



Statement of Environmental Effects

Residential Flat Building

12-24 Stanley Street,
Kogarah, NSW 2217

Submitted to St Georges River Council
On Behalf of Poly Australia

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Report Revision History

Revision	Date Issued	Prepared by	Reviewed by	Verified by
Draft	2/05/18	Jack Davies <i>Assistant Planner</i>	David Ryan <i>Executive Director</i>	
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This document is preliminary unless approved by a Director of City Plan Strategy & Development

CERTIFICATION

This report has been authorised by City Plan Strategy & Development, with input from a number of other expert consultants, on behalf of Poly Australia. The accuracy of the information contained herein is to the best of our knowledge not false or misleading. The comments have been based upon information and facts that were correct at the time of writing this report.

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Appendix	Document	Prepared by
1.	Clause 4.6 variation Request (Height)	CPSD
2.	DCP Compliance Table	CPSD
3.	Survey	SDG Land Development Solutions
4.	Architectural Plans Shadow Diagrams Calculation Plans	Scott Carver
5.	SEPP 65 Design Report, Statement & ADG Compliance Table	Scott Carver
6.	Photomontage & 3D Sketchup Model	Scott Carver
7.	Landscape Plans and Report	Turf Design Studio
8.	BASIX Documentation	Windtech
9.	Acoustic Report	PKA Acoustic Consulting
10.	Access Report	MGAC
11.	Arborist Report	Naturally Trees
12.	Heritage Impact	Artefact Heritage
13.	BCA Design Assessment Report	Steve Watson & Partners
14.	Operational Waste Management Plan	Elephants Foot
15.	Construction and Demolition Waste Management Plan	Poly Australia
16.	Geotechnical Investigation Report	JK Geotechnics
17.	Civil Plans	WSP
18.	Stormwater Management Report	WSP
19.	Traffic and Parking Assessment	Traffix
20.	Pedestrian Wind Environment Statement	Windtech
21.	Solar Light Reflectivity Analysis	Windtech
22.	Cost Report	Altus Group

2. Executive Summary

This Statement of Environmental Effects (SEE) has been prepared for Poly Australia by City Plan Strategy and Development Pty Ltd (“CPSD”) to accompany a Development Application (“DA”) to Georges River Council. The subject site is known as Nos. **12-24 Stanley Street, Kogarah** (“the site”).

The proposal is for the demolition of the existing structures on the site and the construction of a residential flat building (RFB) that is eleven (11) storeys in height with 114 residential apartments and four (4) basement levels. The development will subsequently consolidate the existing twelve (12) allotments, and strata subdivide to 114 titles.

This SEE has been prepared pursuant to Section 4.12 of the *Environmental Planning and Assessment Act, 1979* and Clause 50 of the *Environmental Planning and Assessment Regulation, 2000*. It is proposed to:

- describe the proposed development and its context;
- assess the proposal against the applicable planning controls and guidelines; and
- assess the potential environmental impacts and mitigation measures.

The proposal is representative of the desired future character of the Kogarah locality as described in the recent amendments to the Kogarah LEP and the Kogarah North Draft Urban Design Strategy, which has informed amendments to the Kogarah DCP.

The proposed development seeks to vary one Development Standard pursuant to the *Kogarah Local Environmental Plan 2013* (KLEP) in relation to Clause 4.3 'Height of Buildings' (HOB). The Clause 4.6 Variation report is provided at **Appendix 1**.

In view of the contents of this report, we are satisfied that this proposal has properly responded to all relevant matters for consideration within Section 4.15 of the Environmental Planning and Assessment Act, and the accompanying Regulation.

Any potential environmental impacts have been addressed in the design or are manageable by conditions of consent. The site is suitable, and in view of the positive social impacts in the form of improved housing choice in an accessible location, we conclude that approval of the development is appropriate and in the public interest.

3. The Site and Context

3.1 The Site

The subject site is located at 12-24 Stanley Street, Kogarah and is situated within an area known as the Kogarah North Precinct. The land is located in the Local Government Area of Georges River, is approximately 12km south west from the Central Business District (CBD) of Sydney, and approximately 4km south west of the Sydney Kingsford Smith Airport. See **Figures 1 and 2**.

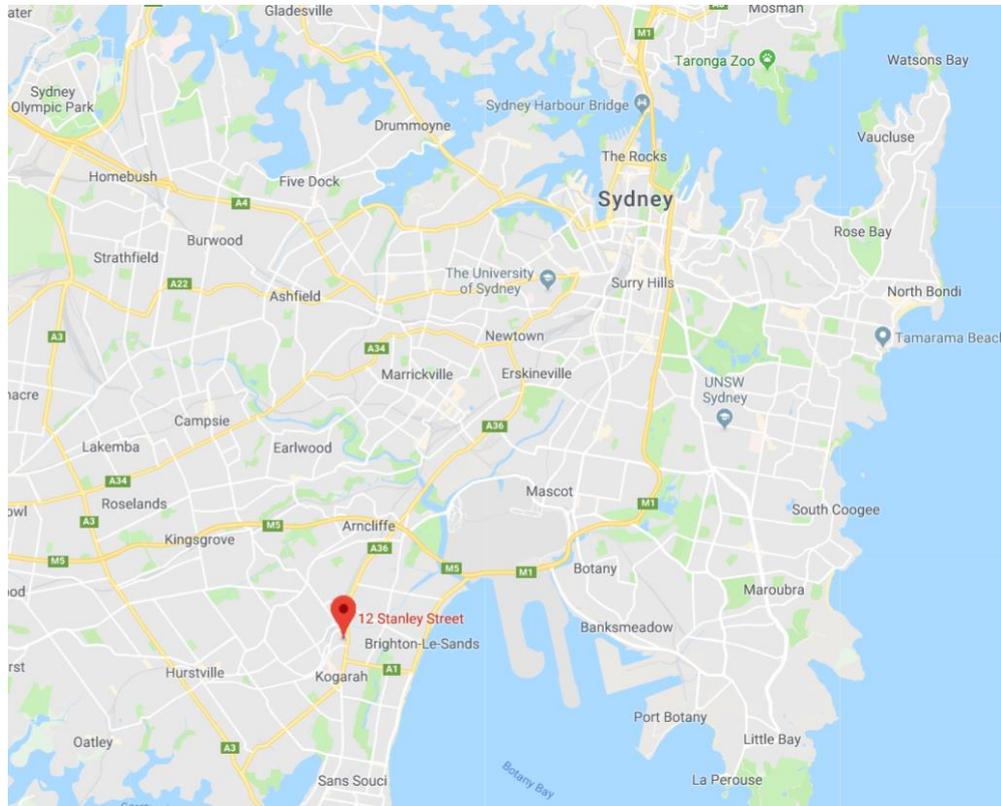


Figure 1: Location of the site in the broader context (Source: Google maps)



Figure 2: The site (outlined in blue) and existing allotments (outlined in red) (Source: Six Maps)

The site currently comprises eight allotments as follows:

TABLE 1: SITE LEGAL DESCRIPTIONS AND ADDRESS

Address	Lot and Plan
12 Stanley Street	Lot 55 Section B DP 1397
14 Stanley Street	Lot 56 Section B DP 1397
	Lot 57 Section B DP 1397
16 Stanley Street	Lot 58 Section B DP 1397
	Lot 59 Section B DP 1397
18 Stanley Street	Lot 60 Section B DP 1397
	Lot 61 Section B DP 1397
20 Stanley Street	Lot 62 Section B DP 1397
	Lot 63 Section B DP 1397
22 Stanley Street	Lot 64 Section B DP 1397
	Lot 65 Section B DP 1397
24 Stanley Street	Lot 66 Section B DP 1397

The amalgamated site forms a rectangular shape with a combined area of 2,452m² as demonstrated in the Survey Plans prepared by SDG Land Development Solutions and provided at **Appendix 3**. The site slopes downwards towards the east with a fall of approximately 3 metres.

The dimensions of the site are as follows:

TABLE 2: SITE DIMENSIONS

Boundary	Frontage	Dimension
North (Stanley St boundary)	Stanley Street	73.11m
East	-	33.54m
South	Stanley Lane	73.17m
West	-	33.54m

3.2 Existing Improvements

The site currently contains four (4) single storey dwellings, and three (3) two-storey detached dwellings all fronting Stanley Street with rear access available in Stanley lane (See **Figures 3-5**). The land also accommodates various forms of ancillary structures and outbuildings associated with the dwellings.



Figure 3: Existing 2-storey structures at the subject site



Figure 4: Existing single storey dwellings at the subject site



Figure 5: Rear access to existing dwellings via Stanley Lane

3.3 Context and Surrounding Land Uses

The site is located towards the northern end of the Kogarah Town Centre, and has frontage to Stanley Street, which leads onto the Princes Highway, an important state arterial road. As such, there is a variety of different development types in the area. Key features of the surrounding area are described below:

- The site is located within a main residential area in the Kogarah North Precinct, which is currently going through transition from low residential development to high density residential.

