BETHANY COLLEGE, KOGARAH
PROPOSED NEW INTEGRATED CARE VILLAGE

Masterplan Report

MAY 2013

St. Patrick's Parish KOGARAH | olsson& associates architects PTY LTD | Greengate Your life. Your community. | St Patrick's Green KOGARAH

TABLE OF CONTENTS

EXECUTIVE SUMMARY 3

1. INTRODUCTION

i. Purpose 7
ii. Location 8
iii. Background 9
iv. Vision 10
v. Community Need 11
vi. What do the Elderly Want? 12
vii. Integrated Aged Care 13
viii. Project Team 14

2. CONTEXT

i. Metro Strategy 16
ii. Local Planning 17
iii. SEPP: Housing for Seniors and People with a Disability 18
iv. Urban Structure 19
v. St George Hospital Development Control Plan 20

3. ANALYSIS

i. Urban Grain 22
ii. Streetscape 23
iii. Transport and Access 24
iv. Aviation Investigation 25
v. Site Investigations 26
vi. Site Analysis 27

4. APPROACH

i. Outcomes and Priorities 29
ii. Key Development Controls 30
iii. Site Principles 31
iv. Design Drivers 32
v. Design Inspiration 33

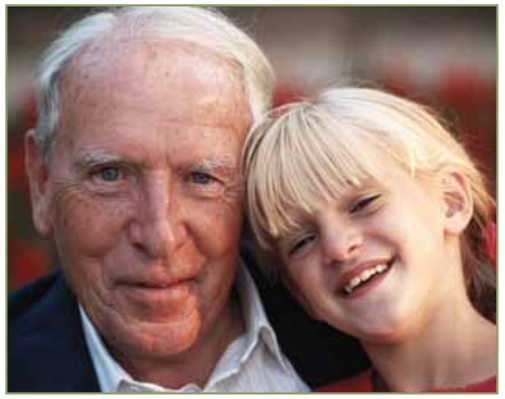
5. CONTEXT

i. Masterplan Concept 35
ii. Visual Analysis 37
iii. Sections 38
iv. Chapel Street 39
v. Village Green 41
vi. Princes Highway 42
vii. Southern Boundary 43

APPENDIX

A. Architectural Drawings 44
B. Design Studies 56
C. Typical Unit & Room Layouts 58
D. Site Survey 61
E. Preliminary Shadow Analysis 63
F. Design Quality Assessment 66

EXECUTIVE SUMMARY



The St Patrick's Parish of Kogarah and the Archdiocese of Sydney have resolved to develop a new integrated care village on the former Bethany College land at Chapel Street, Kogarah to be known as St Patrick's Green.

The vision is to "create a community centred campus focused on spiritual, educational, care and wellbeing that builds upon the 120 year old tradition of delivering important community services to the people of St George."

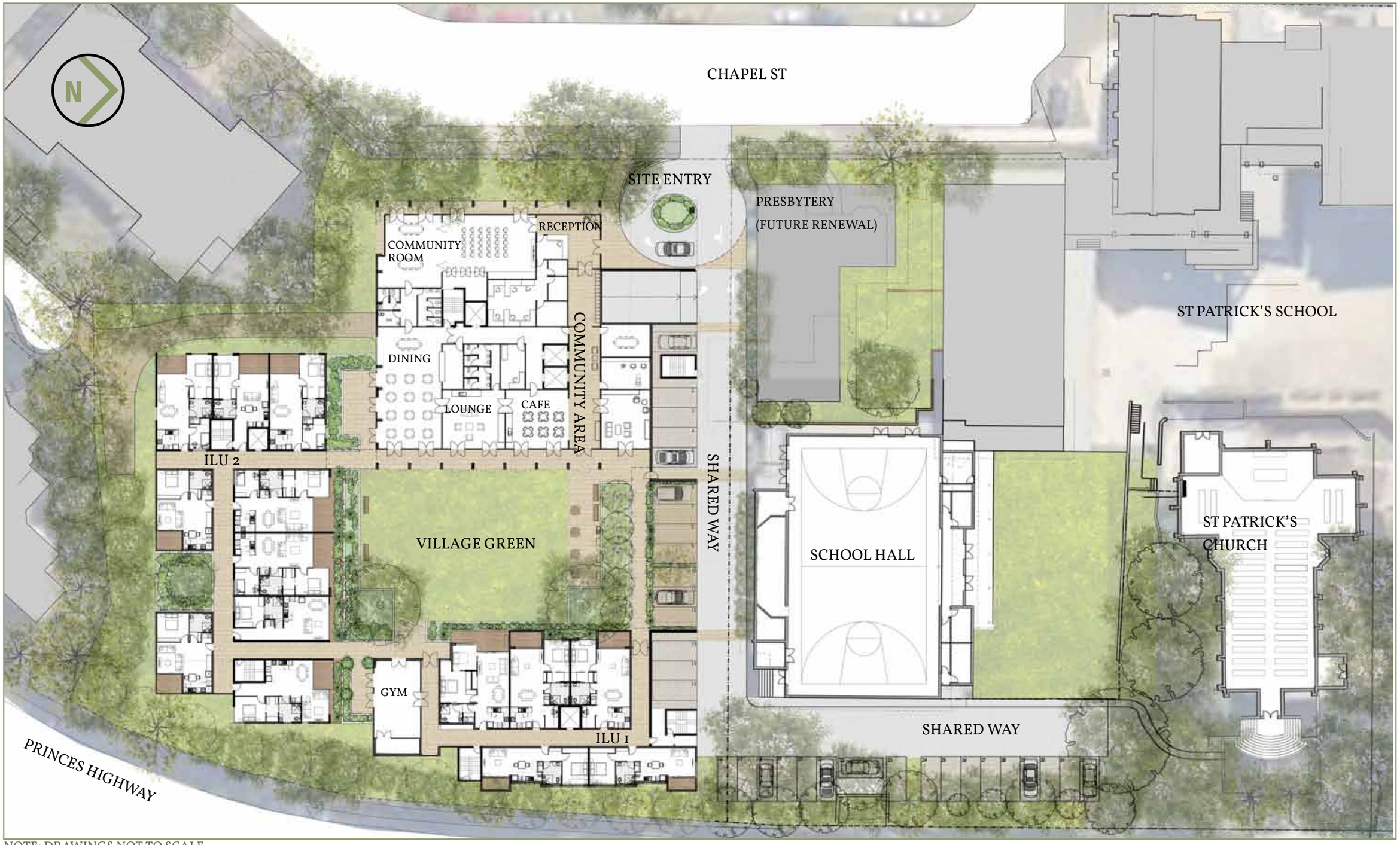
Located on the edge of the town centre and part of the health and medical precinct, the opportunity is to establish a state of the art care village that complements the surrounding community and residential uses. The village will have direct access to all of the transport, shopping and specialist services offered in Kogarah as well the potential to partner with the Hospitals for elderly transitional care.

There is an overwhelming need for new aged care and retirement accommodation in the St George area, particularly for facilities providing 'aging in place' as the Council's recent Ageing Strategy document highlights.

Surrounding a central village green that is roughly the same scale as the Kogarah Town Square the village is proposed to include up to 80 aged care beds and 142 independent living units in three buildings ranging between 4 and 12 stories.

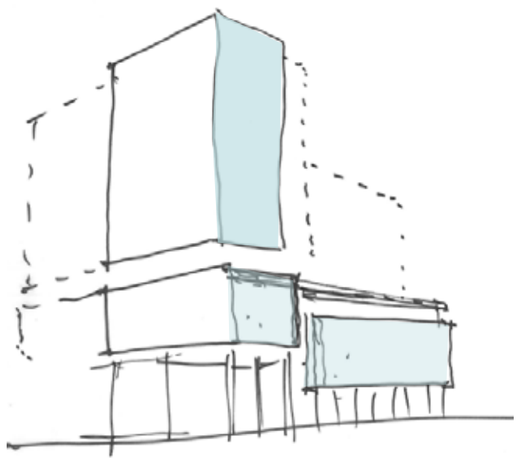
This document outlines the urban design and site investigations undertaken to date. A development application will be lodged later in 2013 with a view to commencing operations in 2016.

CONCEPT MASTERPLAN



NOTE: DRAWINGS NOT TO SCALE

CONCEPT MASTERPLAN



1. INTRODUCTION

INTRODUCTION
1.1 PURPOSE

St Patrick's Parish Church

St Patrick's Catholic Primary School

Bethany College

St Patrick's Parish Church parishioners

The St Patrick's Parish of Kogarah together with the Catholic Archdiocese of Sydney (the Church) are seeking to reinvigorate the former Bethany College land on Chapel Street, Kogarah.

The land occupies part of the 1.2 hectare St Patrick's campus incorporating the historic St Patrick's church and St Patrick's primary school. The college site has remained largely unused following the consolidation of the Bethany College campus to Hurstville in 2008.

In 2012, the Church resolved to redevelop the land to provide a new suite of uses that continue the 120 year old tradition of delivering services to the community of St George.

The central purpose of this document is to outline the proposed masterplan for the land including:

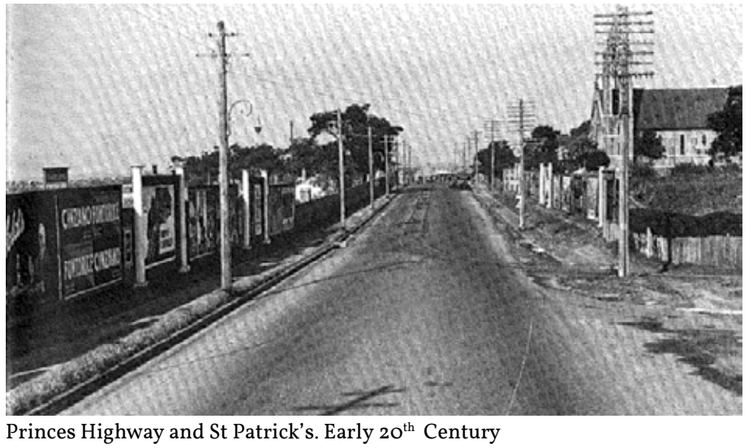
- a summary of the need for integrated aged care in the local community;
- a detailed contextual and site analysis;
- an overview of the approach and concept design;
- a review of the proposal against design quality principles; and
- a suite of preliminary architectural drawings.

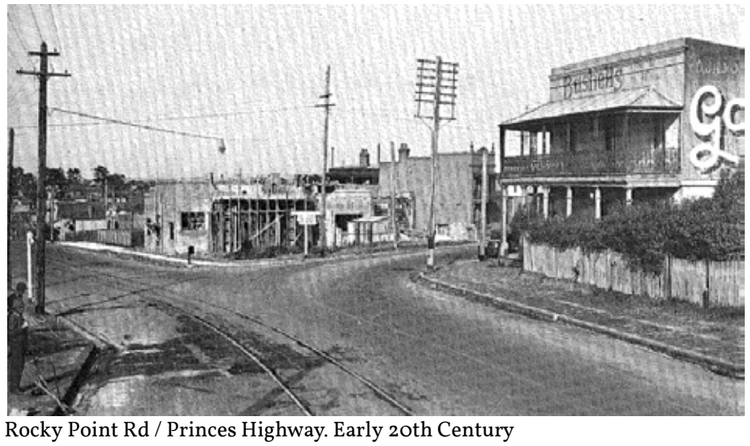
Feedback is sought from the Design Review Panel to assist with the preparation of a development application to be lodged with Kogarah Council later in 2013.

INTRODUCTION
1.2 BACKGROUND

Historical Area Kogorah Town Centre

St Patrick's Church and spire


Princes Highway and St Patrick's. Early 20th Century


Rocky Point Rd / Princes Highway. Early 20th Century

St Patrick's parish has been serving the St George community for over 120 years. The land has historically been a focus of social and civic importance. Prior to the arrival of the railway if formed part of the main street of Kogarah and for a period it was home to the St George Leagues Club before it was relocated.

Over time St Patrick's has undergone several periods of expansion and renewal. In 1984, the prominent Church spire was demolished due to structural deficiencies. More recently, the BER government stimulus package virtually rebuilt the entire primary school .

Since the relocation of the Bethany College in 2008 a number of alternative uses for the land have been considered.

In 2012, the Church decided that given the aging population and the current urgent need for care and accommodation for the local elderly, a new integrated care village would be an ideal use for the land. This will ensure the mission of serving the St George community continues and is entirely complementary to the school, church and surrounding health precinct.

A masterplan for the St Patrick's campus is now being prepared with Greengate to be the village operator.

INTRODUCTION
1.3 LOCATION

Kogorah Town Centre

Kogorah Retail Strip

St George Private Hospital

Located approximately 10km south of the Sydney CBD, the St Patrick's campus forms part of the Kogarah town centre. It is within the district known as St George which includes the Rockdale, Hurstville and Kogarah local Government areas.

Kogarah Town Centre is a compact and vibrant place supporting diverse health, banking, education and business interests as well as residential apartments. Covering an area of approximately one square kilometre the town centre is a walkable neighbourhood well serviced by public transport networks.

The site is adjacent to the main entry to the St George Hospital with an area of 5,400sqm. It has a frontage of 60m to Chapel Street and also backs onto the Princes Highway. It is bounded by the primary school to the north and residential buildings to the south.

Precinct Future Vision

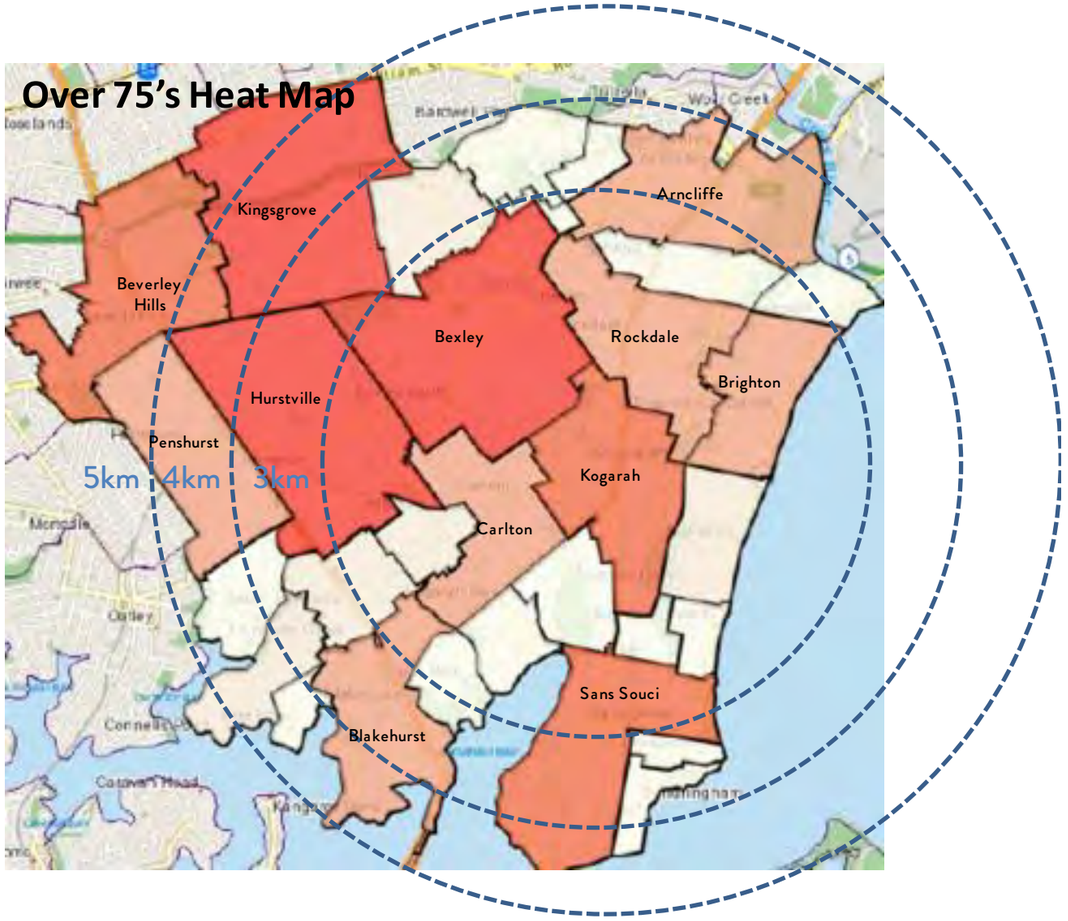
"Create a community centred campus focused on spiritual, educational, care and wellbeing that builds upon the 120 year old tradition of delivering important community services to the people of St George"

To deliver the vision, surplus land will be developed for a new a modern care based village focused on lifestyle, community and healthy living. The village will ensure a vibrant and active parish community is maintained and a quality early education environment can continue on the St Patrick's campus.

The new care village will be a state of the art environment providing all levels of care and accommodation allowing all residents to age in place. Embedded in the village will be a central care philosophy of 'mindfulness' fostering attentiveness and engagement.

The village will bring together residential aged care and retirement living around a central village green. The village green will form part of a ground plane alive with community spaces like lounge, library dining, recreation and reception areas flowing through from the Chapel Street health precinct.

The village will be an open and welcoming place that is connected to the wider community both physically and operationally. The design of the village will carefully balances the operational and care based imperatives with a contemporary urban architectural response as well as complementing the renewal of the St George Hospital.



It is well known the Australian population is facing an aging tsunami. The Commonwealth Government has invested substantial resources into a Productivity Commissions inquiry and more recently into the Living Better Living Longer reforms. The unanimous conclusions are that more needs to be done to provide quality care, accommodation and services for the elderly.

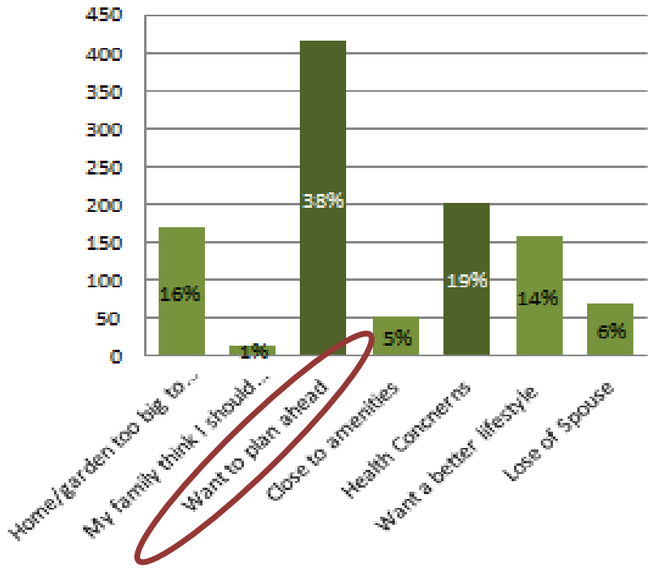
Kogarah Council recently released *Ageing Strategy 2013* in recognition of the area's demographic changes and to ensure the needs and aspirations of older people are recognised and addressed. Some of the relevant findings of the strategy include:

- the need to support well planned and appropriate developments to meet growing demand;
- the need to provide accommodation that facilitates 'aging in place' and
- the need to cater for affordability.

