not coincide with the school or road network peak periods. Construction workers will be encouraged to carpool or travel to work by public transport, further reducing the impact on the road network and local on-street parking during the construction period.

Having regard to the above it is considered that the traffic, parking and access arrangement are appropriate and will not result in any adverse impact.

5.6 Civil works and water management

As noted above preliminary ground water testing (refer **Appendix 26**) has indicated that the proposed basement is likely to intercept the groundwater levels on site and therefore require an aquifer interference approval under the *Water Management Act 2000.* The future basement design will ensure no adverse impact however the application should be referred to Water NSW for its general terms of approval.

In terms of stormwater management Robert Bird Group has prepared a stormwater management system for the site which is detailed in the Civil Drawings and Stormwater Management report included at **Appendix 15 and 16**. The drawings define the requirements for the control, treatment and discharge of stormwater from the development site.

Proposed stormwater drainage systems are designed for the peak flow of 50-year Average Recurrence Interval (ARI) storm events, and for overland flow / flooding for major storms up to 100-year ARI. The site is divided in to two catchment areas: Catchment A will be treated by an OSD tank within the building basement whilst Catchment B (generally around the perimeter of the site) will bypass the OSD and connect to the existing street system on River Road. The proposed OSD tank has been calculated using the Lane Cove Council's OSD calculation sheet (included in **Appendix 16**) and has a capacity of 185m^3. A water treatment train (including raingardens, is proposed to ensure that the quality of the water discharging from the site in the post-development scenario meets the adopted targets.

An Erosion and Sediment Control Plan (refer **Appendix 15**) for the site has also been prepared and will be implemented during the construction phase. The ESCP details measures such as silt fencing, sediment fences and hoarding to be used to maintain the quality of the stormwater discharge.

A Cut and Fill Plan is also provided at **Appendix 15**. It identifies that excavation will extend to a maximum depth of approximately -25 to -30m in the north western corner of the site generally reducing to the south east. An excess of 16,916m^3 of cut will be generated by the proposed works. A construction management plan will be prepared prior to the issue of a construction certificate and will address the method and site of disposal of excess material. Suitable traffic management arrangements for the disposal will also be addressed.

5.7 Noise and vibration

An Acoustic report has been prepared for the site by PKA Acoustics and is provided at **Appendix 21**. It addresses:

- Existing ambient (background) noise levels at the site and surrounding residential receivers
- Mechanical plant noise breakout goals for future detailed design
- Internal wall and floor/ceiling acoustic requirements to comply with sound insulation requirements of the Building Code of Australia (BCA), and
- Establishment of Construction Noise & Vibration Goals.

The report identifies the acoustic requirements of the façade and elements to ensure compliance with the relevant acoustic criteria. The proposal will be constructed in accordance with these requirements and will therefore comply. Primarily it notes that upgraded construction will be required along the southern building facades facing River Road.

Further the report notes that the selection and placement of any outdoor mechanical equipment must be designed to acoustically comply with the criteria established in Section 4.2.1 of the report. This will be addressed prior to the issue of a construction certificate. A Construction Noise & Vibration Management Plan will also be prepared prior to the issue of a construction certificate and will confirm compliance with the construction noise and vibration goals established in the report.

Subject to the recommendations of the acoustic report it is considered that the units will provide an appropriate level of acoustic amenity to the future residents and that the development will not result in any adverse noise or vibration impacts to the neighbourhood.

5.8 Tree removal

The proposed development will necessitate the removal of 103 trees, as detailed in the Arboricultural Impact Assessment prepared by Laurence Co provided at **Appendix 7**. The removal of the trees is required to accommodate the proposed building layout and excavation. The proposed tree removal includes 6 street trees which are in poor condition, and which are proposed to be replaced with mature specimens as part of the proposed works. A total of 28 trees, primarily street trees, are proposed for retention and will be protected during the construction phase.

The report provides a methodology for the removal of trees and a tree protection plan for trees to be retained. Key measures include the installation of geotextile permeable membranes where appropriate and the use of raised platforms and scaffolding to protect the TPZ of trees proposed for retention. A project arborist will also be engaged to monitor compliance with the protection measures.

Subject to the proposed tree protection measures, and proposed replacement planting as detailed in the landscape plan, it is considered that the proposed tree removal is unavoidable and acceptable in the circumstance.

5.9 Contamination

A Preliminary Contamination Assessment has been prepared by JK Environments and is provided at **Appendix 14**. The report provides a preliminary assessment of potential sources of contamination and assesses whether the site is suitable for the proposed development.

The report notes that following a review of the site history information and site walkover inspection, the following areas of environmental concern (AEC) were identified: imported fill; potential application of pesticides; hazardous building materials in existing site structures and upgradient off-site land uses including a dry cleaner and several service station/motor garages.