- Existing development within Stanley Street ranges between single storey cottage style dwellings, two storey dual occupancy and single occupancy dwellings and a six-storey mixed use development.
- The site is within 600m of the Kogarah Train Station to the south-west, and close to several bus stops on Regent Street and the Princes Highway.
- Princes Highway is a busy arterial road carrying heavy traffic, and consists of mixed use development, including residential, commercial uses, car sales yard, and restaurant/cafes.
- The site is approximately 350m to the north-east of Kogarah High School and 200m south of St Georges Girls High School;
- The site is 550m north-east of the Kogarah Town Centre. The Kogarah Town Centre is a strategic centre providing health and commercial related employment opportunities and various other facilities;
- The site is 900m and 750m to the North of the St George Public Hospital and St George Private Hospital respectively;
- The Sydney Airport (Sir Kingsford Smith) is located approximately 4.4km to the north east, and is identified as being within the Obstacle Limitation Surface prescribed for the airport;

Refer to **Figures 6 to 9** which give an understanding of the surrounding context.



Figure 6: Different typologies of development along Stanley Street (Source: Google maps)



Figure 7: Views looking north (left) and south (right) along Princes Hwy at the intersection of Regent St (Source: Google Maps)



Figure 8: Kogarah Public School as viewed from Victoria Street (left) and Palmerson St (right) (Source: Google Maps)



Figure 9: Existing development within the Kogarah Town Centre (Source: Google Maps)

3.4 Strategic Planning Context

The Kogarah North precinct was recently rezoned under the 'New City Plan' amendment to the KLEP. This rezoning resulted in the creation of a high density residential precinct in Kogarah North.

The Draft Kogarah North Urban Design Strategy was prepared to guide the transformation of the Kogarah North Precinct and provided recommendations to allow Council to determine a preferred urban design and planning response to future redevelopment of the Kogarah North area.

As of the 27 November 2017, Council endorsed the Kogarah North Urban Design Strategy as a Strategic Planning document which subsequently informed the recent amendments to the DCP controls for the Kogarah North Precinct.

The design of the development has considered this Strategy, and is consistent, complying with the recommended urban design principles within the strategy and recently amended DCP. A Compliance Table is provided at **Appendix 2** which provides a more comprehensive assessment of the proposal against the strategy.

4. Description of the Development

4.1 Overview

This Development Application seeks consent from Georges River Council (GRC) for the demolition of the existing structures on the site and the construction of a part eleven (11) storey and part ten (10) storey residential flat building (RFB).

The proposal provides a substantial improvement to the site and surrounding locality by creating new housing opportunities in a strategic location that is reflective of the desired future character of the locality.

4.2 Development Statistics

The key statistics and elements of the project are shown in the **Table 3** below:

TABLE 3: DEVELOPMENT STATISTICS

Element	Proposal
Site Area	2,452m ²
Gross Floor Area/FSR	9814m ² / 4:1
Maximum Height	35.1m above existing ground level (51.90RL)
Total Apartments	114 apartments comprising: <ul style="list-style-type: none">▪ 31 x 1 Bedroom (27%)▪ 66 x 2 Bedroom (58%)▪ 17 x 3 bedroom (15%)
Solar Access (2hrs minimum)	83/114 units (73% of all units)
Cross Ventilation	61/98 units (62% of all units)
Communal Open Space	898m ² (37% of site area)
Deep Soil	157m ² (6.4%)
Total Car Parking	175 spaces comprising: <ul style="list-style-type: none">▪ 158 x residential spaces▪ 17 x visitor spaces
Total Bike Parking	84 spaces
Maximum depth of excavation	13.5m

Note: Development Statistics calculated by Scott Carver

4.3 Detailed Description

In detail, the DA consists of the following components:

- Demolition of all existing structures;
- Amalgamation of the twelve allotments (12) allotments into one (1) allotment;
- Excavation of the site for four (4) basement levels;
- Construction of an eleven (11) storey RFB, comprising the following:
 - 114 residential units;
 - 898m² of communal open space in various locations, including on the roof;
 - Closure of 3 existing driveways, and the construction of one new driveway located off Stanley Lane; and

- 175 car parking spaces, 84 bike parking spaces and 1 loading/service bay
- Removal of 4 trees located on the site;
- Landscaping of the site; and
- Land dedication for the widening of Stanley Lane.

The following table provides a summary of the proposal per level:

TABLE 4: DETAILS OF THE DEVELOPMENT

Level	Use	Uses / Car Parking Spaces / Bedrooms	GFA
Basement Level 4	Residential car parking and storage	46 residential car spaces, storage space	-
Basement Level 3	Residential car parking and storage	46 residential car spaces, storage space	-
Basement Level 2	Residential car parking and storage	44 residential car spaces, storage space and water storage	
Basement Level 1	Residential car parking and storage	25 residential car spaces, 17 visitor car spaces, storage space, OSD tank, Garbage rooms.	-
Ground Floor	16 residential units	10 x 1 Bedroom 6 x 2 Bedroom	992m ²
Level 1	7 residential units	6 x 2 Bedroom 1 x 3 Bedroom	981m ²
Level 2	18 residential units	9 x 1 Bedroom 8 x 2 Bedroom 1 x 3 Bedroom	1077m ²
Level 3	7 residential units	6 x 2 Bedroom 1 x 3 Bedroom	988m ²
Level 4	10 residential units	2 x 1 bedroom 6 x 2 bedroom 2 x 3 Bedroom	865m ²
Level 5	10 residential units	2 x 1 bedroom 6 x 2 bedroom 2 x 3 Bedroom	865m ²
Level 6	10 residential units	2 x 1 bedroom 6 x 2 bedroom 2 x 3 Bedroom	865m ²
Level 7	10 residential units	2 x 1 bedroom 6 x 2 bedroom 2 x 3 Bedroom	865m ²
Level 8	10 residential units	2 x 1 bedroom 6 x 2 bedroom 2 x 3 Bedroom	865m ²²
Level 9	10 residential units	2 x 1 bedroom 6 x 2 bedroom 2 x 3 Bedroom	865m ²

Level	Use	Uses / Car Parking Spaces / Bedrooms	GFA
Level 10	6 residential units Rooftop CoS	4 x 1 bedroom 2 x 2 bedroom 344m ² of CoS	583m ²
Total		114 residential units	9,814m ²

Source: Scott Carver GFA Area Schedule

4.4 Cost of Construction

The cost of construction of the project is estimated at \$39,970,000 excluding GST. Refer to the QS Report prepared by Altus Group provided at **Appendix 22**.

4.5 Development Plans and Supporting Documentation

This SEE has been prepared with regard to the following plans and technical reports which accompany the application:

- Survey Plan prepared by SDG Land Development Solutions
- Landscape Plans Prepared by Turf Design Studio
- BASIX documentation prepared by Windtech
- Acoustic Report prepared by PKA Acoustic Consulting
- Access Report prepared by MGAC
- Arborists Report prepared by Naturally Trees
- Heritage Impact Statement prepared by Artefact Heritage
- BCA Design Assessment Report prepared by Steve Watson and Partners
- Operational Waste Management Plan prepared by Elephants Foot
- Construction and Demolition Waste Management Plan prepared by Poly Australia
- Geotechnical Investigation Report prepared by JK Geotechnics
- Civil Plans and Stormwater Management Report prepared by WSP
- Traffic and Parking Assessment prepared by Traffix
- Pedestrian Wind Environment Statement and Solar Light Reflectivity Analysis prepared by Windtech
- Cost Report prepared by Altus Group

4.6 Pre-lodgement Consultation

An informal pre-lodgement meeting was held with GRC planning staff on the 9 March 2018. The Council representatives were generally supportive of the design. Several elements of the project were discussed at the meeting and are summarised in **Table 5** below.

It is to be noted, GRC staff advised that based on their satisfaction with our concept scheme and their high workload that a formal Pre-DA meeting was not required and that it was appropriate to proceed straight to a DA submission. GRC indicated that the assessment of the proposal will not be prejudiced by not having a formal Pre- DA meeting.