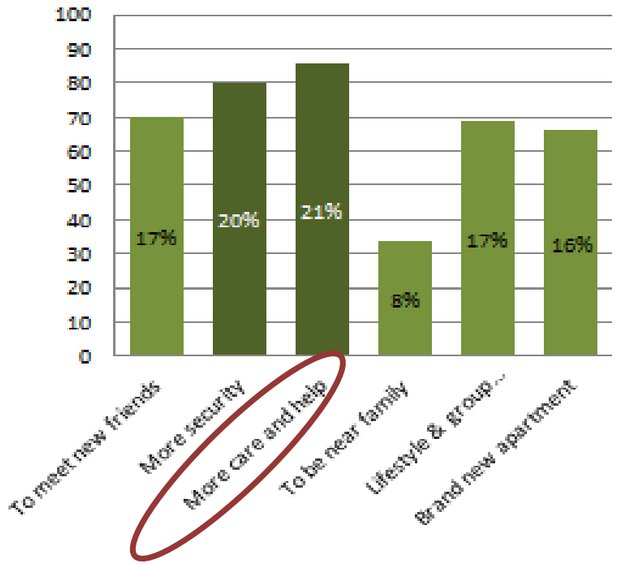
Typically, the residents of a new integrated aged care facility currently live within 5km of the village location and are over 75 years old. An analysis of the St Patrick's Green catchment area reveals that:

- the current stock of aged care is relatively poor;
- very few ILU's exist as the demand is being accommodated by villas which do not provide care;
- by 2016 an under supply of more that 870 beds and 1050 ILU's is forecast (equivalent to 9-10 villages).

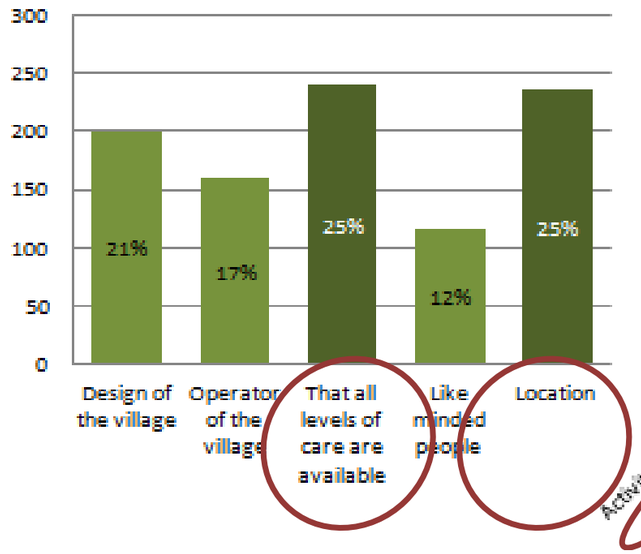
I would consider moving to a village because:



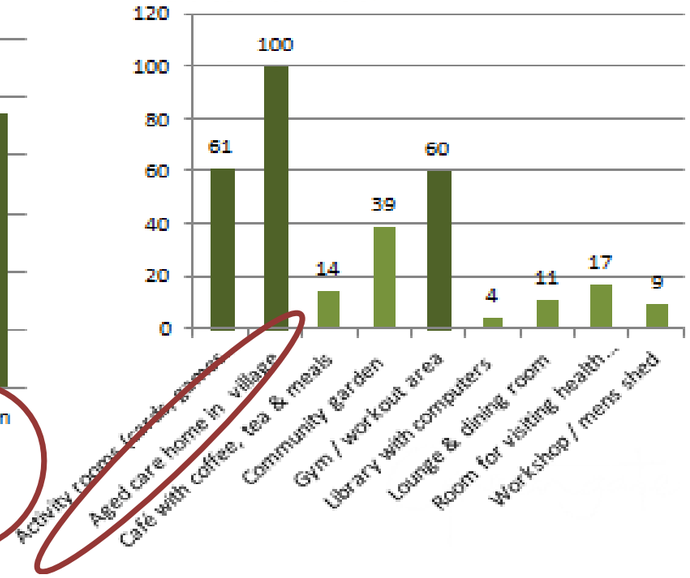
I would move to a village because I'd like:



The most important issue in assessing a potential village is:



If I moved to St Luke's Green the most valued facilities would be:



Over the past 5 years Geengate have undertaken a great deal of empirical research with over 500 elderly people surveyed to find out what they want in modern day aged care and retirement villages. Research has been mainly undertaken through focus groups and consistently the top of mind considerations and preferences are:

- Remain in the area they know;
- Want to plan ahead;
- Care on site and ability to age in place;
- Access to transport and shops;
- Access to health specialists and hospitals;
- Prefer smaller independent living units;
- Prefer a single operator for the village

Integrated care villages are unanimously the preferred option.

Age care bedroom suite

Resident lounge area

Resident lounge area

Independent living unit, internal view

Resident dining area

Resident cafe

St Patrick's Green will be an Integrated Aged Care Village. This means it will incorporate all levels of care and accommodation in one location with a single operator (Greengate). Integrated villages have two main parts:

Residential Aged Care Facility (RACF):
- provides 24 hour nursing care and assistance ;
- residents typically have high care needs and can't live independently
- typically single bed rooms with ensuites;
- common lounge and dining areas
- fresh cook kitchen and laundry on site
- relationship with hospital with targetted transitional care and sub-acute care
- regulated by Commonwealth Government legislation

Retirement Village (RV)
- provides independent and assisted living accommodation;
- residents can live independently but will increasingly need care and assistance;
- a range of apartment sizes and arrangements to cater for all;
- all apartments have kitchens and bathrooms designed for adaptability;
- regulated by State Government legislation

The primary benefit of integrated care villages is the ability to manage residents care and service needs at all stages.

St Peter's Green
LANE COVE

The award winning St Peter's Green village in Lane Cove was completed in 2010. Situated on a former Catholic church site, the village has a 93 bed RACF and 27 independent and assisted living units (IALU's). It also incorporates a Council library, private café, public park and children's playground. St Peter's Green has been widely acclaimed as an exemplar integrated village.

St Brigid's Green
MAROUBRA

St Brigid's Green in Maroubra is under construction and due for completion in 2014. Located close to Maroubra Junction the village occupies the former Brigidine Catholic College and will consist of 67 beds and 88 ILU's surrounding a central village green.

St Luke's Green
BURANDA

St Luke's Green at the inner south Brisbane suburb of Buranda, will include a new 51 bed RACF and 61 IALU's village around the heritage listed catholic church.

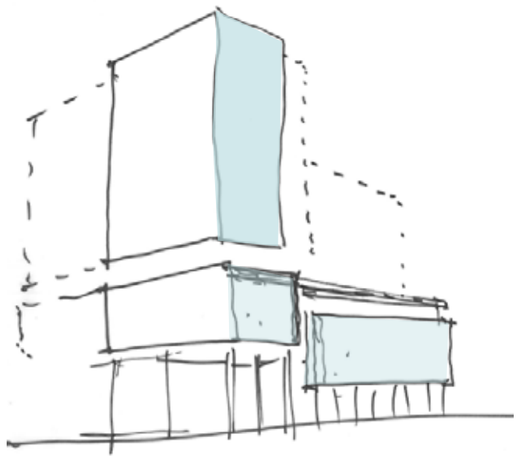
As creator and operator Greengate is dedicated to creating quality integrated care villages in inner urban locations of Sydney and Brisbane. Greengate has a track record of working closely with the Catholic Church and currently has three other villages either complete or underway.

To assist the in-house team, Greengate Care has assembled a highly qualified team of specialists to assist in the creation of St Patrick's Green. The team includes:

- *Russell Olsson (Director, Olsson Associates)*
  Russell has an in depth knowledge of Kogarah having prepared for council the town centre Development Control Plan in 2000. Russell has been principal advisor for urban design, masterplanning and architecture.

- *Dario Spralja (Architect,Quattro Architecture)*
  With more than 15 years experience with the likes of Hassell, Cox and Richard Rogers, Dario has been intimately involved in the design of both St Brigid's and St Luke's for Greengate.

- *David Nelson (Lead Architect, Greengate Care)*
  David leads design across all Greengate villages. With Allen Jack + Cottier background David brings a wealth of aged care and seniors living experience particularly in urban conditions.



2. CONTEXT

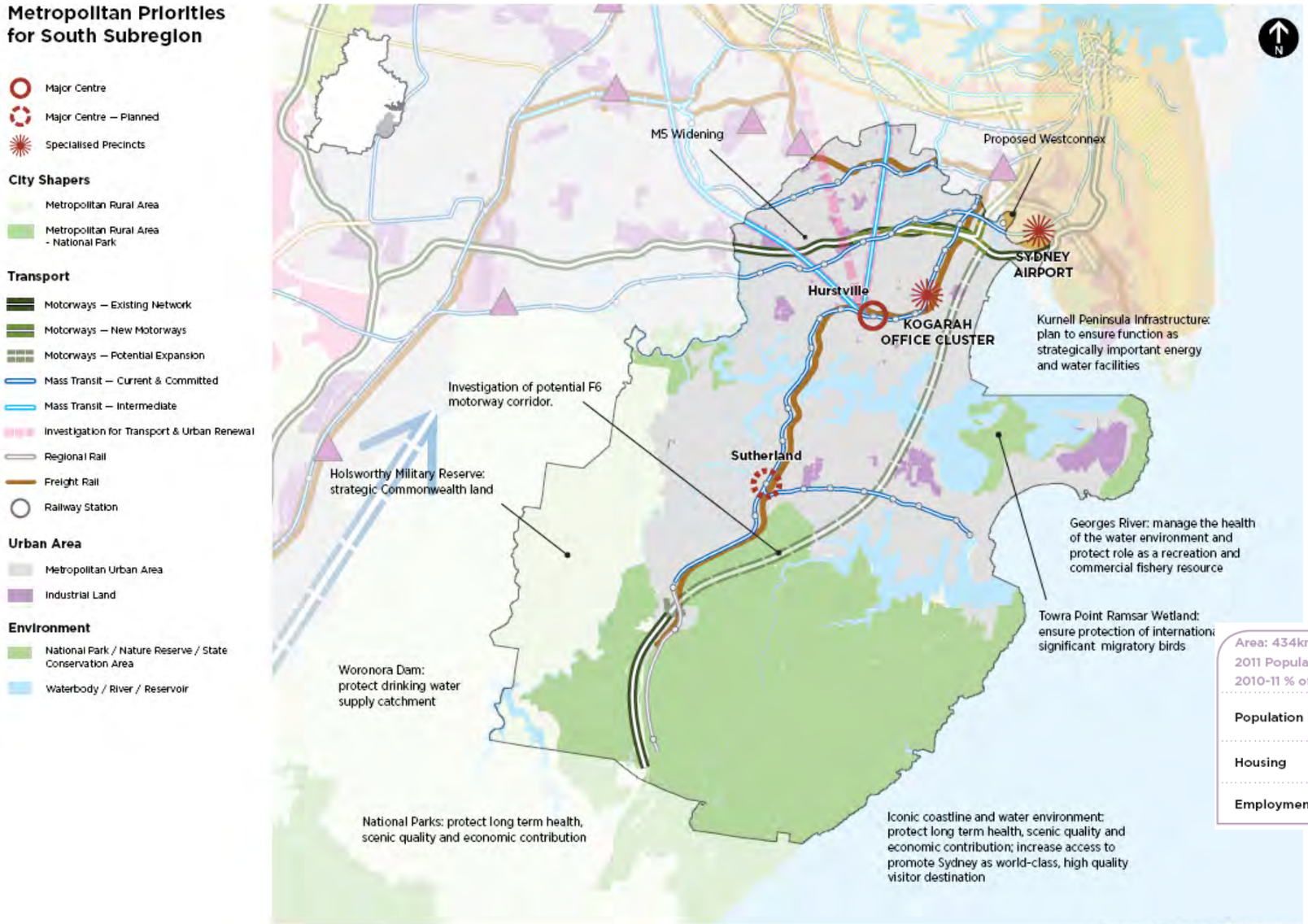


Figure 23: South Subregion

The Draft Metropolitan Strategy for Sydney specifically identifies Kogarah Town Centre as a specialised Precinct

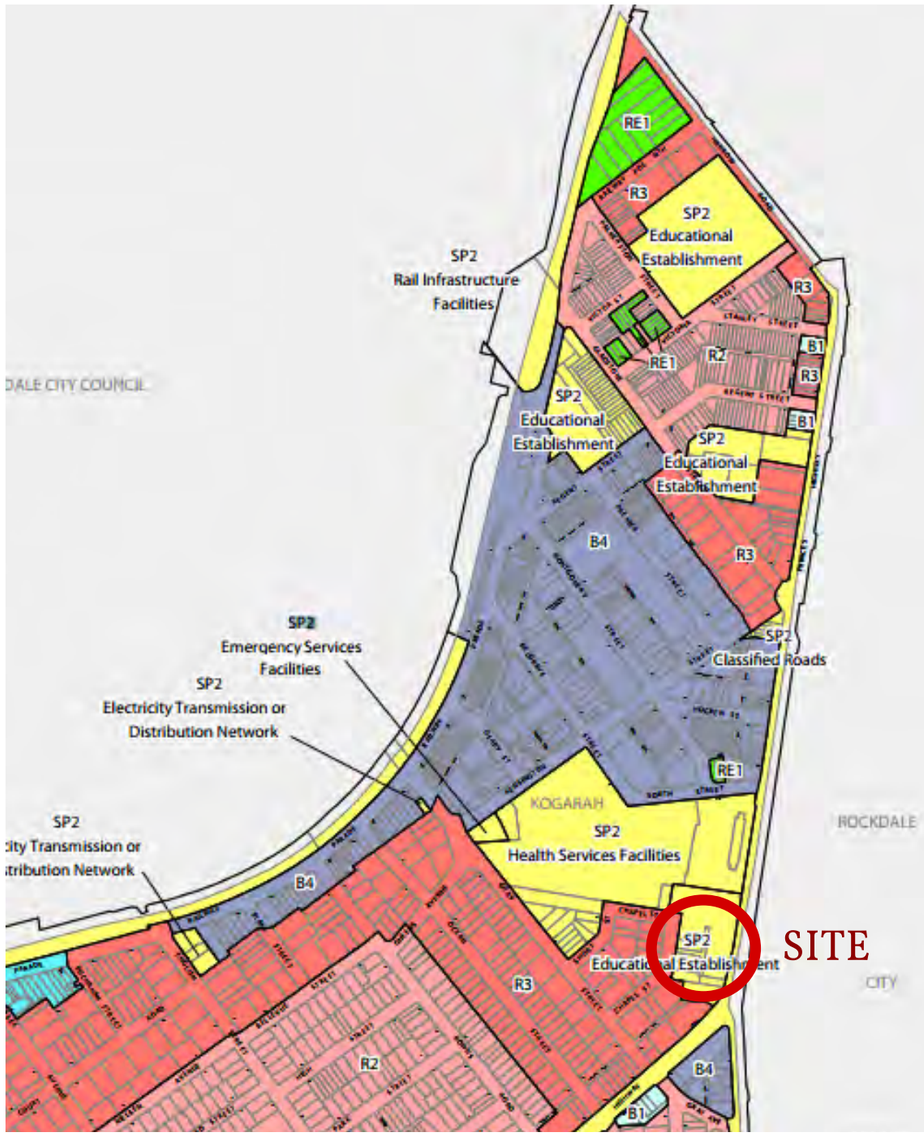
Kogarah Specialised Precinct

- Support opportunities for hospital, medical, educational and finance related industries including a focus on St George Hosptial as a catalyst for a medical/health precinct
- Plan for more diversified office and retail growth as well as more intense housing
- Provide capacity for at least 2,000 additional jobs to 2031

The potential contribution of a new integrated aged care village would accommodate the provision of up to:

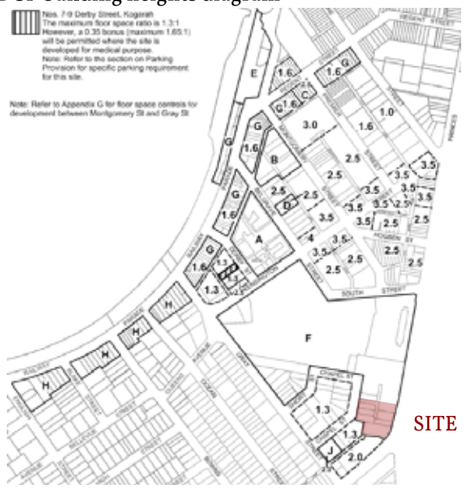
- 200 new beds for the local elderly made up of a mix of aged care and retirement units;
- Up to 40 FTE's in the operational phase;
- Over 300 FTE's during the construction phase;
- Direct economic contribution in the order of $70 million;
- Indirect economic contribution of $350 million.

Area: 434km² 2011 Population density: 1,404 people/km² 2010-11 % of GRP: 5.7 % ($16.5 billion)	Current	Target to 2021 (2011-2021)	Target to 2031 (2011-2031)
Population	609,000	655,000 (46,000)	685,000 (76,000)
Housing	241,000	263,000 (22,000)	283,000 (42,000)
Employment	183,000	207,000 (24,000)	226,000 (43,000)



Zoning map

DCP building heights diagram



DCP FSR diagram

- **A** Kogarah Redevelopment Precinct - see Appendix A
- **B** Kogarah Council and Police Station Site - see Appendix B
- **C** 19 - 31 Regent Street, Kogarah - see Appendix C
- **D** 10 - 12 Belgrave Street, Kogarah - see Appendix D
- **E** Kogarah Railway Station - deferred pending future study
- **F** St George District Hospital - deferred subject to Hospital Masterplan
- **G** Railway Parade - see Appendix G
- **H** Railway Parade South - see Appendix H
- **J** No's 52-56 Gray Street, Kogarah - see Appendix J
- **K** Southern Retail Precinct - see Appendix K

The Kogarah Town Centre is situated on the northern extremity of the Kogarah Local Government Area (LGA) and forms a narrow wedge (600m wide approximately) extending in to the Rockdale LGA.