Soil sampling for the PSI was undertaken from six boreholes. The boreholes generally encountered fill material to depths of approximately 0.35m below ground level (BGL) to 1mBGL, underlain by residual clayey and sandy soils. The fill contained inclusions of sand, sandstone and igneous gravel, brick fragments, silt and root fibres. A selection of soil samples was analysed for the contaminants of potential concern identified in the conceptual site model. Zinc was detected in fill above the ecological based Site Assessment Criteria (SAC).

The report recommends that a Detailed Site Investigation should be undertaken however concludes that the PSI has not identified contamination that would preclude the proposed development/use of the site. Accordingly, it is considered that the site is suitable for the proposed residential use. A Detailed Site Investigation will be prepared prior to the issue of the construction certificate.

5.10 Safety

The proposed development has been designed in accordance with the principles of Crime Prevention Through Environmental Design (CPTED) including natural surveillance, access control, territorial reinforcement and space management as illustrated in Table 9 below:

Table 9: Consideration of CPTED Principles

CPTED PRINCIPLE	RESPONSE
Natural surveillance	The provides provide clear vistas along streets and the through site link which ensures for effective surveillance. Units have been designed to front the streets, green spine, and the through site link thus providing for natural surveillance. Dwelling entries have also been designed to address the street and to be clearly visible from the public domain. Landscape planting reinforces natural surveillance and has been designed to minimise secluded, unsurveilled areas
Access control	The proposed design provides for clear entry points to buildings from the streets and the green spine area. The green spine / communal open space has been designed to attract and encourage people to gather in a myriad of purpose designed spaces rather than in private spaces. Access to the central green spine space is controlled via entry gates off the through site link. Further access to basement car parking will be controlled via entry shutters.
Territorial reinforcement	The built form and landscape design clearly defines the public, shared and private areas throughout the development while at the same time encouraging casual surveillance to ensure a high level of safety and security. Spaces within the Green Spine are clearly delineated for their respective uses either by residents or the general public. Entry gates off the through site link provide a high level of territorial reinforcement and express a sense of ownership to reduce illegitimate use/entry.
Space management	Appropriate materials have been incorporated into the development to discourage vandalism and ensure ease of management and maintenance.

The proposal will enhance the general safety of the area by delivering a vibrant high-quality residential development that is activated at all times of the day. The proposal has been designed to allow for clear lines of sights and casual surveillance. In particular, the surrounding street network and the internal Green Spine will benefit from a high level of surveillance. Accordingly, the proposal provides a high level of safety when assessed against the CPTED principles.

5.11 Accessibility and BCA compliance

ABE Consulting has prepared an Accessibility Report which is provided at **Appendix 22**. The report includes a review of the proposal against the BCA 2019 provisions, Disability (Access to Premises – Building) Standards and Australian Standards. Further it includes an assessment of the proposed visitable and adaptable housing units against AS4299-1995. In summary the report confirms, with the adoption of the recommendations / Performance Solutions, the development readily achieves compliance with the relevant standards.

A Preliminary BCA Issues report has also been prepared by City Plan and is provided at **Appendix 23**. The report confirms that the proposal is capably of complying with all relevant provisions.

5.12 Social impacts

The proposal will facilitate redevelopment of the site for high density housing, providing important capacity to absorb a growing population, in accordance with LCLEP 2009 and consistent with the St Leonards and Crows Nest 2036 Plan, the North District Plan and the Greater Sydney Region Plan*: A Metropolis of Three Cities*.

The proposal will assist to meet dwelling targets and will provide housing choice in a highly accessible location close to employment and public transport. The proposal will support population growth and will in turn provide for greater utilisation of existing and new infrastructure in the locality (including the new Metro rail line under construction).

The proposed development will facilitate the delivery of a number of positive of community benefits including a new east-west through site link which will connect to the surrounding pedestrian network and high quality public domain and landscape areas in the form of a central connecting green spine to realise Council's vision for the area and retain the leafy character of the area.

The subject site is highly accessible and is within easy walking distance of both the St Leonards Station and Crows Nest Metro Station. It will provide community benefit as it will allow future development to take full advantage of its location in close proximity to transport infrastructure in the form of a transit-oriented development, which has benefits that are wider that just the local community.

The proposed development is located near to the local centre of St Leonards with a full range of services and facilities including food and retail shops, medical services and the like.

The site is also close to the major teaching hospital of the Royal North Shore Hospital (approximately 560m), and there are a number of school and child care choices close to the site in all directions. Macquarie University is located approximately 10.5km from the site.

It is recognised that the proposal will result in an increase in the residential population on the site and therefore an increased demand for social services. Improvements to services and facilities will be required to be funded through the payment of section 7.11 contributions.

5.13 Ecologically sustainable development

The EP&A Regulation lists four principles of ecologically sustainable development to be considered in assessing a project. They are:

- the precautionary principle;
- intergenerational equity;
- conservation of biological diversity and ecological integrity; and
- improved valuation and pricing of environmental resources.

5.13.1 Precautionary Principle

The precautionary principle provides that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The precautionary principle requires careful evaluation of potential environmental impacts in order to avoid, wherever practicable, serious or irreversible damage to the environment.