TABLE 5: SUMMARY OF DISCUSSIONS WITH COUNCIL

Item	Discussion
Building height	The degree of height breach was discussed and GRC informed that they understand that the height and FSR controls aren't exactly congruent, and informed that lift over-runs and parapets are acceptable height breaches. GRC's view is that if the protrusion is a result of topographic change and provided the majority of the floor areas are not above the height plane, it is supportable
Side Setbacks on upper levels	Scott Carver presented the side setbacks as compliant with ADG for most levels and suggested that the tower at level 10 maintain alignment with floors below for consistency in the building form. No comment from GRC
Front setback	Scott Carver presented the strategy to align part of tower floorplate to match the neighbouring proposed tower alignments around the western corner and acting as a defining element of the corner. GRC were supportive of this strategy
Open lobby / landing as GFA	GRC was supportive of the strategy to articulate/split the building form into smaller elements from an urban design perspective and agreed the open lift lobby zones are not part of GFA.
Rear setbacks are to be measured from centreline of lane	GRC were supportive of the strategy to use ADG privacy separation dimensions taken from the middle of the widened lane. GRC were also supportive of partial orientation of the southern apartments to look down the laneway to increase the amenities of these apartments as well as avoiding direct facing into the neighbouring buildings. GRC appreciated that the proposed design addresses both the laneway and Stanley Street.

5. Statutory Planning Considerations

5.1 Overview

The relevant statutory framework considered in the preparation of this report comprises:

- Environmental Planning and Assessment Act, 1979;
- Environmental Planning and Assessment Regulation 2000;
- State Environmental Planning Policy No. 55;
- State Environmental Planning Policy No. 65;
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004;
- Kogarah Local Environmental Plan 2012.

Where relevant, these controls are addressed below.

5.2 Environmental Planning and Assessment Act 1979

5.2.1 Section 4.15

Section 4.15(1) of the Act as amended specifies the matters which a consent authority must consider when determining a development application. The relevant matters for consideration under Section 4.15 of the Act are addressed in the Table below.

TABLE 6: SECTION 4.15(1)(A) CONSIDERATIONS

Section	Comment
Section 4.15(1)(a)(i) Any environmental planning instrument	Consideration of relevant instruments is discussed in Section 4 .
Section 4.15 (1)(a)(ii) Any draft environmental planning instrument	Not relevant to this application.
Section 4.15 (1)(a)(iii) Any development control plan	Consideration of relevant the development control plan is discussed in Section 5 .
Section 4.15 (1)(a)(iiia) Any planning agreement	Not relevant to this application.
Section 4.15 (1)(a)(iv) Matters prescribed by the regulations	Refer to Section 4 .
Section 4.15 (1)(a)(v) Any coastal zone management plan	Not relevant to this application.
Section 4.15 (1)(b) - (e)	Refer to Section 6 .

5.2.2 Section 4.46 Integrated Development

This section of the Act defines integrated development as matters which require consent from Council and one or more approvals under related legislation. In these circumstances, prior to granting consent Council must obtain from each relevant approval body their General Terms of Approval (GTA) in relation to the development.

The Geotechnical Investigation undertaken by JK Geotechnics (Appendix 13) observed ground water at approximately 8.42m to 8.72m below natural ground level, with the development requiring excavation between a range of 11m - 13.5m below ground level. Additional Geotechnical testing will be required post consent to understand the level of

ground water intrusiveness, and whether it will be sufficient to require an 'activity approval'. Should the proposal require an approval under the Water Management Act 2000, this can be obtained once this is known. The subject DA is therefore not nominated at Integrated Development.

5.3 Environmental Planning and Assessment Regulation 2000

Clause 50 (1A) of the Environmental Planning and Assessment Regulation 2000 ("the Regulation") requires that a development application for a residential apartment building must be accompanied by a design verification statement from a qualified designer, which confirms:

- (a) that he or she designed, or directed the design, of the development, and*
- (b) provide an explanation that verifies how the development:*
 - (i) addresses how the design quality principles are achieved, and*
 - (ii) demonstrates, in terms of the Apartment Design Guide, how the objectives in parts 3 and 4 of the guide have been achieved.*

This Verification Statement as well as the Apartment Design Guide (ADG) compliance table has been prepared by Scott Carver and accompanies this application.

In addition, Clause 50 calls up Schedule 1 of the Regulation, which provides that any development application for residential apartment development to which [State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development](#) applies, must also be accompanied certain information. These requirements are submitted in support of this application (refer to **Appendix 5**).

All demolition work will be undertaken in accordance with Clause 92 of the Regulation requiring the consent authority to consider AS 2601 - 1991: The Demolition of Structures.

Pursuant to the prescribed conditions under Clause 98 of the Regulation, any building work "must be carried out in accordance with the requirements of the Building Code of Australia". A BCA compliance statement accompanies this application.

5.4 State Environmental Planning Policies

5.4.1 State Environmental Planning Policy No 55 - Remediation of Land

State Environmental Planning Policy No. 55 – Remediation of Contaminated Lands (SEPP 55) establishes State-wide provisions to promote the remediation of contaminated land.

Clause 7 of the SEPP 55 requires that a consent authority must not grant consent to a development unless it has considered whether a site is contaminated, and it is satisfied that the land is suitable (or will be after remediation) for the proposed use.

The subject site has been used for residential purposes for an extended period of time, as can be seen in **Figure 10** below. Inspection of the site did not disclose any filling or other opportunities for the importation of contaminated material. As such, it is considered unlikely that the site is contaminated and we consider that no further assessment is required to satisfy the requirements SEPP 55.



Figure 10: Residential uses at the subject site in 1943 (left) and today (right) (Source: Six Maps)

5.4.2 State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development

This Policy aims to improve the design quality of residential flat development to:

- Ensure such buildings contribute to sustainable development
- Provide sustainable housing in social and environmental terms
- Achieve better built form and aesthetics of buildings, streetscapes and the public spaces they define
- Better satisfy the increasing demand, changing social and demographic profile of the community
- Maximise amenity, safety and security for the benefit of occupants and the wider community
- Minimise the consumption of energy from non-renewable resources

To support these aims the SEPP introduces 9 design quality principles. These principles do not generate design solutions but provide a guide to achieving good design and the means of evaluating the merit of proposed solutions.

An assessment of the proposed development, against these design principles is contained in the SEPP 65 Design Verification Statement prepared by Scott Carver and provided at **Appendix 5**.

An assessment of the proposed development against the Apartment Design Code is contained in the plans and the SEPP 65 Compliance Table prepared by Scott Carver Architects and provided at **Appendix 5**. Overall, the proposed development has been assessed in accordance with the provisions of SEPP 65 and in accordance with the Apartment Design Guide accompanying the SEPP.

In summary, the proposed development provides a positive contribution to its locality in terms of its design quality, the internal and external amenity it provides and an increase in supply of housing types which are in demand in the locality. Furthermore, the proposed development is consistent with the aims and provisions of the Apartment Design Guide as indicated in the Design Verification Statement.

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

The aim of this Policy is to establish a scheme to encourage sustainable residential development (the BASIX scheme). This on-line assessment tool calculates the dwelling's energy and water scores based on a range of design data.

SEPP BASIX requires the submission of a BASIX certificate to accompany an application for development consent for any "BASIX affected building". A BASIX certificate for the residential component of the development has been prepared by Windtech and is provided at **Appendix 8**.

5.5 Kogarah Local Environmental Plan 2012

Zoning and permissibility

In accordance with the KLEP, the zoning of the site is **R4 High Density Residential**.

The proposal is for a RFB, which pursuant to the R4 Land Use Table is permitted with consent.

Zone objectives

Clause 2.3(2) of the Plan provides that Council must have regard to the zone objectives when determining a development application. The objectives for the "R4 High Density Residential" zone are to:

- (a) *To provide for the housing needs of the community within a high density residential environment.*
- (b) *To provide a variety of housing types within a high density residential environment.*
- (c) *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*

The proposed development is consistent with the above objectives in that: -

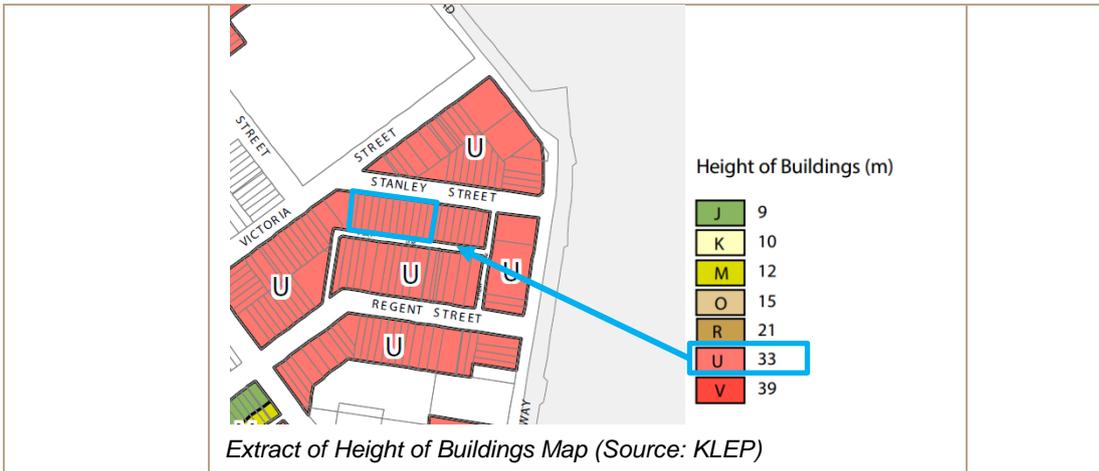
- The proposal provides for the housing needs of the community through a high-density housing form;
- The proposal provides a variety of housing types through a mix of apartment sizes; and
- The proposal does not restrict other land uses in the locality from providing facilities or services for the day to day needs of residents.