The Kogarah Local Environmental Plan 2012 zones the Bethany College site as SP2 (Educational Establishment). Aged care and seniors housing are not permitted uses in the zone. No other development standards exist for the subject land.

To enable the proposed integrated care village a DA will be lodged pursuant to the State Environmental Planning Policy - Housing for Seniors and People with a Disability 2004 (SEPP HS).

The Kogarah Town Centre Development Control Plan, as identified previously, defers any specific controls for the subject land to a future Masterplan.

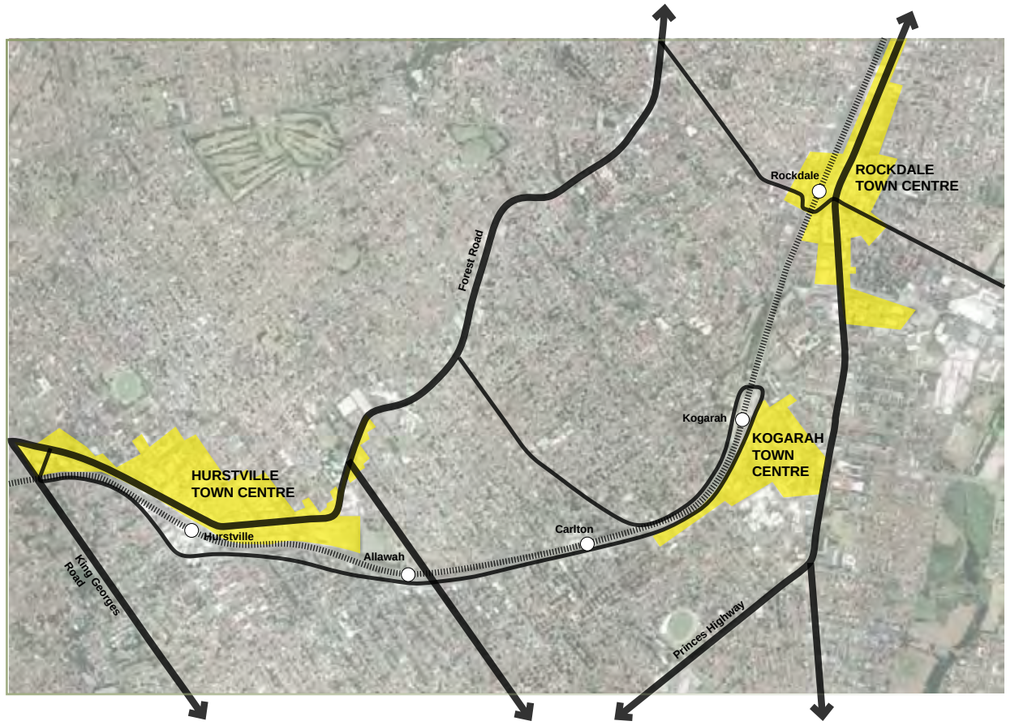
This masterplan document sets out the proposed development controls for the land.

2.3 STATE ENVIRONMENTAL PLANNING POLICY HOUSING FOR SENIORS AND PEOPLE WITH A DISABILITY

The SEPP HS was introduced specifically to promote care and accommodation for the elderly throughout NSW.

In accordance with the SEPP HS a Site Compatibility Certificate (SCC) must be issued by the Director General of the Department of Planning and Infrastructure (DPI) before DA can be lodged. To issue a SCC the Director General must determine if the proposed development is compatible with the surrounding land uses having regard to the considerations outlined in table 1. The Church applied for a SCC in late May 2013.

SEPP HS Compatibility Consideration	**St Patrick's**
(i) the natural environment (including known significant environmental values, resources or hazards) and the existing uses and approved uses of land in the vicinity of the proposed development,	There are no existing environmental values, resources or hazards on the site. The existing and approved uses of the surrounding land are community (hospital and school) and residential. Aged care and seniors living area a blend of of residential and community uses and are compatible.
(ii) the impact that the proposed development is likely to have on the uses that, in the opinion of the Director-General, are likely to be the future uses of that land,	The proposed development will have minimal impact on alternate use for the land.
(iii) the services and infrastructure that are or will be available to meet the demands arising from the proposed development (particularly, retail, community, medical and transport services having regard to the location and access requirements set out in clause 26) and any proposed financial arrangements for infrastructure provision,	The town centre is well equipped to provide the necessary infrastructure for the proposed use.
(iv) in the case of applications in relation to land that is zoned open space or special uses—the impact that the proposed development is likely to have on the provision of land for open space and special uses in the vicinity of the development,	The proposed development will have no impact on the provision of other special uses land given the substantial land holdings surrounding the site dedicated to special purposes (educational
(v) without limiting any other criteria, the impact that the bulk, scale, built form and character of the proposed development is likely to have on the existing uses, approved uses and future uses of land in the vicinity of the development,	The impacts of the bulk, scale and built form of the proposals have been carefully considered to ensure they are compatible with the existing and future uses of the land,
(vi) if the development may involve the clearing of native vegetation that is subject to the requirements of section 12 of the Native Vegetation Act 2003—the impact that the proposed development is likely to have on the conservation and management of native vegetation	No native vegetation will be cleared.



Rockdale, Kogarah and Hurstville form a triumvirate of town centres tied to the railway line. Separately they each represent aspects of best practice town planning in terms of the integration of land use and transport.

Over the past 10 years the centres have experienced a level of urbanization which has fundamentally changed the character and land economy to a point where prevailing planning controls have been overtaken by events.

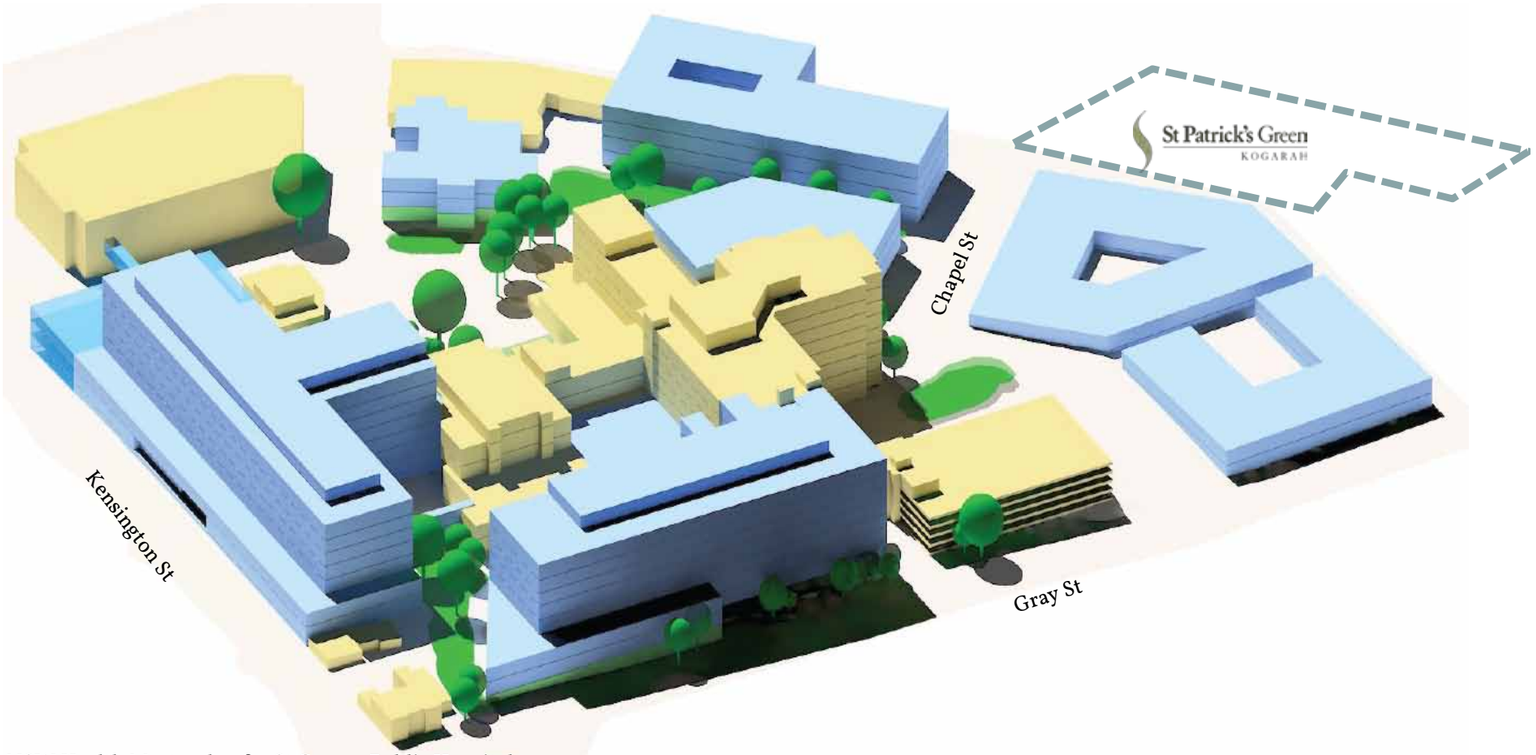
Evidence of this can be seen in all three of the centres where a greater scale and intensity is emerging. For example, the proposals for East Quarter and Treacy Street Hurstville as well as Rockdale Plaza.

The Kogarah LEP and Town Centre DCP have not had substantive revision since the early 2000's. Accordingly the Hospital DCP and this document together outline the desired future character of the locality as part of the Kogarah Specialised Precinct, described in the Draft Metro Strategy.

East Quarter, Hurstville

Treacy St development, Hurstville

175 Princess Highway, Rockdale



NSW Health Masterplan for St George Public Hospital

St George Private Hospital

Calvary Hospital Palliative care

St George Public Hospital

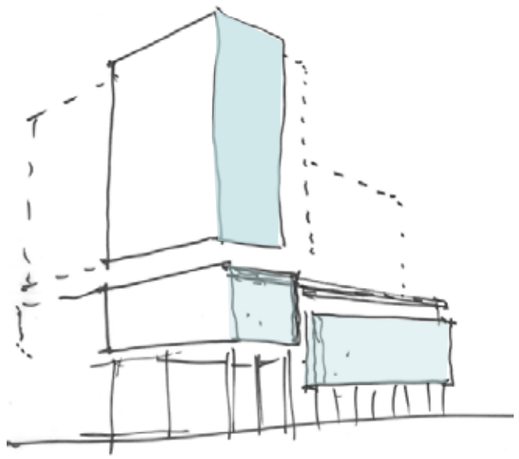
St Patrick's Green is located in the centre of the St George and Kogarah medical precinct, incorporating the major metropolitan referral facility St George Hospital, St George Private Hospital (operated by Ramsay Healthcare) and Calvary Hospital (palliative care).

In January 2013, the St George Hospital released its Development Control Plan (DCP) outlining the future development for the Campus. Stage 1 involves the new Emergency Department on Gray Street the new sub-acute aged mental health unit both currently under construction. Other relevant features of the DCP are;

- A doubling of the total gross floor area of the hospital;
- Building heights in excess of 64m RL (equivalent to the existing clinical services building);
- Tower blocks above podiums on Gray Street and Kensington Street; and
- Redevelopment of the land around Short and Chapel Street

The proximity of the new integrated aged care to the medical precinct provides a range of operational synergies such as:

- Wider and direct access for village resident to a range of specialist services;
- Potential for the village to provide sub-acute packages to the hospital reducing the demand on post-acute outpatient care packages;
- Ability for the village to provide rehabilitation services to facilitate early discharge; and
- Potential transitional care services to facilitate early discharge.

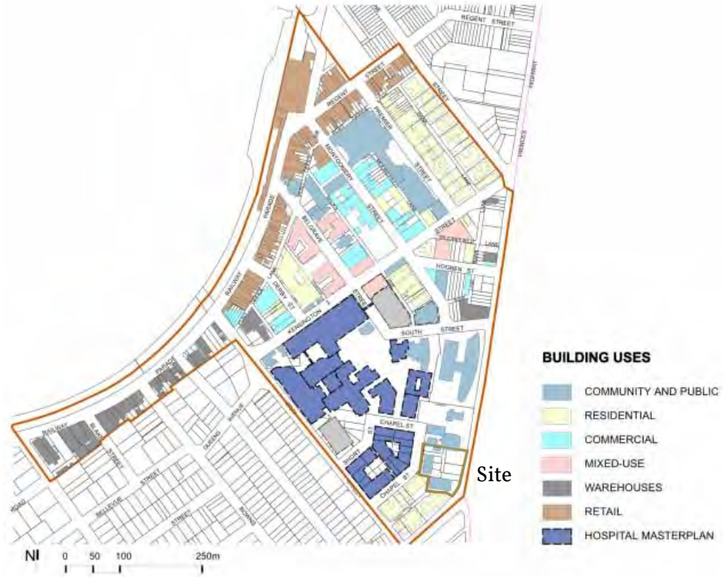


3. ANALYSIS

Aerial of precinct

Figure ground study

Landmark building height and contours



Building use

The urban grain of Kogarah town centre is defined by the strong physical boundaries of the railway and highway together with a clear street pattern overlaid on ridgeline topography.

The Hospital and the St George Bank buildings occupy and define the high points. Kensington Street creates a dominant axis dividing the centre into an eastern and western flank.

The west has a finer grain and reduces in scale to a village character along Railway Parade. It is the main commercial, shopping and living precinct.

The east is characterised by bulky, larger floorplates and taller built form. It is a mix of community uses including health, medical, education and research as well as residential.

The site is well situated to provide a transition between the community uses and the residential to the south.

1. Chapel St. Looking North

2. Chapel St. Looking South

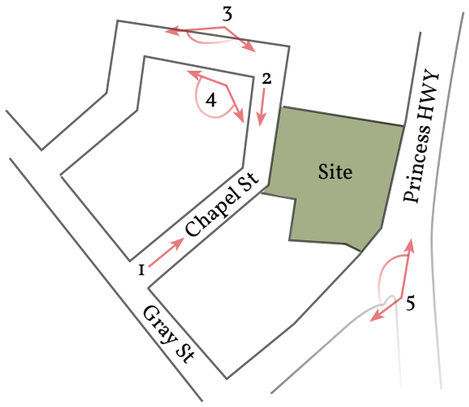
3. South Panorama from Chapel St

4. North-East Panorama from Chapel St

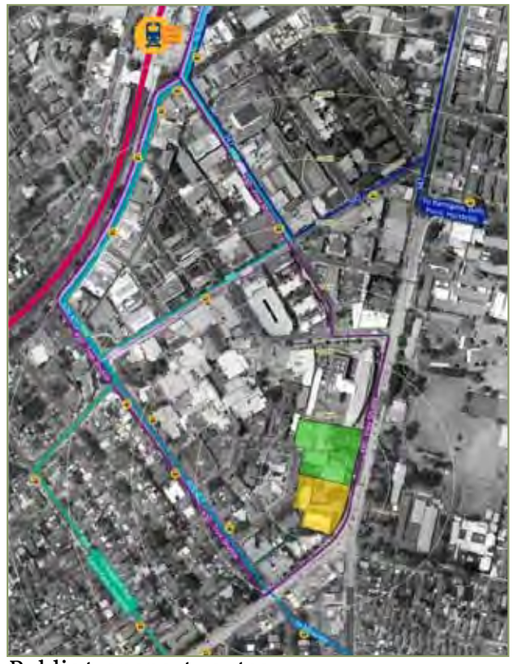
5. South-West Panorama from corner of Rocky Point Road and Princes Highway

The streetscape character of the Princes Highway is a mix of residential and institutional character. With a variety of new residential developments currently under construction the highway built form is increasingly becoming a strong built edge to the town centre.

Chapel Street is a wide one way street dominated by the public Hospital buildings and on street parking. The mature gum trees around the site provide a pleasant character and foil to the buildings behind. The streetscape, however, generally lacks any real sense of quality. A number of temporary, vacant and poorly maintained buildings suggest the immediate locality would benefit from renewal.



Key Diagram


Public transport routes

Pedestrian link through Hospital

Vehicles access to site

Kogarah shuttle bus

Princes Hwy pedestrian bridge

A range of specialist investigations have been undertaken to date including; transport and traffic, aviation, acoustic, arboricultural, hazmat and geotechnical.

Transport

An assessment of the site in relation to transport confirms:

- A bus stop is located within 100m of the site on Gray Street.
- The bus stop provides direct access to the Kogarah shuttle which circulates around the town centre
- The site is within 700m of the Kogarah train station and is connected by a relatively level walk through the hospital; and
- Additional district bus services are available within Kogarah.

Traffic

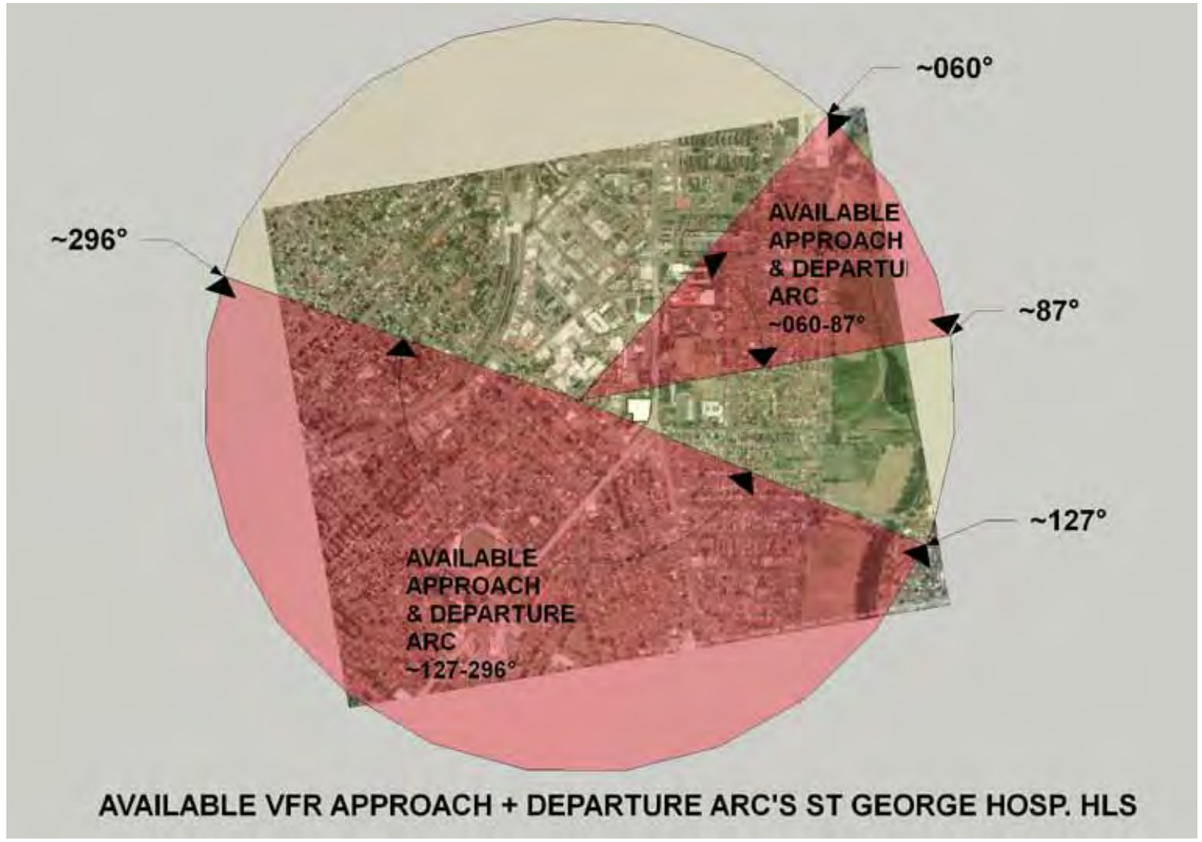
The Chapel Street precinct is known area of high volume traffic. An initial review of the traffic indicates the proposal will have no adverse impact on the local conditions due to the low and off peak travel patterns in retirement and aged care. Further detailed assessments are underway particularly focused on queuing at Gray Street intersection with the Princes Highway

Parking

Chapel Street is a known area of high parking demand. Current assessments confirm parking should be compliant with the provisions of the SEPP HS and Council have confirmed no additional parking for the school is required.