This SEE has not identified any serious threat of irreversible damage to the environment as a result of the proposal and therefore the precautionary principle is not applicable.

5.13.2 Intergenerational equity

Inter-generational equity seeks to ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.

The subject site is on an already developed site which will be transformed into a high density residential environment which will incorporate central open space within the built form environment. This ‘green spine’ will connect to the wider area and enhance the leafy environment of the precinct and associated amenity value.

5.13.3 Conservation of biological diversity and ecological integrity

The principle of biological diversity upholds that the conservation of biological diversity and ecological integrity should be a fundamental consideration.

The subject site is an existing disturbed area with no known threatened species or habitat and there are no anticipated to be any adverse impacts on biological diversity or ecological integrity as a result.

5.13.4 Improved valuation, pricing and incentive mechanisms

The principles of improved valuation and pricing of environmental resources requires consideration of all environmental resources which may be affected by a proposal, including air, water, land and living things.

As demonstrated in this SEE, the project will have strong social, economic and environmental benefits.

5.14 Construction Management

It is intended that a detailed Construction Environmental Management Plan will be prepared prior to the issue of a Construction Certificate and once a contractor has been engaged. The Construction Environmental Management Plan will address a range of construction issues to minimise impacts including:

- the proposed methods for access to and egress from the site for construction vehicles
- the proposed phase of construction works on the site and the expected duration of each construction phase
- the proposed order in which works on the site will be undertaken, and a method statements on how various stages of construction will be undertaken

- the proposed method of pedestrian management surrounding the site (if required) for the various stages of the development
- the proposed method for traffic management during excavation, demolition and construction
- the proposed areas within the site to be used for the storage of excavation materials, construction materials and waste containers during the construction period
- the proposed method/device to remove loose material from all vehicles and/or machinery before entering the road reserve
- erosion and sediment control, and
- dust suppression measures and stockpile protection.

It will also include specific recommendations included in specialist reports as outlined above.

All work will be undertaken during standard construction hours.

6. OTHER RELEVANT CONSIDERATIONS

6.1 Site suitability

The site is considered to be suitable for the proposed development as this assessment demonstrates that it is consistent with all relevant planning controls, with Council's vision for the redevelopment of the St Leonards South Precinct and will not have unacceptable social, economic or environmental impacts on the surrounding locality

6.2 Submissions

The proposal will be exhibited in accordance with requirements of the EP&A Act, and in accordance with procedures adopted by Lane Cove Council in its Community Participation Plan. Any submissions received can then be considered by Council and the Sydney North Planning Panel in its assessment of the application.

6.3 Public interest

The proposal is in the public interest as it will provide additional high quality housing and housing choice to cater for a growing population in a highly accessible location with excellent access to public transport, services and employment. There are no matters which have been identified which indicate that the proposed development would not be in the public interest.

7. CONCLUSION

This report constitutes a Statement of Environmental Effects (SEE) and accompanies a Development Application which seeks consent for the development of land at 22-34 Berry Road, 21-31 Holdsworth Avenue and 42-46 River Road, St Leonards South (the site) for the purposes of 5 multi-storey residential flat buildings and associated works. The land comprises the entirety of Areas 18, 19 and 20 as identified under *Lane Cove Environmental Plan 2009 (LCLEP 2009)* to which specific incentive provisions apply.

The aim of this report has been to:

- describe the components of the proposal
- discuss the potential environmental effects of the proposal
- draw conclusions as to the significance of any impacts, and
- make a recommendation to Lane Cove Council and the Sydney North Planning Panel as to whether the development application should be approved.

The proposal is consistent with all applicable State Environmental Planning Policies which apply to the site, including SEPP 65 and the Apartment Design Guide, as well as the site zoning and all relevant provisions contained within the LCLEP 2009. It is also consistent the site specific and general provisions of the LCDCP 2009.

In a broader strategic context, the proposed development is consistent with the *Greater Sydney Region Plan: A Metropolis of Three Cities*, the *North District Plan*, the *St Leonards Crows Nest 2036 Plan* (2036 Plan), and the *Lane Cove Local Strategic Planning Statement*.

The above assessment concludes that there are no significant environmental constraints on the site that preclude the proposed development, that the development will provide for a development of design excellence that accords with Council's vision and specific controls for the St Leonards South Precinct and that the development will not give rise to any significant adverse impacts.

The proposed development represents a significant investment in the redevelopment and revitalisation of the St Leonards South area to meet the changing demographic and housing needs of the community. It will facilitate the delivery of high quality, high density residential development, increasing the amount and variety of housing in the Lane Cove Local Government Area within close proximity of public transport and services. This is in accordance with local and State government policies which have designated the St Leonards South Precinct as suitable for higher density residential uses given its proximity to jobs, services and transport infrastructure.

Having regard to the above assessment it is concluded that the proposed development is appropriate on the site and within the locality and should therefore be approved.