Remaining KLEP 2012 provisions

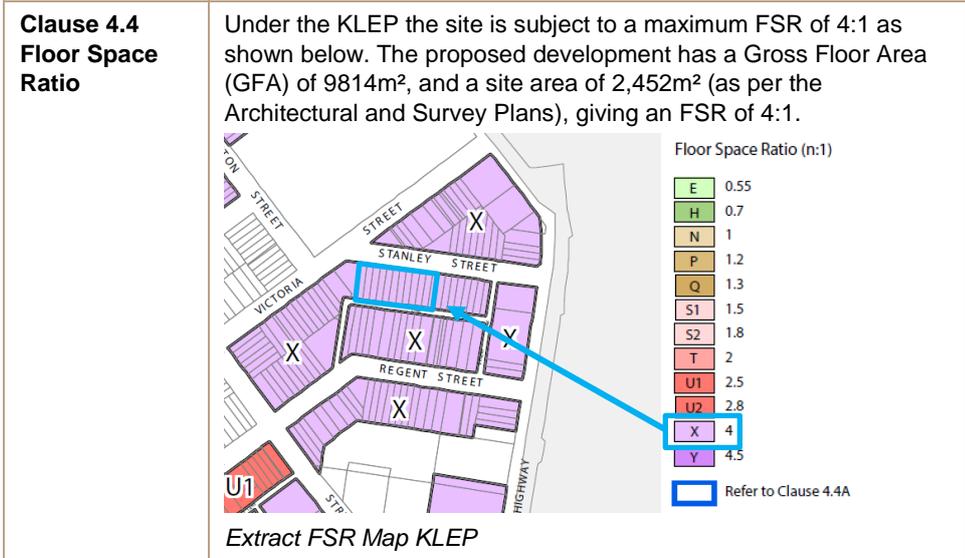
The remaining provisions of the KLEP 2012 that may be relevant to this project are addressed in the following table:

Table 7: Compliance with the Kogarah LEP 2012

Relevant Clause	Comment	Comply
Part 4: Principal Development standards		
Clause 4.3 Height of Buildings	Under the KLEP the site is subject to a maximum building height of 33m. At its highest point the building is 35.1m high. A Clause 4.6 Request is provided (Appendix 1) in support of the variation of the height limit.	No- Clause 4.6 variation request provided



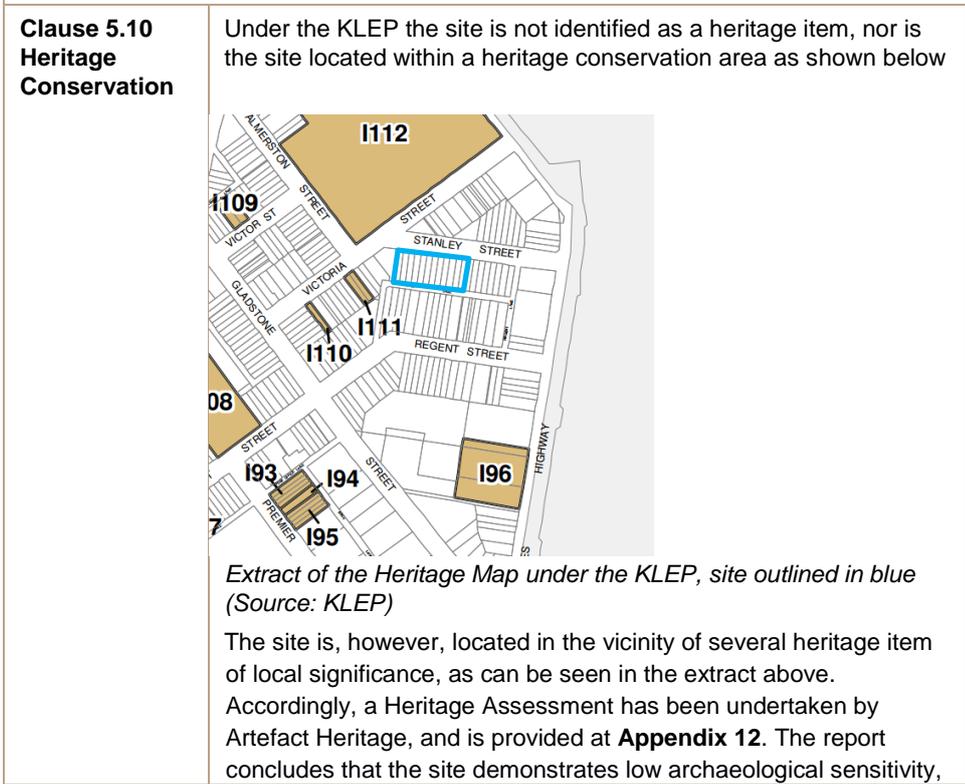
Extract of Height of Buildings Map (Source: KLEP)



Extract FSR Map KLEP

Yes

Part 5 Miscellaneous provisions



Yes

	and that the built form will have only minor visual impact on one of the neighbouring sites. See section 7.3.9 below for further detail.	
Part 6 Additional Local Provisions		
Clause 6.1 Acid Sulfate Soils	Under the KLEP the subject site is not identified on the Acid Sulfate Soils Map.	N/A
Clause 6.2 Earthworks	The development proposes to demolish the existing buildings on the site and excavate the land to accommodate four (4) levels of basement parking to a depth of approximately 13.5m. A Geotechnical Desktop Study has been undertaken by JK Geotechnics and is provided at Appendix 16. The report concludes that the extent of earthworks and excavation is appropriate for the site and provides recommendations to ensure the excavation activities proposed do not adversely impact on the neighbouring properties.	Yes
Clause 6.5 Airspace Operations	<p>The site is within the 'inner horizontal surface 51m AHD' of the Sydney Airport Obstacle Limitation Surfaces map as shown below.</p>  <p><i>Extract of Sydney Airport OLS Map (site identified by star)</i></p> <p>The proposed development has a maximum R.L of 51.90, and therefore, encroaches within the OLS. The DA is required to be referred to the Civil Aviation Safety Authority (CASA) for concurrence.</p>	Yes
Clause 6.6 Development in areas subject to aircraft noise	This KLEP clause applies to development that is on land that is near Sydney Airport, is affected by an ANEF contour of 20 or greater and the consent authority considers is likely to be adversely affected by aircraft noise. The subject site is not within an ANEF area of 20 or greater.	N/A

6. Non-Statutory Considerations

6.1 A Metropolis of Three Cities - the Greater Sydney Region Plan

A Metropolis of Three Cities - the Greater Sydney Region Plan was released in March 2018 and is the first Region Plan by the Greater Sydney Commission. Now adopted, this Plan will replace *A Plan for Growing Sydney*.

The Plan encompasses a global metropolis of three cities – the Western Parkland City, the Central River City and the Eastern Harbour City. It is envisioned that people of Greater Sydney will live within 30 minutes of their jobs, education and health facilities, services and great places.

Relevant sections of the *Greater Sydney Region Plan* are outlined in the table below.

Table 8: Consistency with the Greater Sydney Region Plan

Direction	Comment
Chapter 4 - Liveability A city for the people Housing for the city A city of great places	Greater Sydney is forecast to grow from 4.7 million people to 8 million people by 2056. Housing targets include 725,000 additional homes over the next 20 years and 817,000 new jobs to meet the needs of a changing economy. The proposal will provide 114 apartments to contribute towards housing demand in a well located established area.
Chapter 5 - Productivity A well-connected city Jobs and skills for the city	Integration of land use and transport will mean more people have access to jobs, education, health and other services by public transport within 30 minutes of their homes. The proposal is consistent with this direction by providing housing and additional jobs during the construction phase in a strategic location with excellent access to various public transport routes and employment areas.
Chapter 6 - Sustainability A city in its landscape An efficient city A resilient city	The Plan looks to manage the effects of urban development on the natural environment, as well as to reduce costs, carbon emissions and environmental impacts and contribute to a target towards net-zero emissions by 2050. The proposal encourages public transport use by providing residential apartments in a highly accessible location, within 600m of the Kogarah Train Station. Further, the design of the development incorporates sustainability features and includes a landscaped roof.