Access

Current recommendations are to split vehicle access with primary private vehicles to enter and exit via Chapel Street and serviced vehicles to utilise Princes lane. Council concur with the approach.



Helicopter approach diagram

Detail - Helicopter approach and departure path

Helicopter Flight Path Assessment
The St George hospital has a helipad located on top of the Gray Street multistorey car park. A helicopter flight path assessment has been undertaken by Aviation Professional Services Pty. Ltd. (AviPro).

The assessment confirms that appropriate helicopter approach and departure paths can be achieved without obstacle interference and there will be no unacceptable impacts on aviation safety as a result of the proposed development. A report has been submitted to Civil Aviation Safety Authority.

Obstacle Surface Limitation (OLS) Assessment
The site falls within the Inner Horizontal Area of the Sydney Airport Masterplan which has an OLS threshold of 51.0m AHD. Avipro have undertaken an assessment and confirmed that whilst a small part of the proposed village will exceed 51.0m it will still be below the existing and proposed St George Hospital buildings immediately adjacent to the site.

As a consequence, provided red obstacle lights are installed on the tallest building the proposal will not have any additional or unacceptable impacts on aviation safety in the area. A full report and application has been lodged withSACL and the proposal has now been referred to CASA and Air Services Australia.

Acoustic

A preliminary acoustic assessment confirms that site falls within the Roads and Maritime Services (RMS) traffic volume maps. Accordingly the proposal must comply with the mandatory requirement under clause 102 of the State Environmental Planning Policy (SEPP Infrastructure) 2007 to achieve the levels outlined below.

Space /Activity Type		Project Internal Noise Level Criteria (SEPP)
Residential	Sleeping Areas	35 dB(A) $L_{eq\ (9\ hr)}$
	Living Areas	40 dB(A) $L_{eq\ (15\ hr)}$

- Achieving the mandatory acoustic levels will require treatment such as:
- Insulated glazing units with acoustic seals to windows should be used for all windows particularly those facing east;
- Ceiling and walls should insulation; and
- Specific treatments to penetrations

Arboricultural

An arboricultural assessment has been undertaken for the entire site. It confirms the eucalypts to Chapel Street are the main trees worthy of retention.

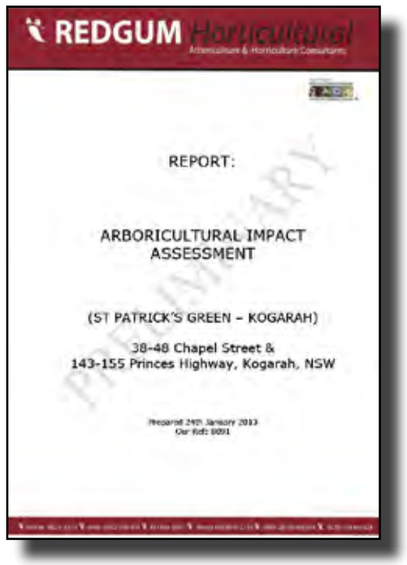
Hazardous Materials and Contamination

Current assessments indicate there are no hazardous material or contamination on the site.

Geotechnical

The subsurface conditions of the site are typically composed of up to 0.8m of sandy fill over 1.5-2.5m of residual silty clays (medium and high plasticity). Beneath which is thin layer of weathered shale

- of extremely low and very low strength and a sandstone bedrock 3m to 4.5m below the surface. The sandstone reaches medium to high strength from 4.6m. No groundwater was encountered.



Infrastructure

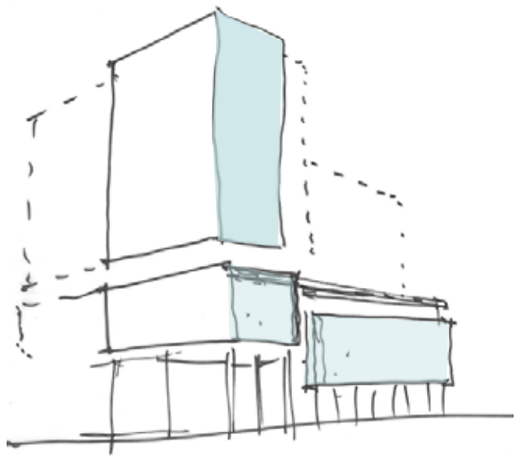
Investigations in to the local services and infrastructure have confirmed:

- A new 1000kva substation will be required. This will need to be located on thee Princes Highway frontage;
- A sewer diversion will be required. Design negotiation are continuing with Sydney Water;
- A water main upgrade in the Princes Highway will be required; (negotiations underway with Sydney Water)
- A suitable high pressure gas supply exists in Chapel Street;
- Telecommunications services exist in Chapel Street.

Services Diagram

In addition to the investigations described above other aspects of the site conditions to consider are:

- The future renewal of the presbytery and adjacent health lands;
- The site is well orientated to take advantage of the summer breezes and winter sun;
- The elevation of the site means it is exposed to strong southerly breezes;
- Existing trees along the Chapel Street frontage provide good street amenity;
- Potential views to the district, CBD and Botany Bay are available from 6m above Chapel Street;
- The site has a cross fall of almost 6m (two storey's from Chapel Street to Princes Highway);
- Existing college buildings on the site are up to 12m in height and currently overshadow neighbouring residential buildings;
- Traffic noise from the highway needs to addressed to improve site amenity;
- The school halls southern wall is large and blank and will face the village site;
- The school hall provides a good foil for visual privacy to the school grounds;
- Chapel Street has a generous 20m wide carriageway;
- Informal cross site links between the college site and the church exist.



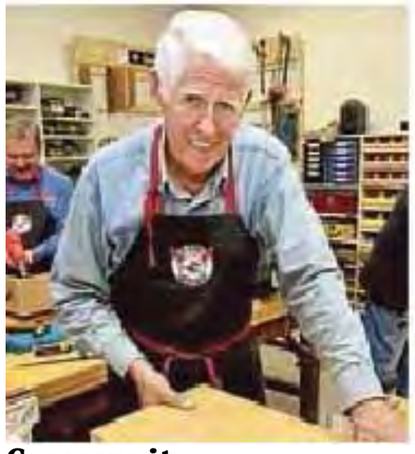
4. APPROACH

Care
The highest priority, a care philosophy must underpin all decisions. Greengate's care philosophy is 'mindfulness';

Sustainability
To ensure the longevity and quality of villages can be sustained economic viability and environmental responsibility are paramount;

Operations
Practical arrangements for kitchens, laundry, servicing and loading docks is paramount providing care and accommodation for the elderly;

Choice
A variety of options for care, services and accommodation is imperative to cater for all and to ensure affordability is provided.

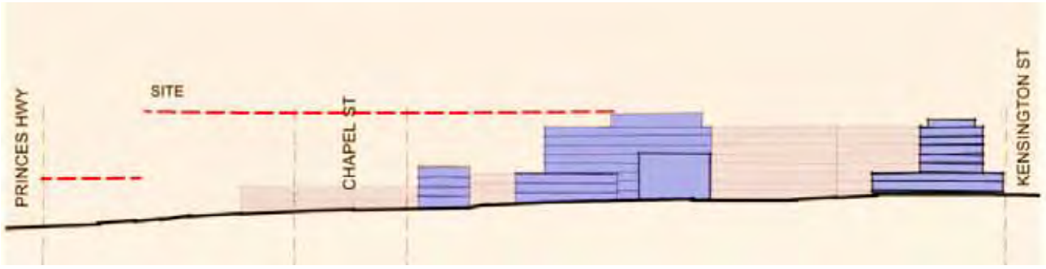


Community
A caring and vibrant village community is a combination of a carefully considered physical layout as well as the 'soft' infrastructure like events, gatherings and village social calendar.

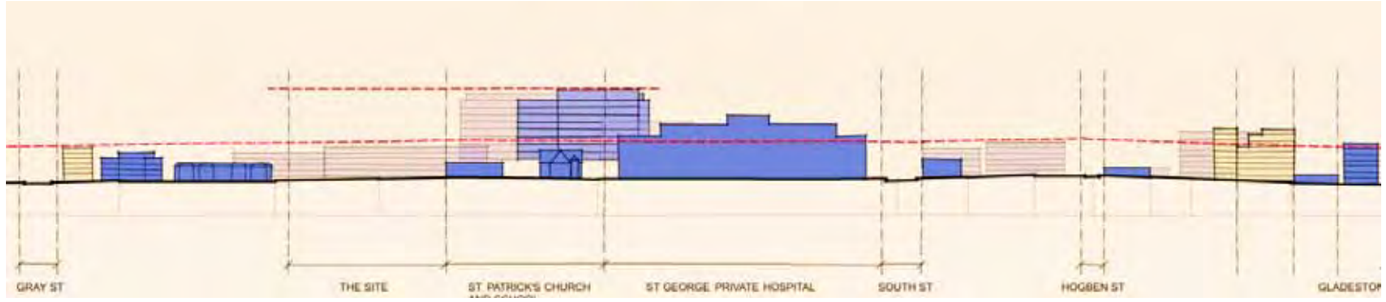
Environment
Creating healthy living environments for the elderly in inner urban locations is challenging. Greengate adopt the philosophy of buildings in a landscape setting which often means the village takes on a more vertical design;

Place
Integrating with the local neighbourhood both physically and operationally creates connected villages that residents, family and staff identify with.

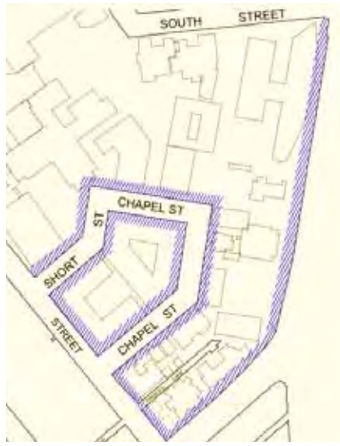
Design
The village design draws together, balances and prioritises all key themes. Greengate recognise the value of design particularly the importance of the ground plane.



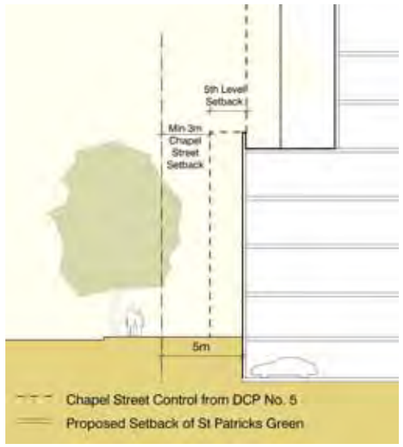
1 Chapel Street Height Plane



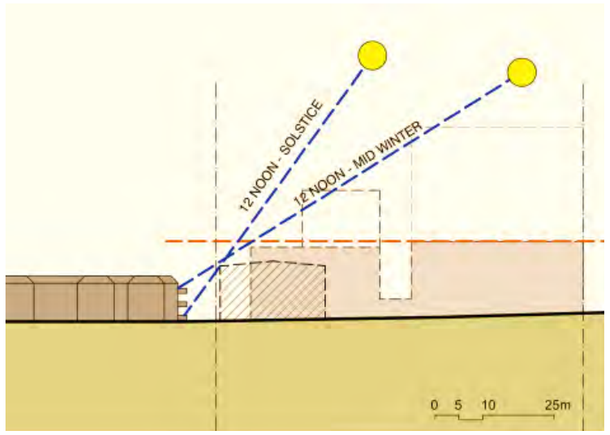
2. Princes Highway Height Plane



3. Precinct Built Edges



4. Chapel Street Setback



4. Southern Boundary Envelope Control

In the absence of any existing planning controls for the site the urban design investigations have established four key controls to guide development, including:

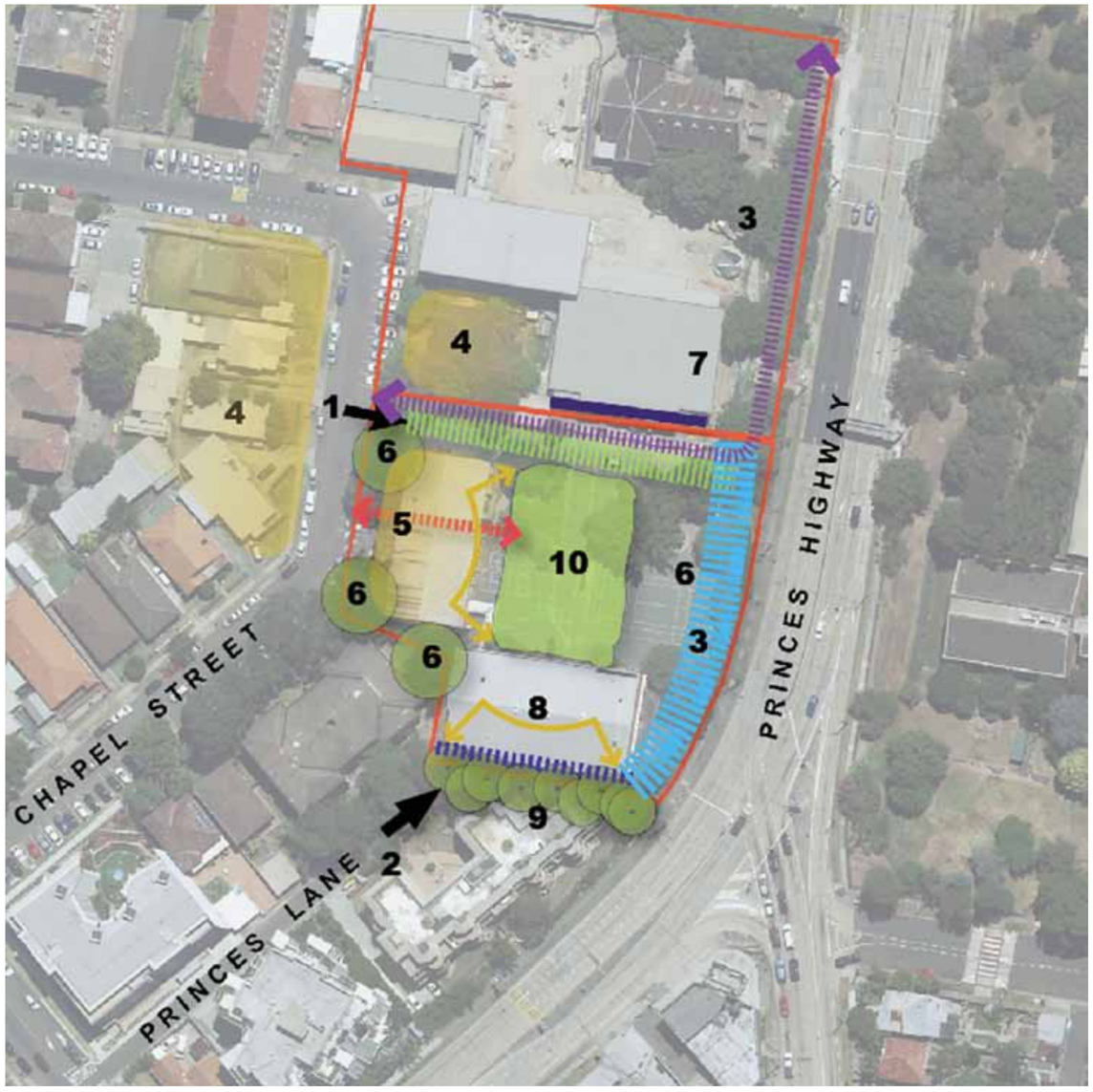
1. **Chapel Street Height Plane**- new built form is to be lower than the existing clinical services building of the public hospital (65.0m AHD);

2. **Princes Highway Height Plane**- new built form fronting the highway is to be no more than six stories above the highway (41.0m AHD at the St Patrick's site);

3. **Precinct Built Edges**- a consistent built form alignment should be established along the highway frontage (maximum six stories) and to the Short Street and Chapel Street frontage (maximum 4 stories); and

4. **Chapel Street Setback** - The 4 storey street frontage is to be set back three metres minimum from the street alignment. The proposed setback is five metres;

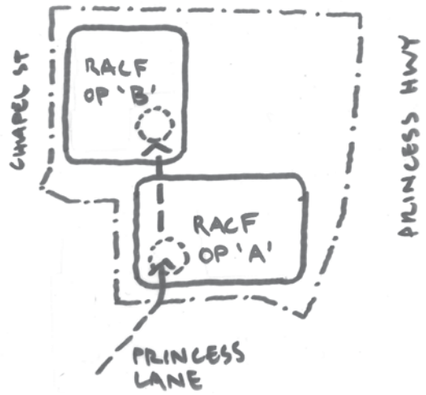
5. **Southern Boundary Envelope Control**- building envelopes and should be setback and modulated to achieve no net loss of amenity to residential dwellings



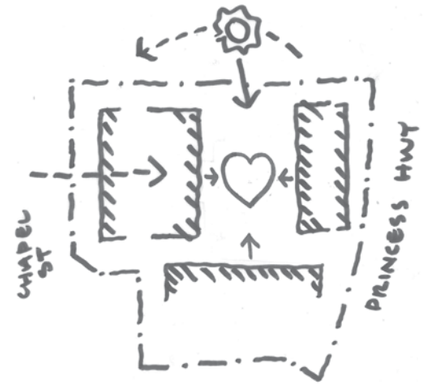
As an extension to the site analysis and urban design investigations, site specific masterplan principles include:

1. Establish primary vehicular and pedestrian access from Chapel street;
2. Service vehicle only access should be from Princes Lane;
3. Establish a cross site link from Chapel Street to St Patrick's Church;
4. Consider the future development of the Presbytery and the adjacent Chapel Street health owned land;
5. Establish a defined built edge incorporating the scale of existing eucalypt trees on Chapel Street
6. As a foil for noise and for visual interest combine a built edge and landscaping to the Princes highway frontage;
7. Soften and reduce the scale of the school hall southern wall using planting or artwork;
8. Maximise the view opportunities to the north, east and south
9. Complement the existing vegetated buffer along the southern boundary
10. Create a substantial village green with access to light and air.