6.2 Kogarah Development Control Plan 2013

Compliance and/or consistency with the relevant provisions within the Kogarah Development Control Plan (KDCP) 2013 is addressed in the Table of Compliance prepared by CPSD at **Appendix 2**. The following parts of the DCP are relevant to this proposal:

- Part B - General design provisions
- Part E4 - Kogarah North Precinct

The assessment concludes that the development satisfies most of the relevant guidelines, or where variations are proposed, they satisfy the relevant objectives of the DCP. These mainly relate to building height and setbacks, which are addressed in the following sections of the SEE.

7. Environmental Impact Assessment

7.1 Overview

This section identifies and assesses the impacts of the development with specific reference to the heads of consideration under section 4.15(1) of the Act.

7.2 Context and Setting

The context and setting of the development site is described in **Section 3.3** of this Statement.

As discussed in detail in the SEPP 65 Statement prepared by Scott Carver (at **Appendix 5**), the proposal is compatible within the desired future context and character of the locality. The proposal provides a built form, and features which are considered to positively contribute to the quality and transitioning identity of the locality. The SEPP Design Statement includes the following comments:

Considers local context, character and site conditions by:

- Responding to the surrounding context by articulating the built form to create a positive and more articulated streetscape character and to respond to the activation of Stanley lane and the adjacent through site link*
- Providing a building with a strong identity in its articulation and design which contributes positively to the context and its neighbours.*
- Providing 2 storey apartments facing the street and lane frontages that reflects the future residential character of Kogarah north and activates these areas.*
- Proposing an architectural language which reflects, materials and colour palettes that can be found in Kogarah and are timeless and conducive to residential design.*

Given the site is located within the Kogarah North Precinct which in close proximity to the Town Centre (approximately 600m), the emerging character of the area, as anticipated under the KLEP, is of high density development in an urban environment. Whilst there are some high density RFBs in the immediate locality, the majority of the surrounding area currently comprises low density residential development, which have yet to be developed to the current planning controls, which were gazetted in mid-2017. The proposal will be compatible with the future character of the area, once it has realised its development potential. An indicative perspective of the future character of the area is identified in **Figure 11**.



Figure 11: Artists Impression of the future desired character of Kogarah North Precinct (Source: Kogarah North Precinct Urban Design Strategy)

The proposal is entirely consistent with the anticipated character of the surrounding area.

7.3 Built Environment

7.3.1 Height, Bulk and Scale

The subject site has a maximum height standard of 33m under the provisions of the KLEP. The proposed development is eleven (11) storeys in height, with a maximum building height of 35.1m and a maximum RL of 51.90 AHD. However, it is important to note that this is the maximum, relating mainly to areas of the roof and roof top features.

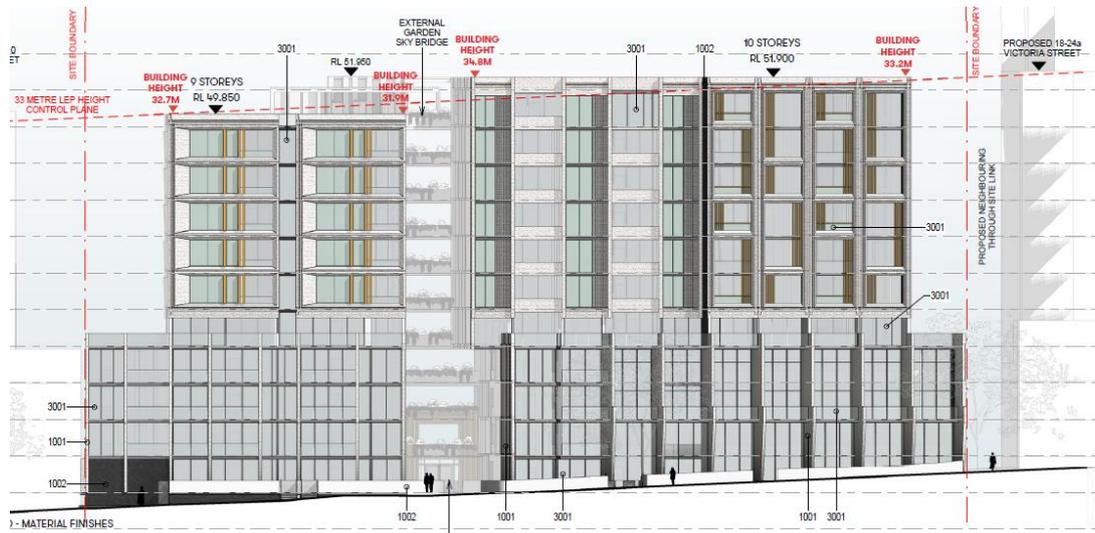


Figure 11: Northern Elevation of the building as it presents to Stanley Street (Source: Scott Carver)

The proposed development exceeds the height standard by a maximum of 2.1m. Accordingly, a Clause 4.6 variation request has been prepared and is provided at **Appendix 1**. The request concludes that the relatively minor height variation is reasonable and acceptable in the circumstances.

The proposed breach relates to the lift overrun and parts of the roof that provide communal open space and rooftop landscaping. The proposed roof provides an aesthetically pleasing design that does not unreasonably influence the perceived height and bulk of the development.

The proposed building has been designed to respond to the built form character established within the Kogarah North Precinct Urban Design Strategy and the subsequent amendments to the KDCP. In this respect, the building has incorporated a consistent built form for the lower levels up to Level 4. From Level 4, upwards, the development has introduced increased setbacks. Further, the building has integrated several design elements to break up the bulk of the building as viewed from the public domain, including:

- 'celebration' of the entrance, effectively creating a split in the development, breaking up the long frontage;
- The use of balconies and privacy devices to create articulation to the façade;
- Orientation of the western core to the north-west, addressing the corner and reducing the bulk of the development as viewed from Stanley and Victoria Street; and
- The use of landscaping treatment to the ground floor, the roof and to the connecting bridge, softening the building's relationship with the public domain, and providing an aesthetically pleasing design.

The bulk and scale of the building is consistent with the desired future character for the Kogarah North Precinct. Consistency with the Kogarah North Precinct urban design principles is demonstrated in the DCP Compliance table at **Appendix 2**. The artist's illustration below provides a visual representation of the design elements described above.



Figure 12: Photomontage of proposed building (Source: Scott Carver)

7.3.2 Setbacks

The proposed development incorporates a range of setbacks, and includes: -

- **Stanley Street:**
 - A 2m landscaped setback is provided at ground floor. The building line is setback 5m, the private courtyards encroach this space.
 - The built form of level 1, 2 and 3 are predominantly setback 7m. However, several portions of the building are only set back 5 metres. As discussed, Scott Carver presented the strategy to align part of tower floorplate to match the neighbouring proposed tower alignments. GRC were supportive of this strategy.
 - On levels 4 and above, the built form is set back predominantly 8m to the boundary, noting a portion on the western boundary is not, in order to express the corner. This is mostly consistent with the DCP.
- **Eastern Boundary:**
 - The eastern elevation is setback between 0 and 6m until the 3rd floor. It is noted that the walls on this portion of the building are blank, and so are those on the proposed building adjacent at 2-10 Stanley Street. Hence, no separation issues should arise.
 - From floors 4-9 the eastern elevation is setback between 7.25m and 9m – Privacy screens are provided to bedroom windows that are facing the side boundaries. Scott Carver has confirmed this to be adequate in their ADG Compliance at **Appendix 5**.
- **Western Boundary:**
 - The Setbacks on the western elevation range from 0m – 11.5m across the 11 levels of the development. It is to be noted that the nil setback is a design element incorporated into the corner presentation. Privacy screens are provided to bedroom windows that are facing the side boundaries.
- **Stanley Lane:**

- The rear setback includes a 6m setback to the podium and 8m - 9m setback to the tower. Where the development is setback 8m, opaque glazing and privacy screens are incorporated into design to mitigate any privacy issues that may be caused.

7.3.3 Design and Aesthetics

The proposed development demonstrates high design and aesthetic qualities.

As discussed in the SEPP 65 Design Verification Statement prepared by Scott Carver and appended at **Appendix 5**, the design of the development has taken into consideration the principles of good urban design, as described by Scott Carver below:

"Considers aesthetics through:

- Treating the facades to include a variety of materials and finishes which provide visual interest and have a high aesthetic content. - See material palette.

- Incorporating a variety of architectural treatments including recessed balconies, shading fins, precast panel articulation podium terraces and awnings. The adequacy of the design of the development is demonstrated by the following elements:"

- The height and density of the building is largely consistent with the outcomes contemplated in the planning controls implemented in mid-2017;
- The size and arrangement of the floor plates ensure that the internal amenity of apartments optimises natural light and cross ventilation;
- Apartments are provided with appropriately sized and located areas of private open space;
- The western core is orientated slightly to the north-west, effectively breaking up the bulk of the building, and optimising views for the buildings residents;
- The finishes and materials have been selected to present an attractive external appearance to the building. A Reflectivity Report prepared by Windtech at **Appendix 21** confirms that materials and finishes are appropriate to ensure the safety of pedestrians and motor vehicle users.
- Access between the private and communal areas within the complex is direct, safe and efficient; and
- The proposal provides a direct and efficient vehicular ingress and egress point situated appropriately on the rear laneway.

7.3.4 Solar Access

As demonstrated in the solar access plans prepared by Scott Carver, the building has maximised the access to sunlight for each unit and achieves an overall provision of 73% of all units (i.e. 83/114) that receive a minimum of 2hrs of direct solar access between 9am and 3pm mid-winter. Given the site has a predominant north and south orientation, 23% of the units (i.e. 31/114) receive no direct sunlight. In this regard, daylight has been maximised by orienting dwellings on the east and west boundaries and corner apartments to the northern aspect.

Further to the above, the communal open space is located on the roof of the development so that it maximises access to direct sunlight throughout the day and provides a highly useable and comfortable space for the building occupants.

7.3.5 Overshadowing

Scott Carver has prepared detailed shadow diagrams for the proposal, which are provided at **Appendix 4**. The shadow diagrams demonstrate that the proposed development casts shadows to the following properties:

- 18-24a Victoria Street: Shadows are cast on dwellings between 9am and 10am only.
- 52 Regent Street: Shadows are cast on dwellings at 9am only.
- 54-56 Regent Street: Shadows are cast on dwellings at 9am only.
- 58-68 Regent Street: Shadows are cast on dwellings between 9am and 1pm.
- 70-78 Regent Street: Shadows are cast on different parts of the development between 9am and 3pm.
- 80-84 Regent Street: Shadows are cast onto these properties between 2pm and 3pm.

As demonstrated on the plans and above, the majority of the properties are not significantly affected by shadows.

The exception is the shadow impacts on 70-78 Regent Street, which occur on different parts of the development throughout the entire 9am-3pm period. The orientation and relationship of the two sites leads to inevitably and unavoidable overshadowing implications for *any* development in accordance with the recently adopted planning controls. Scott Carver has compared indicative shadows arising from a development complying with the current LEP and DCP controls and those from the proposed development. The illustrations below indicate that any building developed to its anticipated potential would cause adverse overshadowing impacts on the property at 70-78 Regent Street. Notwithstanding this, the building design, setbacks and articulation, have sought to reduce overshadowing impacts on this site as far as practicable.

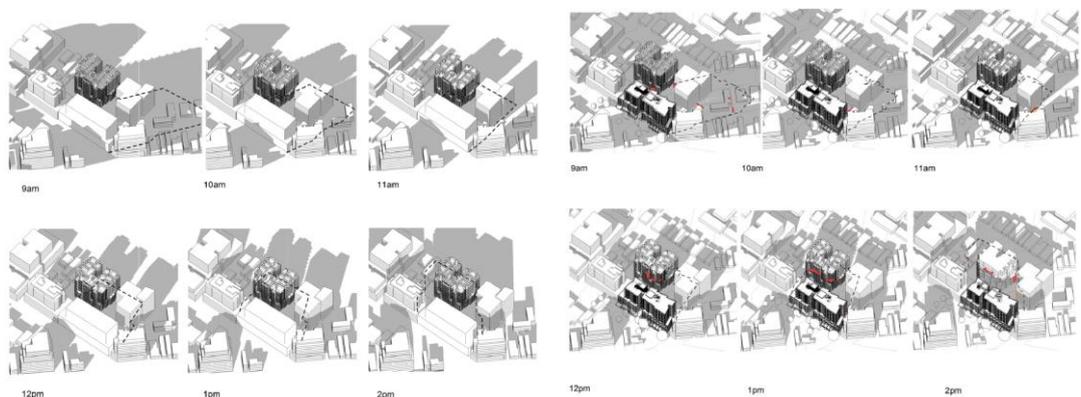


Figure 12: Comparison of Shadow diagrams, DCP Envelope to the left and proposed structure on the right (Source: Scott Carver)

7.3.6 Internal and External Amenity

Particular design attention has been given to the amenity of future occupants of the development, neighbouring properties and the public domain. As discussed in the SEPP 65 Design Verification Statement prepared by Scott Carver provided at **Appendix 5**, the development is responsive to the opportunities and constraints of the site and it surrounds with regard to topography, vegetation, neighbouring buildings, noise and physical impacts of street traffic, solar access and views. This has culminated in generating a unique design which creates a sense of space, connectivity to public and private space, and fixed and

manoeuvrable mechanisms to enable users to control acoustics, solar access and privacy to their units. This is achieved by the following design initiatives:

- 62% of apartments benefit from cross ventilation;
- 73% of units receive a minimum of 2hrs or more of direct sunlight to their living rooms and private balconies; and
- maximised solar access through high ceilings and tall windows;
- units are separated at an appropriate distance to neighbouring properties to maintain amenity and privacy.
- generous open floor plans which are highly efficient and foster high quality living and use of spaces;
- appropriate separation between living areas and bedrooms;
- trees and shrubs to allow solar access in winter and shade in summer;
- short paths of travel between units to access stairs and lifts which enable ease of access;
- terraces or balconies to all units which provide an attractive outlook to the surrounding areas and feature landscaping where appropriate;
- generous rooftop communal space;
- easily accessible garbage storage and sorting facilities;
- accessible vehicular entry points and a legible parking and circulation network; and
- safety by design initiatives to enhance the sense of safety and security.

Careful consideration has been undertaken to mitigate potential aspects of the design which could degrade the quality and liveability of the units both individually and for the development as a whole. We consider the development provides residents with a high level of amenity.

7.3.7 Privacy

The proposal provides a high level of privacy between the occupants of the buildings and the adjoining properties. In this respect, the separation and setbacks from adjoining properties have been maximised and where overlooking may occur, privacy devices have been employed, including composite timber screening and opaque glazing to windows. This is discussed further in detail in the revised SEPP 65 Design Statement and ADG Compliance Table prepared by Scott Carver (**Appendix 5**).

7.3.8 Public Domain

The proposal positively contributes to the public domain by providing a building of high architectural standard that is compatible with the existing and future anticipated character for the area.

The proposal also contributes to the public domain in that:

- The building achieves a desirable interface with public areas by 'celebrating' the entry through distinct core split
- The building addresses and integrates with its street frontage through the inclusion of active/outlooking facades with design elements that promote a visual relationship with public pedestrian areas adjacent to, and surrounding, those edges of the site;

- Many apartments enjoy a direct visual connection which overlooks the adjacent public domain ensuring a high degree of passive surveillance which will encourage a sense of safety within the public spaces around the site;
- The architectural treatment and landscaping elements will achieve a suitable streetscape presentation;
- Stanley Lane is proposed to be widened to improve amenity and safety to the rear of this site and development on the opposite side of the lane;
- Vehicle access point is consolidated and provides a simple, centralised, and direct vehicular movements throughout the site; and
- Service areas and plant rooms are integrated into the building design and do not visually dominate the streetscape or pedestrian areas adjoining the site.

7.3.9 Heritage

The proposed development is not a heritage item, however, it is in the vicinity of several heritage items as outlined below.

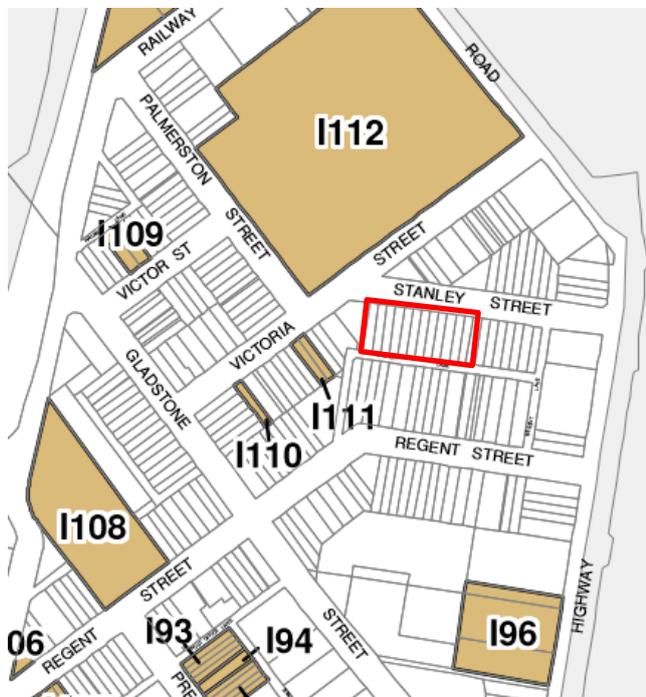


Figure 13: Heritage items surrounding the subject site. Site outlined in red (Source: Kogarah LEP)

As such, a Heritage Impact Statement has been prepared by Artefact, and is appended at **Appendix 12**. The Heritage Impact Statement assesses the proposed development's potential impact on the heritage items in the vicinity. The Report concludes the following:

- The proposal would not involve any direct physical impacts within the curtilages of heritage items located in the vicinity of the study area.
- Potential indirect impacts due to vibration could result in a minor impact to the locally listed Terraces and garden 'Beatrice' and Lillyville' (LEP No. I111) due to its location within 50 metres of the study area and negligible impact to St George Girls High School (two storey main building) (LEP No. I112) due to its location within 75 metres of the study area.