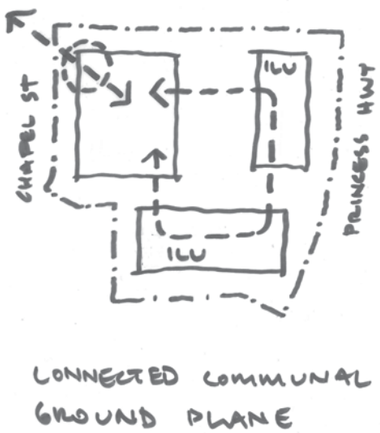
APPROACH
4.4 DESIGN DRIVERS



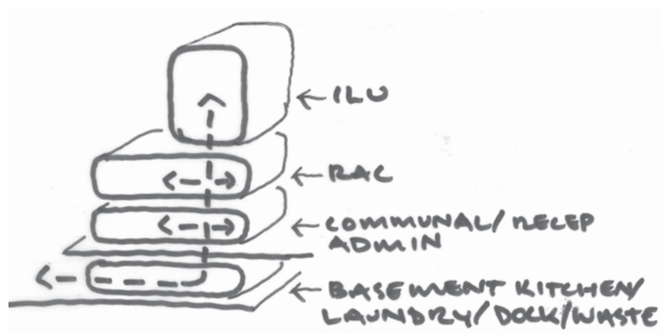
1.Location



2. Heart

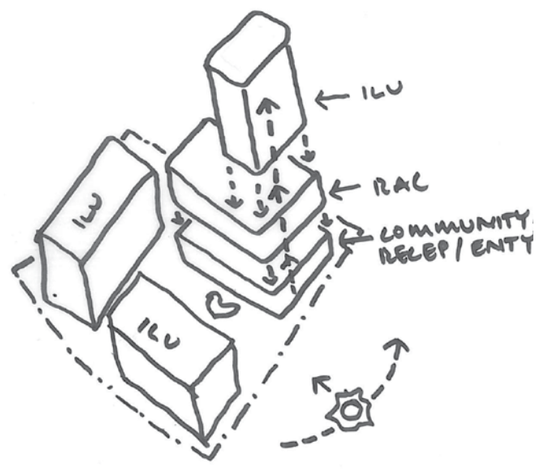


3. Connected



4. Vertical

5. Engaged



6. Massing

1. **Location of the RACF** - operational and functional requirements (services and care) together with a substantially different building form mean the RACF location is a first order design driver. Only two options are possible at St Patrick's; the southern boundary or Chapel Street (preferred).

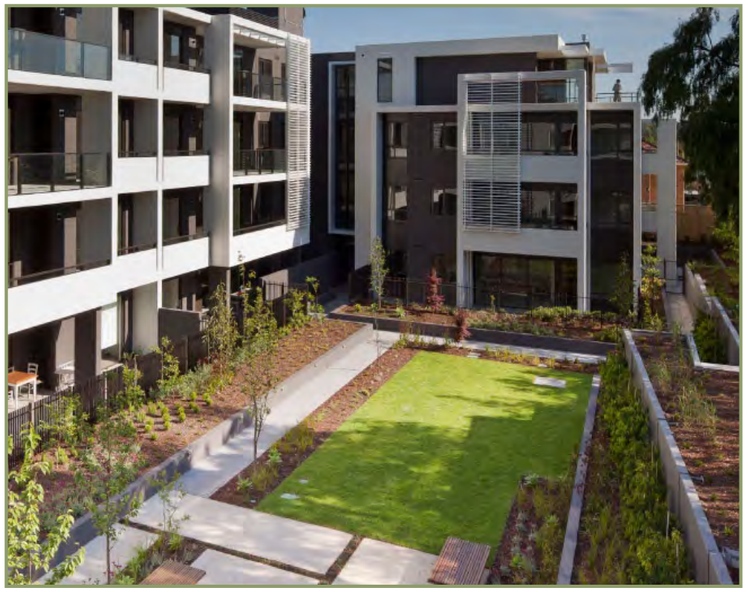
2. **Village Heart** - a generously proportioned open space and village green that is available to all residents is a primary design driver. The village green must be well overlooked for surveillance with access to light and sun.

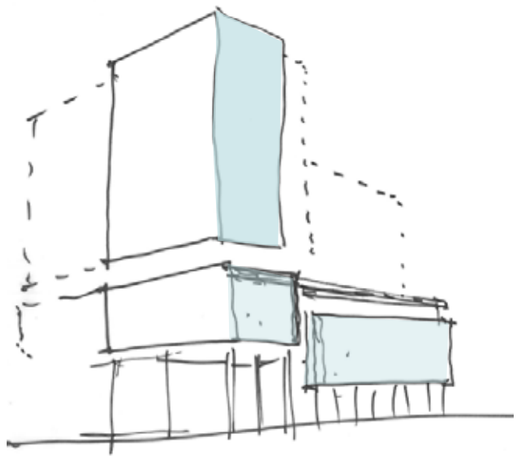
3. **Connected Communal Ground Plane** - the ground plane of the village including the village green must be connected and full of communal spaces both active and passive with a clear pattern of circulation, identifiable entry and reception.

4. **Vertical Integration** - a vertically integrated building combining RACF, ILU's and community spaces provide maximum flexibility, choice and efficiency in the delivery of care and services for residents.

5. **Chapel Street Engagement** - a village and built form that positively engages and contributes to the Chapel Street streetscape is a driver to create a place that is welcoming and inclusive, not institutional.

6. **Massing Arrangement** -in line with empirical research the design should arrange building mass to take advantage of solar and view amenity whilst being sympathetic to the context and precinct.





5. CONCEPT

CONCEPT
5.1 MASTERPLAN CONCEPT

Precinct Plan

The masterplan concept establishes three separate buildings surrounding a central north facing village green. The main building presents to Chapel Street as part of four level podium and is designed to incorporate the village entry and existing trees.

The main building comprises all of the community spaces as well as the residential aged care, assisted and independent living units. The building is part nine, part 12 storey 's modulated into a series of finer elements.

Fronting the highway is a part four and part five storey independent living building with apartments predominantly facing the courtyard but with some smaller more affordable accommodation adjacent to the highway. To the southern boundary is a second building containing only ILU's. It is a part 4 part 5 storey building setback from the southern boundary by some 6m.

A landscaped car parking area provides a buffer between the village and the school and will incorporate a green wall to the blank end of the hall. The car park will be treated as s shared way establishing a pedestrian link between the village, hall and St Patrick's parish Church.

NOTE: DRAWINGS NOT TO SCALE

CONCEPT
5.2 VISUAL ANALYSIS

The following suite of images show photomontages of the proposed scheme from various views located in the local area.

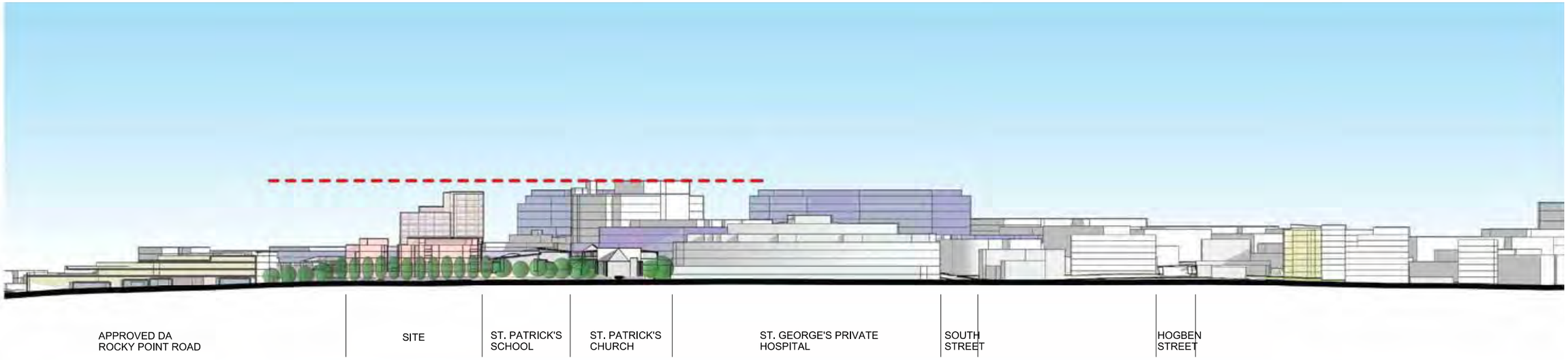
The montages show the village buildings form a reasonable town centre aggregation with the adjoining hospitals.

Banks Street

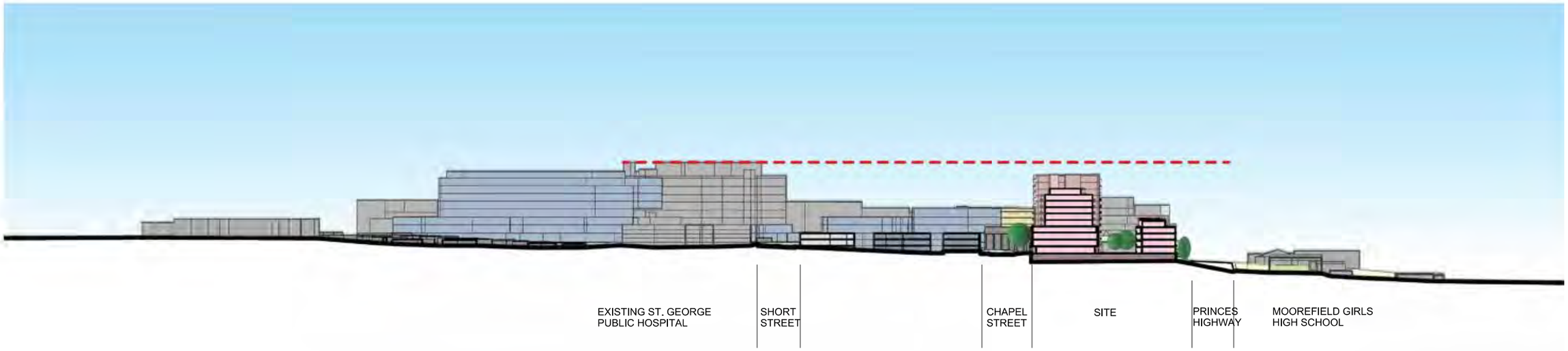
Chuter Street

Barton Ave

Key map



PRINCES HIGHWAY ELEVATION



SITE SECTION - NORTH SOUTH

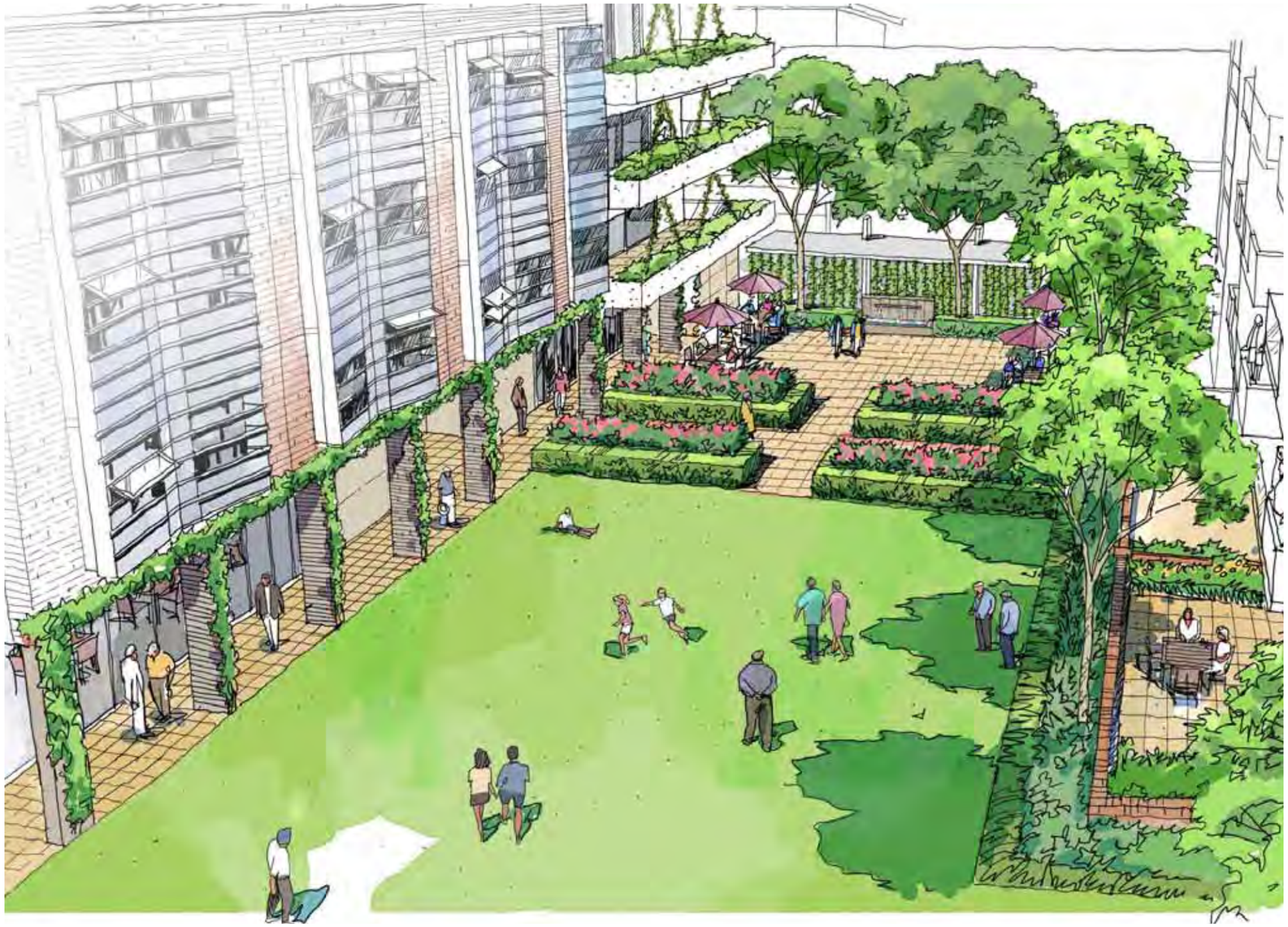
PROPOSED SCHEME
EXISTING
PROPOSED HOSPITAL MASTERPLAN
APPROVED DA

Perspective: Site entry, Chapel St looking South

- The proposed scheme presents to Chapel Street as a composition of three elements; a four level podium with two block elements above;
- Each element is an expression of its particular function and celebrated across the elevation generating a lively and engaging architectural outcome;
- Ground level of the podium comprises the porte-cochere, reception entry and flexible community spaces. The porte-cochere is a double height volume formed within the mass of the podium element. It incorporates concrete structural framing; feature stone cladding and hull height glazing to internal spaces;
- A single storey colonnade supports the balance of the podium allowing for internal spaces to engage with the street through large glazed openings;
- Elsewhere the upper levels of the podium feature windows to RAC bedrooms. These are grouped into paired clusters; glazed to form window bays. This breaks down and modulates the scale of the larger context. Screens provide shading to bedrooms;
- The overall podium is composed into a number of sub elements by the use of expressed edge framing creating of visual reference with the upper level independent living units;
- The upper levels are orientated mostly north with some west and south. Corner instances in both directions provide the opportunity for dual aspected units.

Perspective: Chapel St Elevation

- Generally, deep balconies are used to provide both good outdoor living areas, solar shading and to formalise and order the overall façade. The balconies are formed from a combination of half high rendered concrete and clear glass balustrades;
- The corner balconies of the taller tower are designed to create a visual association with lower elements by creating a vertical weave throughout the height of the building and to provide and engaging and composed entire piece;
- Existing trees provide an important scale reference for the podium as well as a shaded screen improving visual amenity and privacy; and
- Resilient and lush new landscaping will be placed between the colonnade and the street.



Perspective: View, Courtyard facing North

- The central village green is framed on three sides and opens to the north. A colonnade flanks the western edged linking into the communal spaces of the village and links to the southern ILU building;
- The courtyard includes two main spaces; a large lawn area to the south and a smaller landscaped area to the north which provides a place for outdoor furniture, tables and chairs;
- On the eastern side and southern side of the village green are two ILU buildings up to five stories. The units of the eastern building predominantly face in the courtyard as does southern building with north facing balconies;
- The ground level ILU's will feature private courtyards and a dividing hedge/garden bed;
- The western edge of the village green supports the balance of the three level podium housing the RACF. Similar to the language of the western façade windows are grouped into paired bays located within a face brick wall;
- The northern end of the podium is the RAC lounge/dining room balconies with rendered concrete balustrades with planters; and
- Large trees frame the village green to the north provide a green outlook, summer shade and screen the adjacent school hall.