- The increased height of the proposal in comparison to the existing low-rise nature of development and heritage items in the vicinity would result in a range of neutral to moderate visual impacts to the views to and from heritage items.
- Despite the increased height of the proposed residential apartments, the proposal has been designed where possible to minimise visual impact to the heritage items in the vicinity.
- Despite the increased height of the proposed residential apartments, the proposal has been designed where possible to minimise visual impact to the heritage items in the vicinity.

Further, Artefact provide several recommendations and mitigation measures to effectively minimise any impact that the development may have on Heritage items in the vicinity. See the statement at **Appendix 12** for further detail.

7.3.10 Building and Construction

Accompanying this application is a BCA compliance review that has been prepared by Steve Watson and Partners (**Appendix 13**). The report provides various recommendations to ensure that the proposed building is capable of achieving compliance with the Deemed to Satisfy requirements, or alternative solutions provisions of the BCA and relevant adopted standards without undue modification to the design or appearance of the building. Compliance with the BCA will be demonstrated with the Construction Certificate documentation.

A final Construction Management Plan will be prepared by the appointed contractor, once the terms of any approval granted by Council are known. Accordingly, it is anticipated that Council will include appropriate conditions within any consent notice requiring the preparation and approval of a CMP prior to works commencing.

7.4 Natural Environment

7.4.1 Flora and Fauna

The existing physical condition of the site is such that it does not have any ecological attributes which, if lost, would impact upon any threatened species, population, ecological community or habitat.

7.4.2 Tree Removal

The proposal includes the removal of four (4) trees, two (2) of which are located on the subject site. Accordingly, an Arborist Report has been prepared by Naturally Trees and is appended at **Appendix 11**. The report indicates that the effected trees have been assessed as low category, are relatively unimportant, and that replacement trees are to be planted to mitigate the losses (See Landscape Plans at **Appendix 7**). It is also noted that one of the trees to be removed is exempt from Council's tree preservation order.

The report also indicates that the proposed development may affect a further six high category trees, and nine low category trees. As such, a Tree Management Plan has been provided in the report's appendices, and certain protective measures are outlined. The report concludes that:

"If adequate precautions to protect the retained trees are specified and implemented through the arboricultural method statement included in this report, the development proposal will have no adverse impact on the contribution of trees to local amenity or character."

7.4.3 Landscape

The proposed development is accompanied by concept landscaping plans prepared by Turf Design Studio and appended at **Appendix 7**.

The concept landscaping proposed provides a variety of indicative landscaping elements that contribute to the presentation of the site. This includes ground level plantings within the rear and front setbacks, as well as plantings within the communal open space located on the roof and treatment to the external garden breezeways connecting the residential cores. The proposed landscaping involves the following:

- Landscape treatment to the Stanley Street entry, creating a green and welcoming entrance to the property;
- 898m² (37% of site area) of communal open space including:
 - 344m² on the rooftop;
 - 392m² within the skybridge zones;
 - 162m² on the ground floor landscaped entries; and
- 157m² (6.4%) of deep soil within the site including:
 - 37m² North East corner; and
 - 120m² South West corner.

The proposed landscaped areas have taken into consideration a mix of solar access, shade, shelter, wind mitigation and amenities in order to encourage social interaction of the future residents. The proposed treatment also accommodates replacement plantings in response to the loss of trees resulting from the building footprint. The proposal provides a significant amount of space that can be used for communal purposes, noting that the development provides private communal open space for the building's residents in various locations, including on the roof that meets the minimum requirements of the ADG.

It is noted that the deep soil zone is non-compliant with the requirements of the ADG. A detailed justification is provided in the ADG compliance table prepared by Scott Carver at **Appendix 5**.

7.4.4 Water Management

Existing drainage conditions, proposed design and relevant impacts associated with development are contained in the Civil Plans and Stormwater Report prepared by WSP at **Appendix 17 and 18**. In summary, the proposed drainage for the development is as follows:

- Water collected from the roof and on the building (including from the basement) will be drained to the proposed On-site Detention System (OSD) tank and rainwater tank;
- Basement 4 includes a double pump stormwater pit; and
- 10 x stormwater filter cartridges are proposed to achieve Council's 'Captured Stormwater Treatment Standards'.

7.4.5 Soil Management

As discussed in **Section 4.2**, our SEPP 55 assessment concluded that there is negligible risk of potential soil contamination.

Also refer to the Erosion and Sedimentation Control Plan provided at **Appendix 17** which provides measures to ensure the development provides appropriate soil management and sedimentation control.

7.4.6 Air and Microclimate

Some dust is anticipated during the construction period, particularly given demolition and excavation is involved. This impact can be managed through measures such as wetting down work areas/stockpiles, stabilising exposed areas, preventing material tracking out onto public roadways, covering loads on all departing trucks and working to weather conditions. The proposal is otherwise not expected to give rise to any long term or adverse impacts on local or regional air quality.

A final CMP will be provided by the builder, once appointed, prior to the issue of the Construction Certificate.

The proposal is otherwise not expected to give rise to any long term or adverse impacts on local or regional air quality.

7.4.7 Wind

The DA is accompanied by a Wind Analysis prepared by Windtech and appended at **Appendix 20**. The report indicates that prevailing winds from the north-east in Summer, and the south in Winter could potentially cause wind impacts upon the proposed development. The report provides several treatment options, which, if implemented into the design would provide suitable wind conditions for all trafficable outdoor areas. Specifically, the recommended treatments have been used to inform the design of landscape plantings on all outdoor trafficable areas. Accordingly, all wind related issues have been addressed. Refer to the Landscape Plan and Wind Analysis at **Appendix 7** and **20** for further detail.

7.4.8 Noise & Vibration

The application is accompanied by an Acoustic Report prepared by PKA Acoustic Consulting (Appendix 9). The report has undertaken an assessment of the noise impacts, and concluded:

" The results of the acoustic survey show the site is not affected by high road traffic noise. This is due to a combination of distance from the Princes Highway and nearby multi-storey apartment complexes shielding line-of-sight to the highway. Acoustic mitigation measures will not be necessary and standard construction and glazing will be sufficient to meet the relevant indoor noise requirements. "

Further, the report includes several recommendations and a schedule of requirements for certain building elements to ensure that the development is in line with the requirements of the KDCP, and that internal areas of the residential apartments achieve optimal amenity outcomes and can effectively mitigate any potential noise impacts.

7.5 Movement and Access

7.5.1 Transport

The site is highly accessible by public transport being within close proximity to public transport. The Kogarah Train Station is approximately 600m to the south west of the site, and various bus stops, i.e. bus routes 422, 476, and 477, are in close proximity.

7.5.2 Roads and Traffic

The DA is accompanied by a Traffic and Parking Impact Assessment prepared by Traffix Traffic and Transport Planners, appended at **Appendix 19**. The report has undertaken an assessment of the proposal and the impact to the surrounding road system.

The assessment indicates that the major intersections in the vicinity of the subject site currently operate at a 'good' or 'acceptable' level of service. The proposed development will result in an additional 19 vehicles/hour during morning peak periods and 14 vehicles/hour in the afternoon peak. The report concludes that the consequential traffic conditions would not unreasonably impact the key intersections in the vicinity of the site, which will continue to operate as predominantly occurs with similar delays and queues.

7.5.3 Car Parking

The subject site is located within 600m walking distance of the Kogarah train station. Accordingly as per Clause 30(1)(a) of SEPP 65, a consent authority cannot refuse an application if the proposal satisfies the parking requirements under Part J of the ADG. In this respect, the proposal requires a total of 95.3 parking spaces for the development under the Guide to Traffic Generating Developments (79 residential spaces and 16.3 visitor spaces).

The proposed development has provided a total of 175 parking spaces within the basement levels (158 residential spaces and 17 visitor spaces). As such, the proposal provides in excess of the required parking and cannot be refused on this basis.

The proposed parking also includes 3 accessible parking spaces to accommodate the 12 adaptable dwellings proposed as discussed in the Access Report prepared by MGAC (**Appendix 10**).

The Traffic Report confirms that the basement car parking spaces have been designed to achieve the relevant standards, and that a safe and efficient layout has been provided.

The design also includes 84 bicycle spaces/racks within the basement levels and ground floor levels, which satisfies the requirements of Council's DCP.

7.5.4 Servicing / Waste

Demolition and Construction Waste

To ensure that resources are conserved and waste is processed responsibly by minimising waste generation and maximising recycling of materials, a Demolition and Construction Waste Management Plan has been prepared by Poly (**Appendix 15**). The demolition and construction phase will be appropriately managed to mitigate the environment impact of the development. Appropriate strategies for environmental protection are also identified in the Sedimentation and Erosion Plan (refer to **Appendix 17**).

Operational waste

An integrated and accessible garbage collection and management system is provided. Each residential level has a garbage chute that is located central to all occupants. The garbage chute leads to garbage storage rooms and compactors located within Basement Level 1. Waste will be collected from a private waste contractor, and a loading bay is situated adjacent to the driveway access off Stanley Lane. The garbage bins will be moved on collection days by the building manager. The Traffic Report prepared by Traffix confirms that the service area has been designed to accommodate the safe ingress/egress of waste vehicles through reversing in via Stanley Lane, and existing in a forward direction.

In addition to the garbage storage room, a separate 'bulky' storage room has been allocated centrally within the basement. A detailed Waste Management Plan has been prepared by Elephants Foot and is provided at **Appendix 14**.

7.5.5 Pedestrians and Accessibility

Accompanying the application is a BCA Report and an Access Review report prepared by MGAC and provided at **Appendix 10**. The report concludes that the proposed drawings indicate that accessibility requirements, pertaining to external site linkages, building access, common area access and parking can be readily achieved.

7.6 Site Suitability

7.6.1 Geotechnical

The Geotechnical Investigation Report has been prepared by JK Geotechnics and is provided at **Appendix 16**. The Report provides a preliminary assessment of the soils anticipated to be encountered during the excavation and construction of the development and provides various recommendations to ensure that the development is constructed in a manner that will not have any impacts to adjoining properties, and to maintain structural integrity of the proposed building. The recommendations include:

- Monitoring of groundwater levels in Boreholes 1 to 3.
- Drilling of 3 additional cored boreholes in the western portion of the site.
- Dilapidation reports of adjoining movement sensitive structures prior to the commencement of construction.
- Review of structural drawings to confirm the intentions of their report have been successfully implemented in the design.
- Periodic or continuous vibration monitoring during percussive excavation.
- Proof loading of all anchors to confirm that their design loads are achieved.
- Inspection and/or testing of all footings by a geotechnical engineer to confirm that the design
- Inspection of the excavation to review groundwater seepage and drainage.

These recommendations are readily conditioned and may form part of any construction management plan for the development.

7.6.2 Contamination

Refer to Section 4.2 for the SEPP 55 assessment.

7.6.3 Bushfire

The site is not within a Bushfire area.

7.6.4 Flooding

The site is not within a known Flood prone area.

7.6.5 Services and Utilities

The site contains adequate facilities which will be retained / reused / upgraded where needed to cater for the proposed residential development. All installations will be capable of meeting the requirements under the Australian Standards and the Building Code of Australia. Notably, the following services have been addressed within this application.

Power

A substation is proposed at the south-western corner of the site. The substation is completely covered by a kiosk and is integrated into the landscape scheme as to maintain the aesthetics of the development when viewed from the public domain.

Water Storage

As the building is in excess of 25m effective height, the BCA requires a grade 1 water supply for both hydrants and sprinklers. ACOR Consulting has indicated that the following water storage is anticipated to be required pending any successful DA at the subject site:

- Fire Hydrant – 30L/s (>5000m²) 4 hours storage with 10L/s inflow = 288,000L
- Fire Sprinkler supply 1 – 20L/s (OH2) 1 hour storage = 72,000L
- Fire Sprinkler supply 2 – 20L/s (OH2) 1 hour storage = 72,000L

Accordingly, the Architectural Plans provide an indicative layout of the water storage tanks at basement level 2. It is understood that the size of the tanks may be altered as per a condition of consent. Full compliance will be demonstrated at construction certificate phase.

7.6.6 Hazards (Other)

Natural Hazards

The subject site is not affected by any known hazards. The Geotechnical Investigation prepared by JK Geotechnics (**Appendix 16**) demonstrates that the conditions of the site are appropriate for the excavation and construction works proposed and provides recommendations to protect the sub-surface conditions and neighbouring properties.

7.7 Social and Economic Effects

7.7.1 Social

As discussed in the ADG Compliance Table prepared by Scott Carver, (refer to **Appendix 5**) the property market is currently characterised by buyer groups with a high level of demand for smaller apartments. The proposed development satisfies this demand, which is valuable due to the Precinct's proximity to transport, local employment, schools, restaurants and retail amenity. The proposal provides a positive planning outcome and responds to demand for high quality residential apartments which deliver a desirable price point and rental demand.

7.7.2 Crime and Safety

The proposal is for a residential development with a high level of amenity, casual surveillance and ultimately public safety within the building and surrounding area. The proposal will assist in revitalising and activating the premises and will provide appropriate lighting and security measures to protect the safety of neighbouring premises, residents and the local community.

Crime Prevention through Environmental Design (CPTED) is a recognised model which provides that if development is appropriately designed it can reduce the likelihood of crimes being committed. By introducing CPTED measures within the design of the development, it is anticipated that this will assist in minimising the incidence of crime and contribute to perceptions of increased public safety. The proposal has been designed to take into consideration these principles as follows:

Surveillance: This principle provides that crime targets can be reduced by effective surveillance, both natural and technical. In this regard, the development has been designed to directly front each of the road frontages with direct surveillance of the public domain from the residential units, pedestrian access points, the public domain areas.

The layout of the development also provides lines of sight between public and private spaces which will be maintained during the night by a suitable lighting scheme. The proposed development introduces potential for 24 hour activity within the local footpath and road network and casual surveillance to ensure the safety of residents and neighbouring properties and the public.

Access Control: This principle provides that barriers to attract/restrict the movement of people minimises opportunities for crime and increases the effort required to commit crime. residential premises benefits from designated access points which is clearly visible. The building has a dedicated and secure lobby and entry area via Stanley Street. The car park is accessed via Stanley Lane and is secure.

Territorial Reinforcement: This principle provides that well-used places reduce opportunities for crime and increase risk to criminals. There is a clear delineation between the public street and footpath verge, and the private residential areas. The future occupants of the development benefit from direct access to encourage the connection of these spaces. In this regard the development provides for residential units which will create activity within the site and the wider local area.

Space Management: This principle provides that space which is appropriately utilised and well cared for reduces the risk of crime and antisocial behaviour. Strategies to implement this principle include, site cleanliness, rapid repair of vandalism and graffiti, the quick replacement of broken light fixtures/globes and the removal or refurbishment of decayed physical elements.

The proposed works will assist in improving the presentation of the site, which will improve the amenity, casual surveillance and ultimately public safety and sense of security within the site and surrounding area.

8. Conclusion

This application seeks approval for demolition of the existing structures on **Nos 12-24 Stanley Street, Kogarah** and the construction of an eleven (11) storey Residential Flat Building including four (4) basement parking levels and one-hundred and fourteen (114) residential units.

In summary, this SEE has assessed the proposal as:

- being an appropriate response to the context, setting, planning instruments and environmental assessment as required under the heads of consideration in Section 4.15 (1) of the *Environmental Planning and Assessment Act, 1979*;
- presenting a built form that is in keeping with the Urban Design Principles established for the Kogarah North Precinct;
- providing an appropriate scale and excellent design that, notwithstanding the relatively modest variation to the maximum height standard for the site, avoids unreasonable adverse overshadowing or amenity impacts on surrounding properties;
- providing high quality residential units in a highly accessible location and which have good amenity for the future occupants; and
- being largely consistent with the North Kogarah DCP, however, some variations to setbacks and other guidelines are proposed. These have resulted from detailed site analysis, which seeks to optimise the development potential of the site in accordance with its desired future character, whilst acknowledging constraints associated with its orientation and location. The proposed variations are considered appropriate and justified in the circumstances;
- having no unreasonable adverse environmental impacts on adjoining properties or the public domain.

The benefits provided by the proposed development outweigh any potential impacts and its approval is therefore in the public interest.