Perspective: View from Princes Hwy looking West

Perspective: View from Princes Hwy looking South

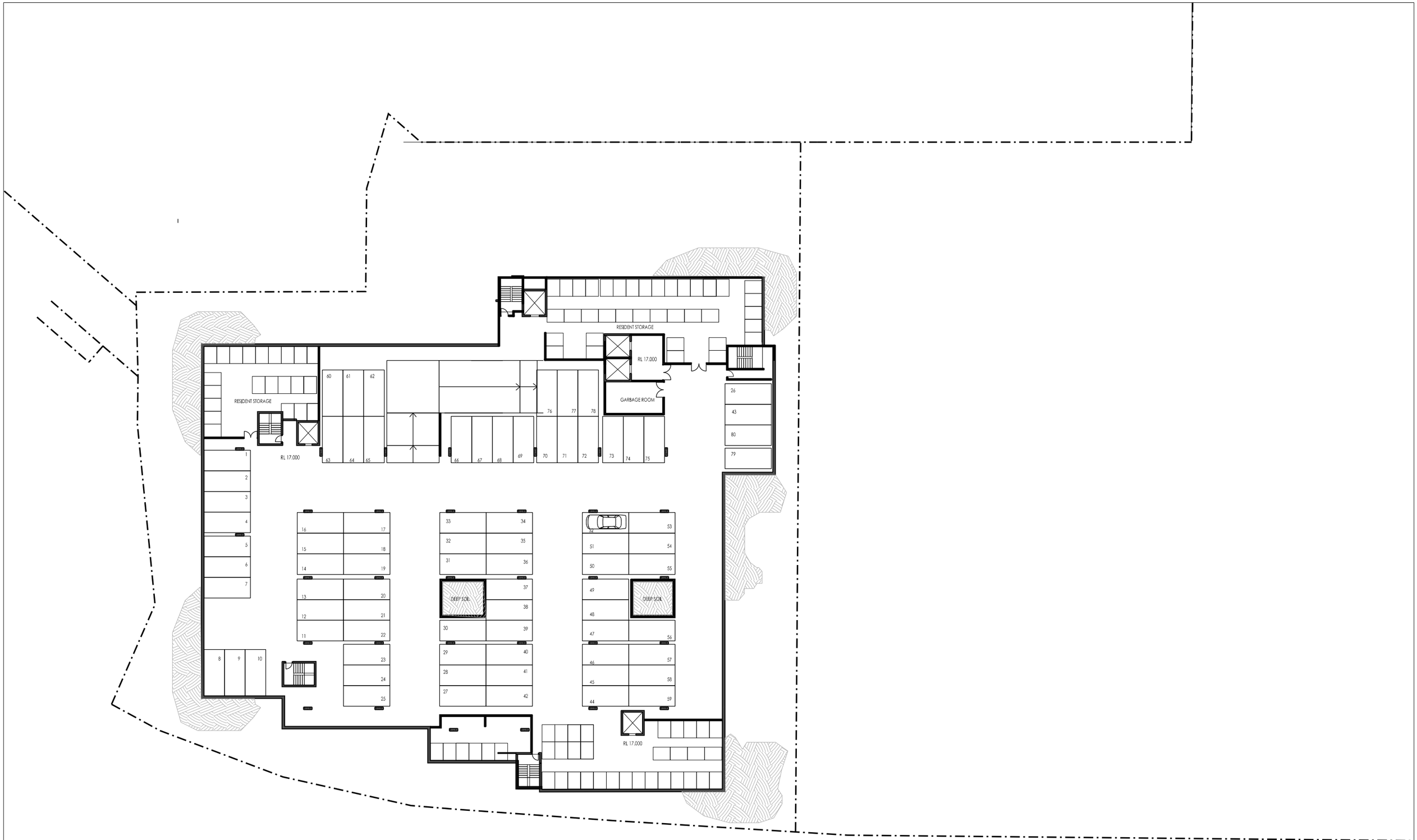
- The highway edge is defined by part 4 and part 5 storey ILU buildings;
- The buildings are designed to predominately orientate toward the village green or to the north away from the highway to improve amenity. However, some more affordable units have been located on the highway frontage to avoid the village completely turning its back.;
- The fewer units to the east results in a clam and more solid façade where the main wall material is face brick;
- The few units which do face the east incorporate glazing to balconies in a winter garden form to minimise sound intrusion into the unit;
- Likewise the few bedroom windows are grouped into vertical bays. These are also offset out from the main facade plane in the form of box or bay windows; these help modulate and articulate the facade;
- Together the vertical bays of the bedroom windows and glazed balconies generate a rhythmic treatment composed within the context of a larger masonry frame;
- At night time the illuminated glazed balconies together with the landscaping will provide a dynamic effect enjoyed from the Highway;
- The composition and dynamic of the cantilevered balconies and bay windows is further enhanced by having the entire façade float over the basement perimeter screen;
- Along the boundary landscaping provides visual screening from the highway and the existing masonry boundary retaining wall will be replaced with a seat high wall screening to the basement beyond;
- To the rear of eastern ILU buildings and visible over the roof line are balconies of ILU's located on the upper levels of the eastern podium and tower building. At these upper levels large balconies less affected by highway noise enjoy outlooks to Botany Bay.

Perspective: View from car, Rocky Point Rd & Princes Hwy looking North

Rocky Point Rd approach to site looking North

- The southern boundary presents to the adjoining residential units as a three storey element with a substantially setback upper fourth level;
- The building is designed with a longer north wing and a shorter west wing;
- A majority of units in the longer north wing orientate north toward the village green;
- These north facing unit's present predominately as a series of connected balconies with usable elevated outdoor living areas as well as shading protection from hot summer sunlight;
- Some units on each level of the longer wing are located to the south and orientated to the south east which are spaced apart to lessen shadow impact and further increase separation and space between existing and proposed buildings;
- The southern units incorporate full height glazing to their balconies to form winter gardens. This will minimize highway traffic sound intrusion into the unit, improve thermal performance and provide protection from cold south westerly winter winds.
- The west wing units face onto the existing and proposed landscape courtyards formed between the new and existing buildings.
- Additionally a four storey glazed acoustic screen is placed along the eastern flank of the easternmost north orientated unit providing protection to the eastern units and minimizes traffic sound intrusion into the central village green.

APPENDIX A: ARCHITECTURAL DRAWINGS



notes

All dimensions and setouts to be verified prior to commencement, omissions or discrepancies to be immediately notified to the architect.

DO NOT SCALE. If in doubt check.

copyright

The copyright of this drawing together with any other documents prepared by Greengate Design remains the property of Greengate Design. Greengate Design grants licence for the use of this document for the purpose for which they are Intended. The licence Is not transferable without the permission of Greengate Design.

quality assurance system

.....
authorised by:

.....
date:

legends

rev	revision description	by	dd-mm-yy
A	PRE DA SUBMISSION	DN	21/05/13

consultant

file print details
D:\Clients\20 - St Patricks, Kogarah\04 Consultants\024 - GG Design\Consultant Documents\Sheet\Kogarah_SK01_Basement Level 2 Plan.dwg

scale
0 2m 4m 6m 8m 10m
1:200 @ A1, NFS @ A3

plot date
22/05/2013

architect
GREENGATE DESIGN PTY LTD
Level 1/156 Gloucester Street, Sydney, NSW 2000 Australia
Nominated Architect: Andrew Sweeney 6972 (NSW)
t: 61 2 9256 5615

project name
ST PATRICK'S GREEN
Kogarah
42-48 Chappel St
Kogarah, NSW

client
GREENGATE DEVELOPMENT PTY LTD
Level 1, 156 Gloucester Street
Sydney NSW 2000
t: 61 2 9256 5600

drawing title
BASEMENT LEVEL 2

00-18
project number:

RAIA work stage:

SK02
drawing no.

A
rev

notes

All dimensions and setouts to be verified prior to commencement, omissions or discrepancies to be immediately notified to the architect.

DO NOT SCALE. If in doubt check.

copyright

The copyright of this drawing together with any other documents prepared by Greengate Design remains the property of Greengate Design. Greengate Design grants licence for the use of this document for the purpose for which they are intended. The licence is not transferable without the permission of Greengate Design.

quality assurance system

.....
authorised by:

.....
date:

legends

rev	revision description	by	dd-mm-yy
A	PRE DA SUBMISSION	DN	21/05/13

consultant

file print details
C:\Clients\20-St Patricks, Kogarah\04 Consultants\024-GG Design\Consultant Documents\Sheet\Kogarah_SK02.dwg, 22 April 1 Paragon

scale
0 2m 4m 6m 8m 10m
1:200 @ A1, NFS @ A3

plot date
22/05/2013

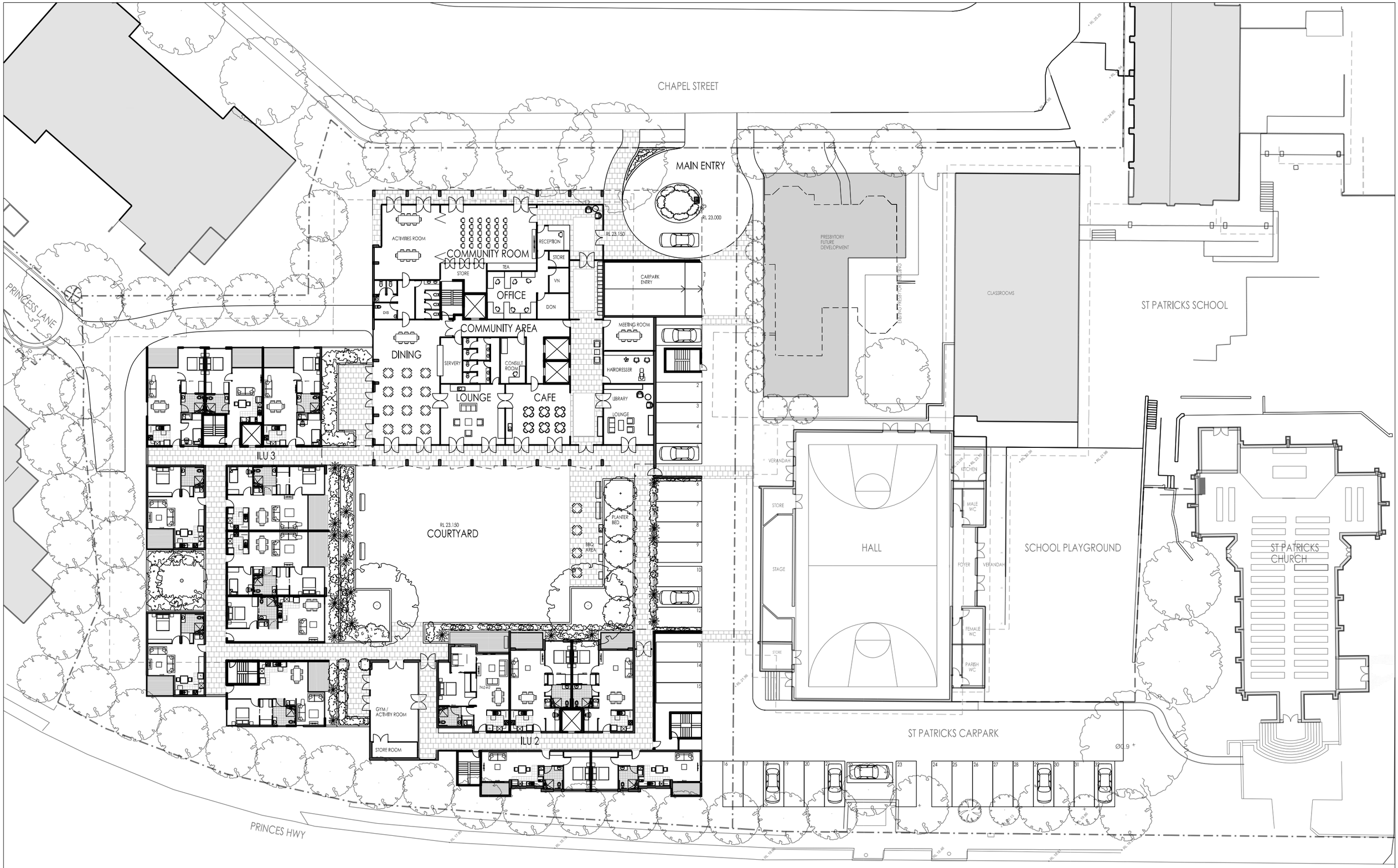
architect
GREENGATE DESIGN PTY LTD
Level 1/156 Gloucester Street, Sydney, NSW 2000 Australia
Nominated Architect: Andrew Sweeney 6972 (NSW)
t: 61 2 9256 5615

project name
ST PATRICK'S GREEN
Kogarah
42-48 Chappel St
Kogarah, NSW

client
GREENGATE DEVELOPMENT PTY LTD
Level 1, 156 Gloucester Street
Sydney NSW 2000
t: 61 2 9256 5600

drawing title
BASEMENT LEVEL 1

project number:	RAIA work stage:	drawing no.	rev
00-18		SK02	A



notes

All dimensions and setouts to be verified prior to commencement, omissions or discrepancies to be immediately notified to the architect.

DO NOT SCALE. If in doubt check.

copyright

The copyright of this drawing together with any other documents prepared by Greengate Design remains the property of Greengate Design. Greengate Design grants licence for the use of this document for the purpose for which they are Intended. The licence Is not transferable without the permission of Greengate Design.

quality assurance system

.....
authorised by:

.....
date:

legends

rev	revision description	by	dd-mm-yy
A	PRE DA SUBMISSION	DN	21/05/13

consultant

file print details
C:\Clients\20 - St Patricks, Kogarah\04 Consultants\024 - GG Design\Consultant Documents\Sheet\Kogarah_SK03_Ground Floor Plan.dwg

scale
0 2m 4m 6m 8m 10m
1:200 @ A1, NFS @ A3

plot date
22/05/2013

architect
GREENGATE DESIGN PTY LTD
Level 1/156 Gloucester Street, Sydney, NSW 2000 Australia
Nominated Architect: Andrew Sweeney 6972 (NSW)
t: 61 2 9256 5615

project name
ST PATRICK'S GREEN
Kogarah
42-48 Chappel St
Kogarah, NSW

client
GREENGATE DEVELOPMENT PTY LTD
Level 1, 156 Gloucester Street
Sydney NSW 2000
t: 61 2 9256 5600

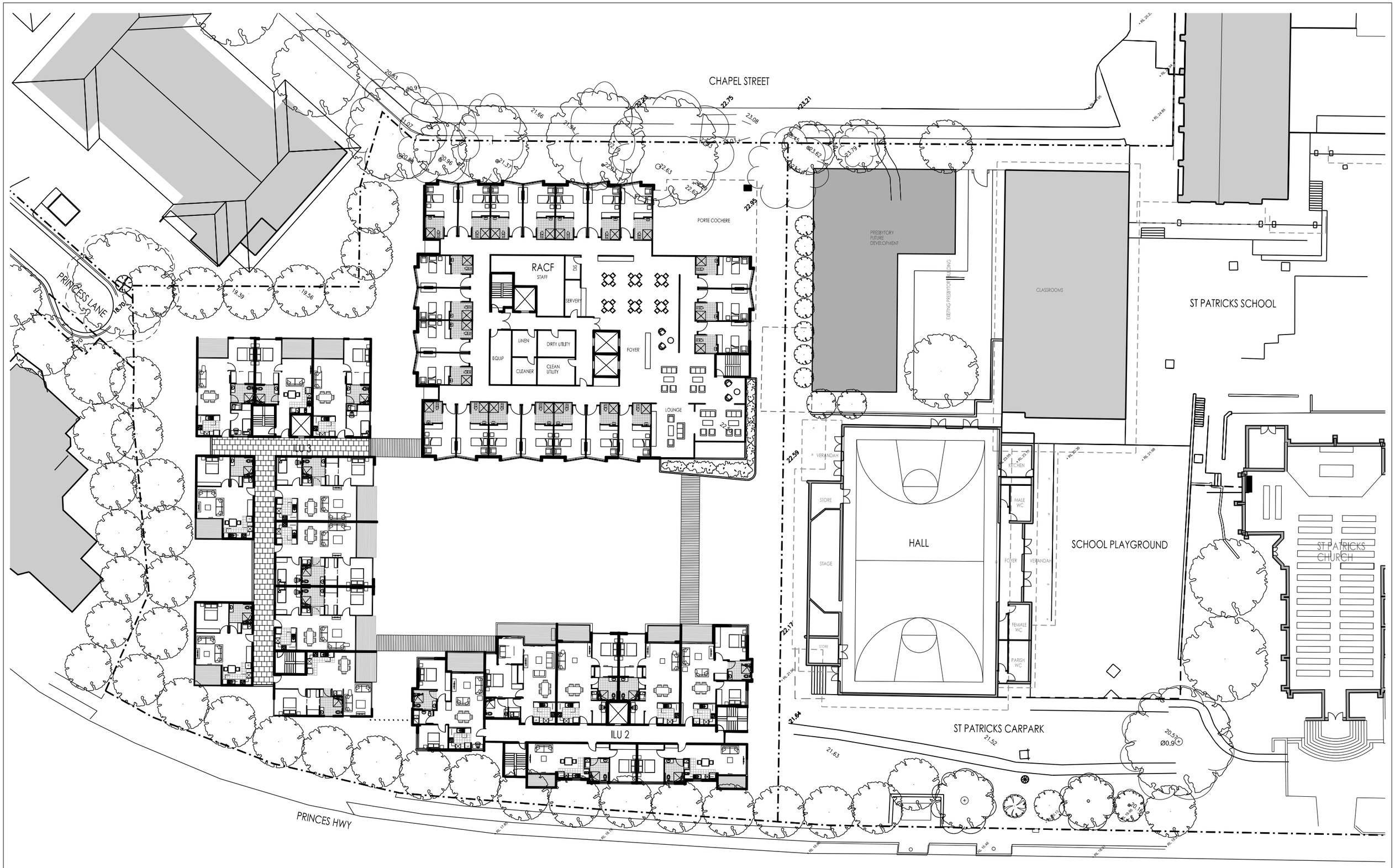
drawing title
GROUND FLOOR PLAN
MEASURED AREA

00-18
project number:

RAIA work stage:

SK03
drawing no.

A
rev



notes

All dimensions and setouts to be verified prior to commencement, omissions or discrepancies to be immediately notified to the architect.

DO NOT SCALE. If in doubt check.

copyright

The copyright of this drawing together with any other documents prepared by Greengate Design remains the property of Greengate Design. Greengate Design grants licence for the use of this document for the purpose for which they are intended. The licence is not transferable without the permission of Greengate Design.

quality assurance system

authorised by: .....

date: .....

legends

rev	revision description	by	dd-mm-yy
A	PRE DA SUBMISSION	DN	21/05/13

consultant

file print details

C:\Clients\20 - St Patricks, Kogarah\04 Consultants\024 - GG Design\Consultant Documents\Sheet\Kogarah_SK04_Level 1 Plan.dwg

scale

0 2m 4m 6m 8m 10m

1:200 @ A1, NFS @ A3

plot date

22/05/2013

architect

GREENGATE DESIGN PTY LTD

Level 1/156 Gloucester Street, Sydney, NSW 2000 Australia
Nominated Architect: Andrew Sweeney 6972 (NSW)

t: 61 2 9256 5615

project name

ST PATRICK'S GREEN

Kogarah

42-48 Chappel St
Kogarah, NSW

client

GREENGATE DEVELOPMENT PTY LTD

Level 1, 156 Gloucester Street
Sydney NSW 2000

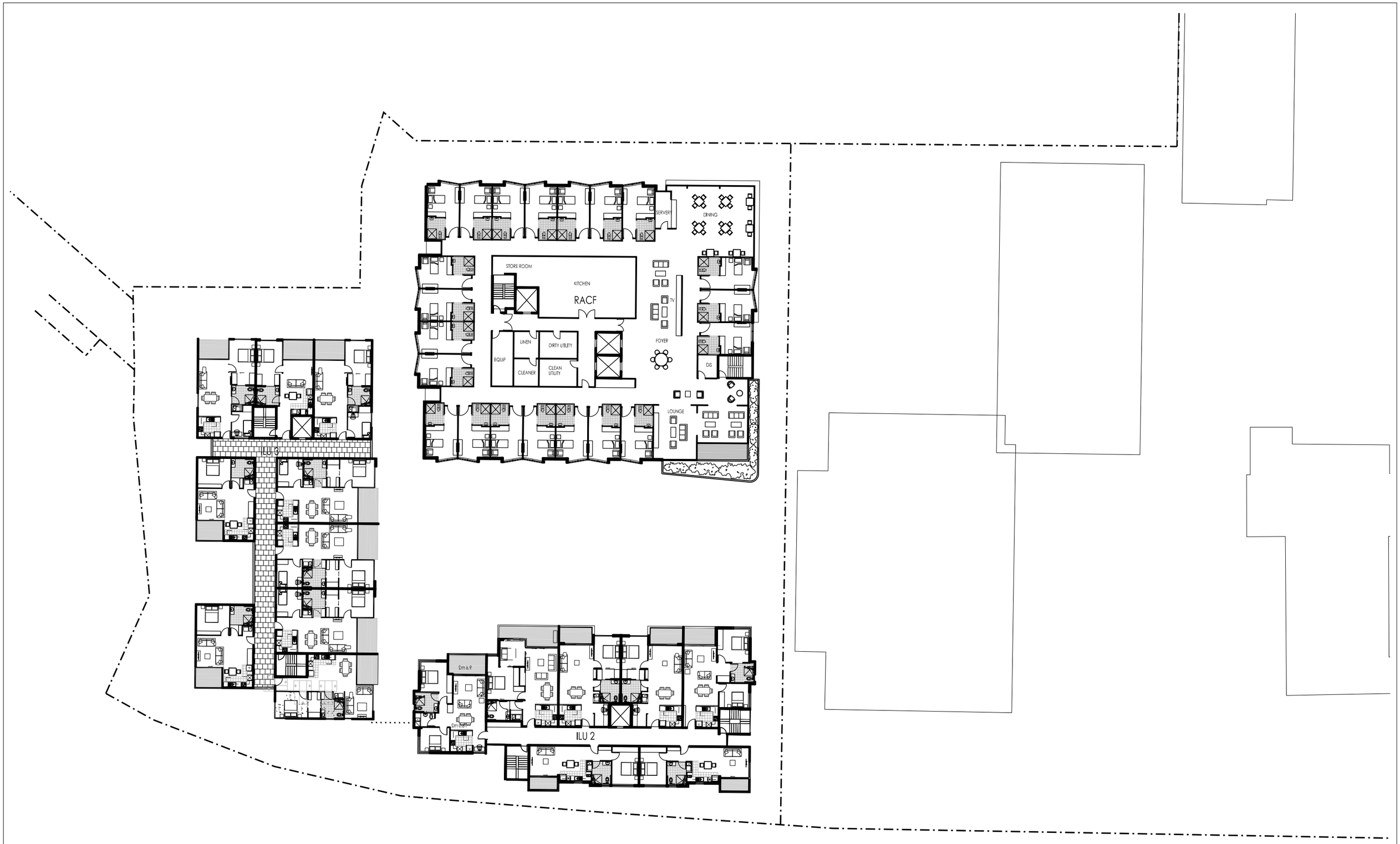
t: 61 2 9256 5600

drawing title

LEVEL 1 PLAN

MEASURED AREA

project number:	RAIA work stage:	drawing no.	rev
00-18		SK04	A



notes

All dimensions and setouts to be verified prior to commencement, omissions or discrepancies to be immediately notified to the architect.

DO NOT SCALE. If in doubt check.

copyright

The copyright of this drawing together with any other documents prepared by Greengate Design remains the property of Greengate Design. Greengate Design grants licence for the use of this document for the purpose for which they are intended. The licence is not transferable without the permission of Greengate Design.

quality assurance system

authorised by:

date:

legends

rev	revision description	by	dd-mm-yy
A	PRE DA SUBMISSION	DN	21/05/13

consultant

file print details

C:\Clients\20 - St Patricks, Kogarah\04 Consultants\024 - GG Design\Consultant Documents\Sheet\Kogarah_SK05_Level 02.Rvt.dwg

scale

0 2m 4m 6m 8m 10m

1:200 @ A1, NFS @ A3

plot date

22/05/2013

architect

GREENGATE DESIGN PTY LTD

Level 1/156 Gloucester Street, Sydney, NSW 2000 Australia
Nominated Architect: Andrew Sweeney 6972 (NSW)

t: 61 2 9256 5615

project name

ST PATRICK'S GREEN

Kogarah

42-48 Chappel St
Kogarah, NSW

client

GREENGATE DEVELOPMENT PTY LTD

Level 1, 156 Gloucester Street
Sydney NSW 2000

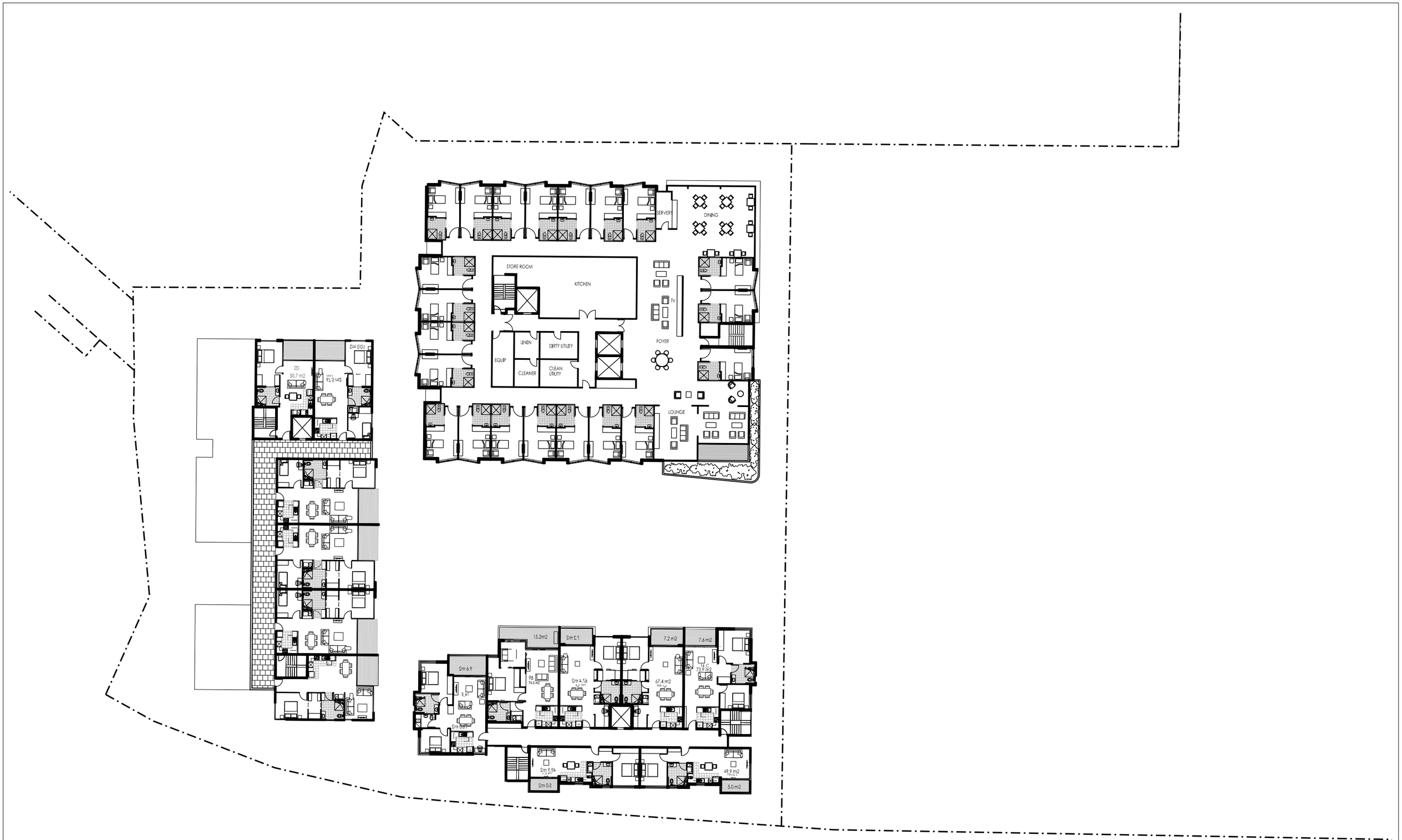
t: 61 2 9256 5600

drawing title

LEVEL 2 PLAN

MEASURED AREA

project number:	RAIA work stage:	drawing no.	rev
00-18		SK05	A



notes

All dimensions and setouts to be verified prior to commencement, omissions or discrepancies to be immediately notified to the architect.

DO NOT SCALE. If in doubt check.

copyright

The copyright of this drawing together with any other documents prepared by Greengate Design remains the property of Greengate Design. Greengate Design grants licence for the use of this document for the purpose for which they are intended. The licence is not transferable without the permission of Greengate Design.

quality assurance system

authorised by: .....

date: .....

legends

rev	revision description	by	dd-mm-yy
A	PRE DA SUBMISSION	DN	21/05/13

consultant

file print details

O:\Clients\20 - St Patricks, Kogarah\04 Consultants\024 - GG Design\Consultant Documents\Sheet\Kogarah_SK06_Level 3 Plan.dwg

scale

0 2m 4m 6m 8m 10m

1:200 @ A1, NFS @ A3

plot date

31/05/2013

project name

ST PATRICK'S GREEN

Kogarah

42-48 Chappel St
Kogarah, NSW

drawing title

LEVEL 3 PLAN

MEASURED AREA

architect

GREENGATE DESIGN PTY LTD

Level 1/156 Gloucester Street, Sydney, NSW 2000 Australia
Nominated Architect: Andrew Sweeney 6972 (NSW)

t: 61 2 9256 5615

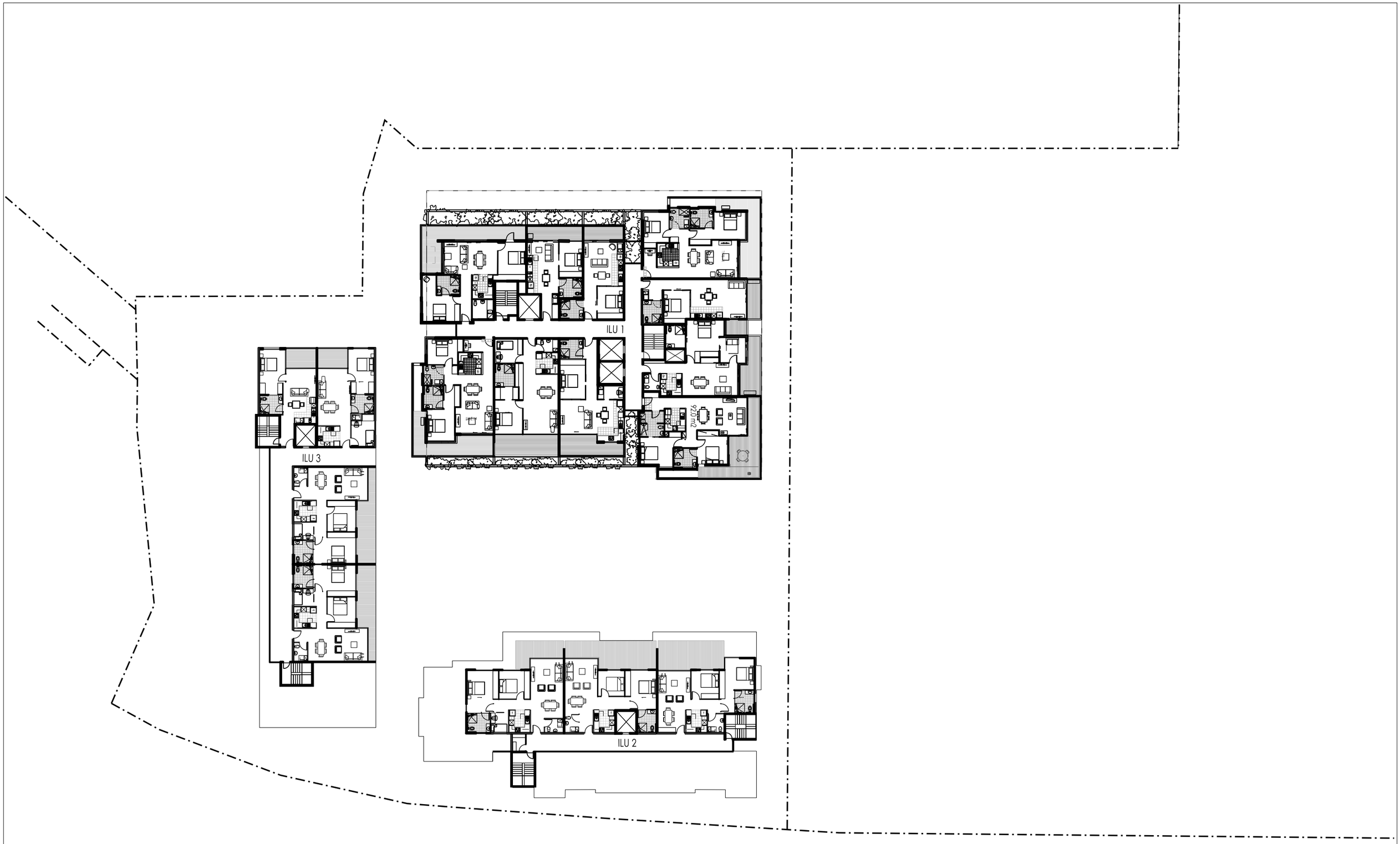
client

GREENGATE DEVELOPMENT PTY LTD

Level 1, 156 Gloucester Street
Sydney NSW 2000

t: 61 2 9256 5600

project number:	RAIA work stage:	drawing no.	rev
00-18		SK06	A



notes

All dimensions and setouts to be verified prior to commencement, omissions or discrepancies to be immediately notified to the architect.

DO NOT SCALE. If in doubt check.

copyright

The copyright of this drawing together with any other documents prepared by Greengate Design remains the property of Greengate Design. Greengate Design grants licence for the use of this document for the purpose for which they are intended. The licence is not transferable without the permission of Greengate Design.

quality assurance system

.....
authorised by:

.....
date:

legends

rev	revision description	by	dd-mm-yy
A	PRE DA SUBMISSION	DN	21/05/13

consultant

file print details
D:\Clients\20-St Patricks, Kogarah\04 Consultants\024-GG Design\Consultant Documents\Sheet\Kogarah_SK07_Level 4.rvt

scale
0 2m 4m 6m 8m 10m
1:200 @ A1, NFS @ A3

plot date
22/05/2013

architect
GREENGATE DESIGN PTY LTD
Level 1/156 Gloucester Street, Sydney, NSW 2000 Australia
Nominated Architect: Andrew Sweeney 6972 (NSW)
t: 61 2 9256 5615

project name
ST PATRICK'S GREEN
Kogarah
42-48 Chappel St
Kogarah, NSW

client
GREENGATE DEVELOPMENT PTY LTD
Level 1, 156 Gloucester Street
Sydney NSW 2000
t: 61 2 9256 5600

drawing title
LEVEL 4 PLAN
MEASURED AREA

00-18
project number:

RAIA work stage:

SK07
drawing no.

A
rev

notes

All dimensions and setouts to be verified prior to commencement, omissions or discrepancies to be immediately notified to the architect.

DO NOT SCALE. If in doubt check.

copyright

The copyright of this drawing together with any other documents prepared by Greengate Design remains the property of Greengate Design. Greengate Design grants licence for the use of this document for the purpose for which they are intended. The licence is not transferable without the permission of Greengate Design.

quality assurance system

authorised by: .....

date: .....

legends

rev	revision description	by	dd-mm-yy
A	PRE DA SUBMISSION	DN	21/05/13

consultant

file print details

C:\Clients\20 - St Patricks, Kogarah\04 Consultants\024 - GG Design\Consultant Documents\Sheet\Kogarah_SK08_Level 1 Template

scale

0 2m 4m 6m 8m 10m

1:200 @ A1, NFS @ A3

plot date

22/03/2013

architect

GREENGATE DESIGN PTY LTD

Level 1/156 Gloucester Street, Sydney, NSW 2000 Australia
Nominated Architect: Andrew Sweeney 6972 (NSW)

t: 61 2 9256 5615

project name

ST PATRICK'S GREEN

Kogarah

42-48 Chappel St
Kogarah, NSW

client

GREENGATE DEVELOPMENT PTY LTD

Level 1, 156 Gloucester Street
Sydney NSW 2000

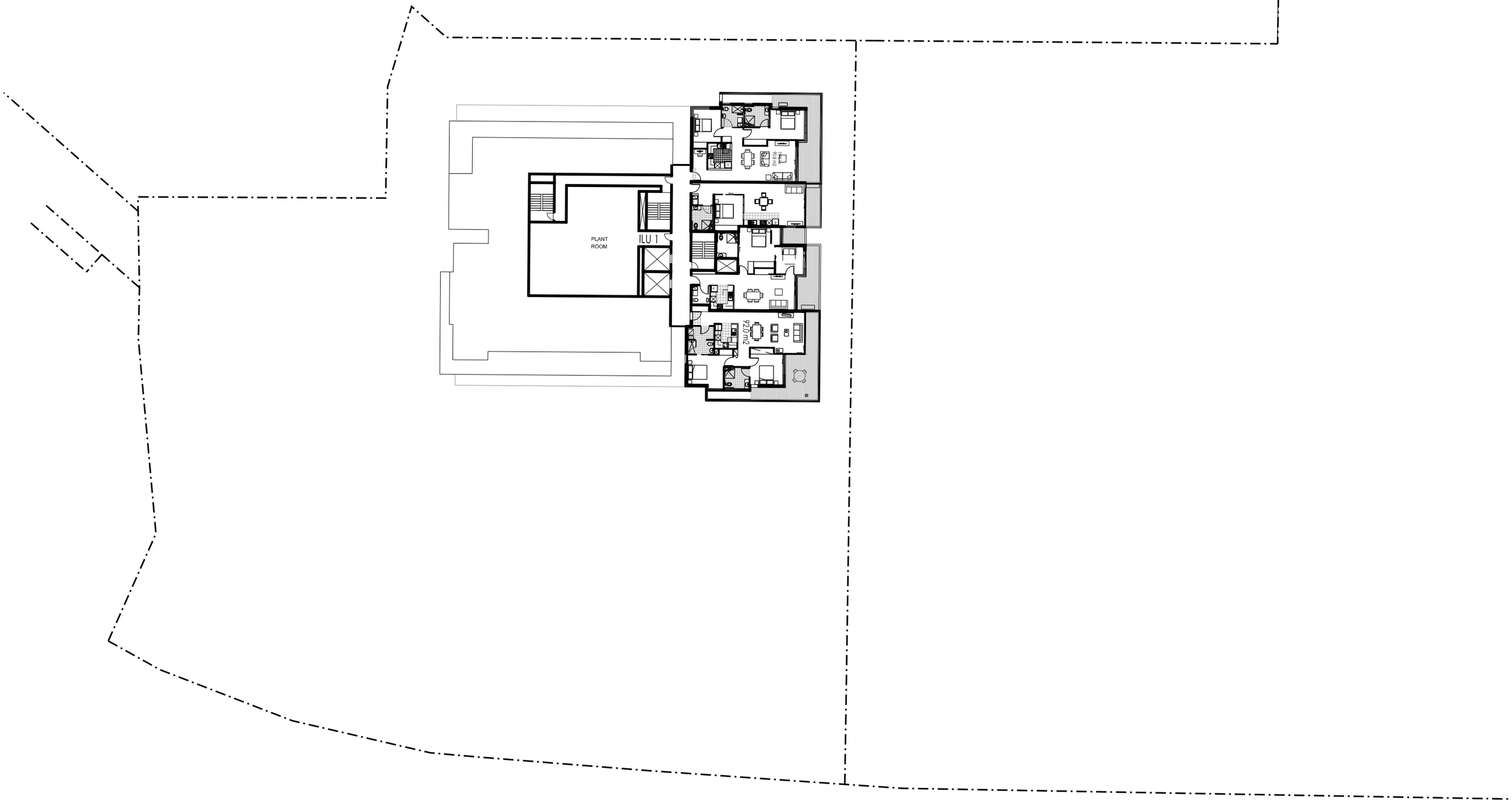
t: 61 2 9256 5600

drawing title

LEVEL 5-8 PLAN

MEASURED AREA

00-18		SK08	D
project number:	RAIA work stage:	drawing no.	rev



notes

All dimensions and setouts to be verified prior to commencement, omissions or discrepancies to be immediately notified to the architect.

DO NOT SCALE. If in doubt check.

copyright

The copyright of this drawing together with any other documents prepared by Greengate Design remains the property of Greengate Design. Greengate Design grants licence for the use of this document for the purpose for which they are intended. The licence is not transferable without the permission of Greengate Design.

quality assurance system

authorised by: .....

date: .....

legends

rev	revision description	by	dd-mm-yy
A	PRE DA SUBMISSION	DN	21/05/13

consultant

file print details

C:\Clients\01 - St Patricks, Kogarah\04 Consultants\024 - GG Design\Consultant Documents\Sheet\Kogarah_SK12_Level 9 Plan.pln

scale

0 2m 4m 6m 8m 10m

1:200 @ A1, NFS @ A3

plot date

22/03/2013

architect

GREENGATE DESIGN PTY LTD

Level 1/156 Gloucester Street, Sydney, NSW 2000 Australia
Nominated Architect: Andrew Sweeney 6972 (NSW)

t: 61 2 9256 5615

project name

ST PATRICK'S GREEN

Kogarah

42-48 Chappel St
Kogarah, NSW

client

GREENGATE DEVELOPMENT PTY LTD

Level 1, 156 Gloucester Street
Sydney NSW 2000

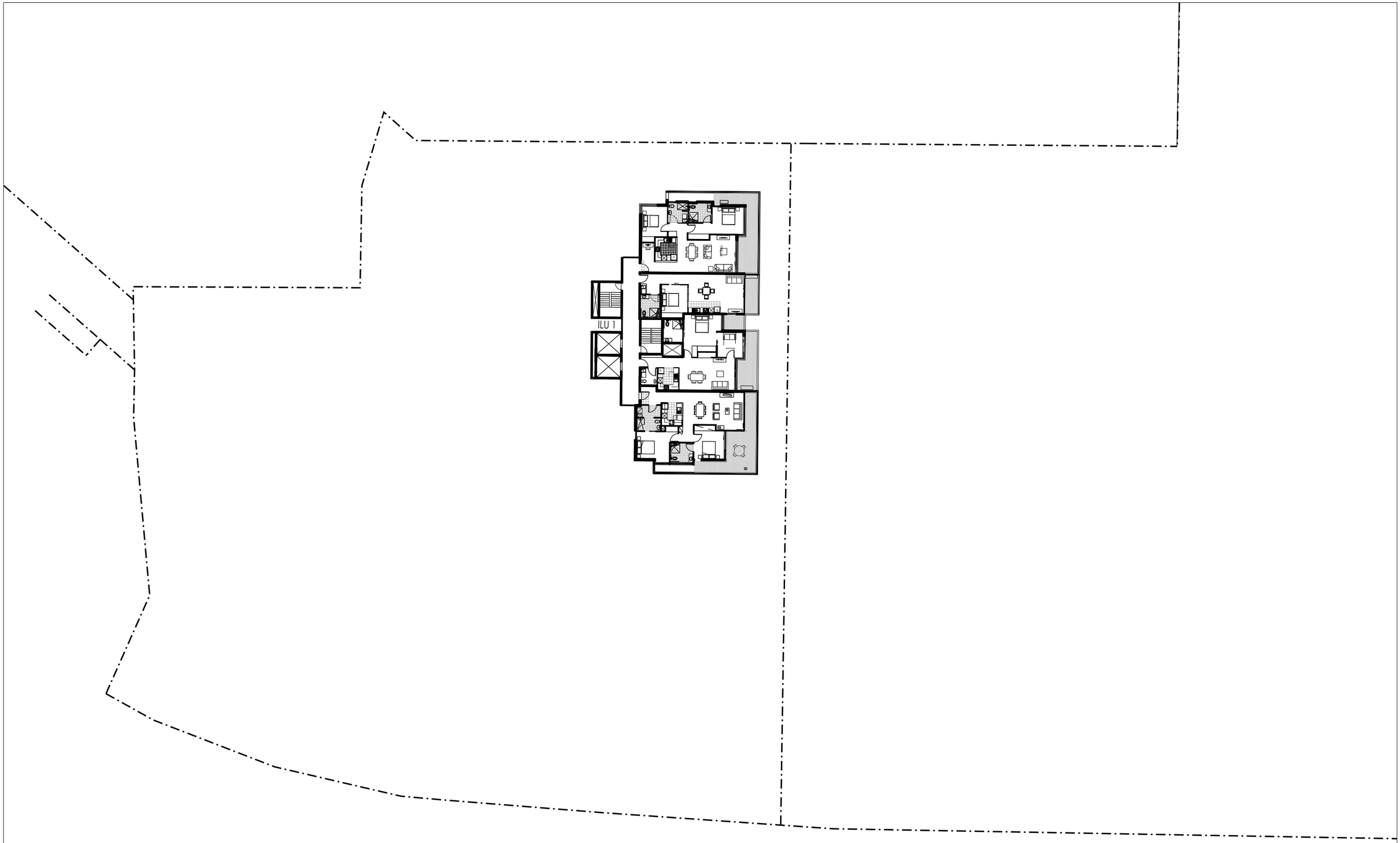
t: 61 2 9256 5600

drawing title

LEVEL 9 PLAN

MEASURED AREA

project number:	RAIA work stage:	drawing no.	rev
00-18		SK12	A



notes

All dimensions and setouts to be verified prior to commencement, omissions or discrepancies to be immediately notified to the architect.

DO NOT SCALE. If in doubt check.

copyright

The copyright of this drawing together with any other documents prepared by Greengate Design remains the property of Greengate Design. Greengate Design grants licence for the use of this document for the purpose for which they are Intended. The licence Is not transferable without the permission of Greengate Design.

quality assurance system

.....
authorised by:

.....
date:

legends

rev	revision description	by	dd-mm-yy
A	PRE DA SUBMISSION	DN	21/05/13

consultant

file print details

O:\Clients\20 - St Patricks, Kogarah\04 Consultants\024 - GG Design\Consultant Documents\Sheet\Kogarah_SK13_Level 10 Plan.dwg

scale

0 2m 4m 6m 8m 10m

1:200 @ A1, NFS @ A3

plot date

22/05/2013

project name

ST PATRICK'S GREEN

Kogarah

42-48 Chappel St
Kogarah, NSW

drawing title

LEVEL 10 11 PLAN

MEASURED AREA

architect

GREENGATE DESIGN PTY LTD

Level 1/156 Gloucester Street, Sydney, NSW 2000 Australia
Nominated Architect: Andrew Sweeney 6972 (NSW)

t: 61 2 9256 5615

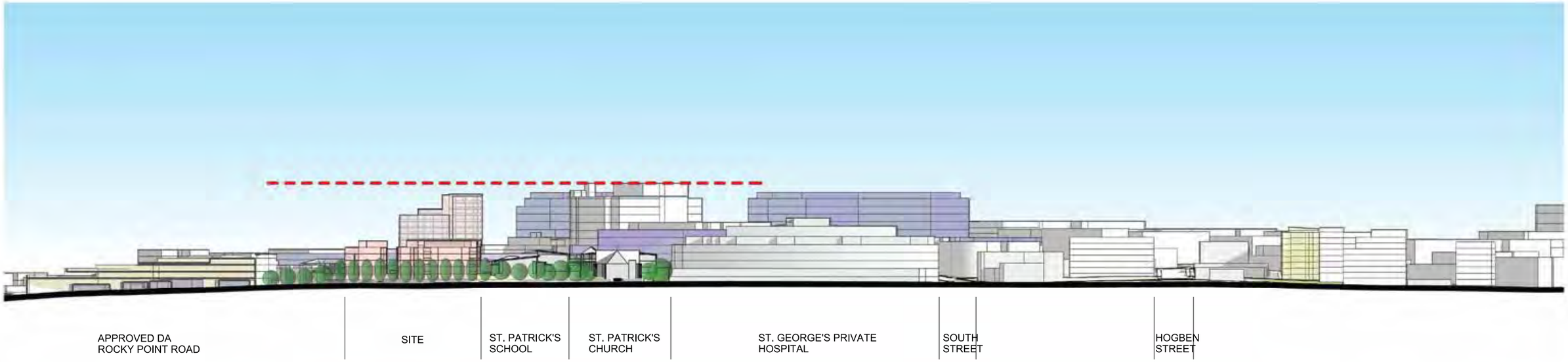
client

GREENGATE DEVELOPMENT PTY LTD

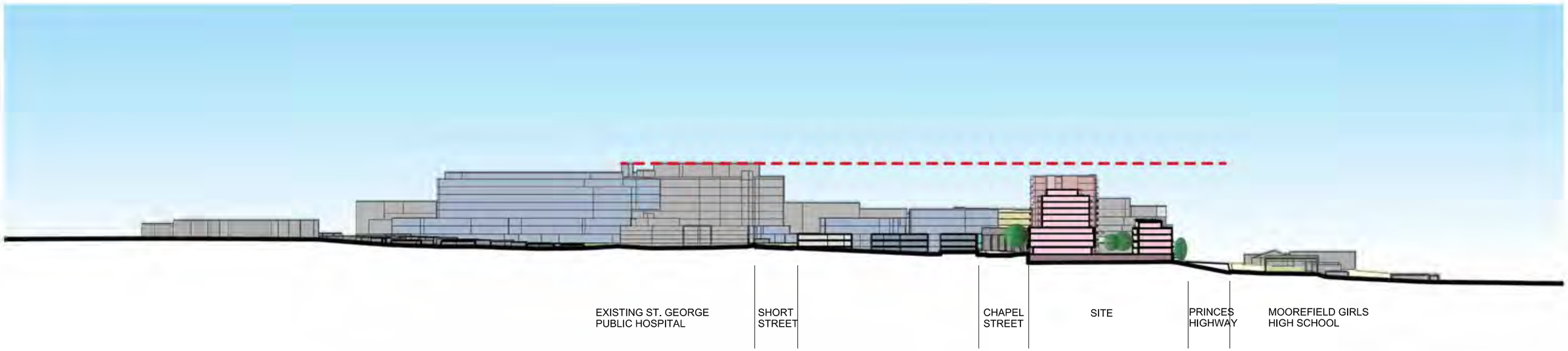
Level 1, 156 Gloucester Street
Sydney NSW 2000

t: 61 2 9256 5600

00-18		SK13	A
project number:	RAIA work stage:	drawing no.	rev



PRINCES HIGHWAY ELEVATION



SITE SECTION - NORTH SOUTH

PROPOSED SCHEME
EXISTING
PROPOSED HOSPITAL MASTERPLAN
APPROVED DA

notes
All dimensions and setouts to be verified prior to commencement, omissions or discrepancies to be immediately notified to the architect.

DO NOT SCALE. If in doubt check.

copyright

The copyright of this drawing together with any other documents prepared by Greengate Design remains the property of Greengate Design. Greengate Design grants licence for the use of this document for the purpose for which they are intended. The licence is not transferable without the permission of Greengate Design.

quality assurance system

.....
authorised by:

.....
date:

legends

rev	revision description	by	dd-mm-yy
A	PRE DA SUBMISSION	DN	21/05/13

consultant

file print details
O:\Clients\20 - St Patricks, Kogarah\04 Consultants\024 - GG Design\Consultant Documents\Sheet\Kogarah_SK20_Context Elevations + Sections.dwg

scale
0 10 20 30 40 50
1:500 @ A1

plot date
11/06/2013

architect
GREENGATE DESIGN PTY LTD
Level 1/156 Gloucester Street, Sydney, NSW 2000 Australia
Nominated Architect: Andrew Sweeney 6972 (NSW)
t: 61 2 9256 5615

project name
ST PATRICK'S GREEN
Kogarah
42-48 Chappel St
Kogarah, NSW

client
GREENGATE DEVELOPMENT PTY LTD
Level 1, 156 Gloucester Street
Sydney NSW 2000
t: 61 2 9256 5600

drawing title
CONTEXT ELEVATIONS & SECTIONS

00-18
project number:

RAIA work stage:

SK20
drawing no.

A
rev

APPENDIX B: DESIGN STUDIES

APPENDIX C: TYPICAL UNIT & ROOM LAYOUTS

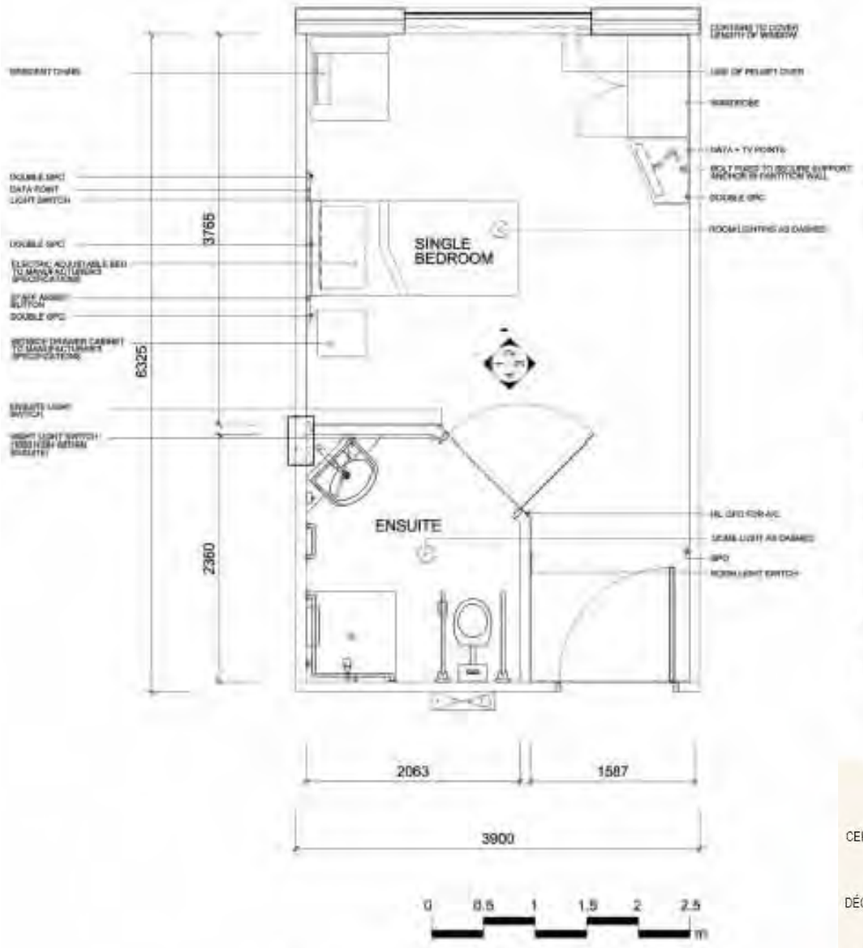
TYPICAL UNIT & ROOM LAYOUTS

C.1 STANDARD APARTMENT TYPES

Type	Studio	1 bed	1+ bed	2 bed (1 bath)	2 bed (1 bath)	2 bed (2 bath)	3 bed (2bath)
Size (approx)	53sqm	58sqm	68sqm	76sqm	84sqm	90sqm	100sqm
Balcony (approx)	12sqm	8sqm	10sqm	10sqm	12sqm	12sqm	18sqm

TYPICAL UNIT & ROOM LAYOUTS

C.2 TYPICAL RACF ROOM



Bedroom Plan Scale 1:50 @ A3
1:70 @ A4

Adjustable Shower Chair
Bathroom

Lift Hygiene Chair
Bathroom

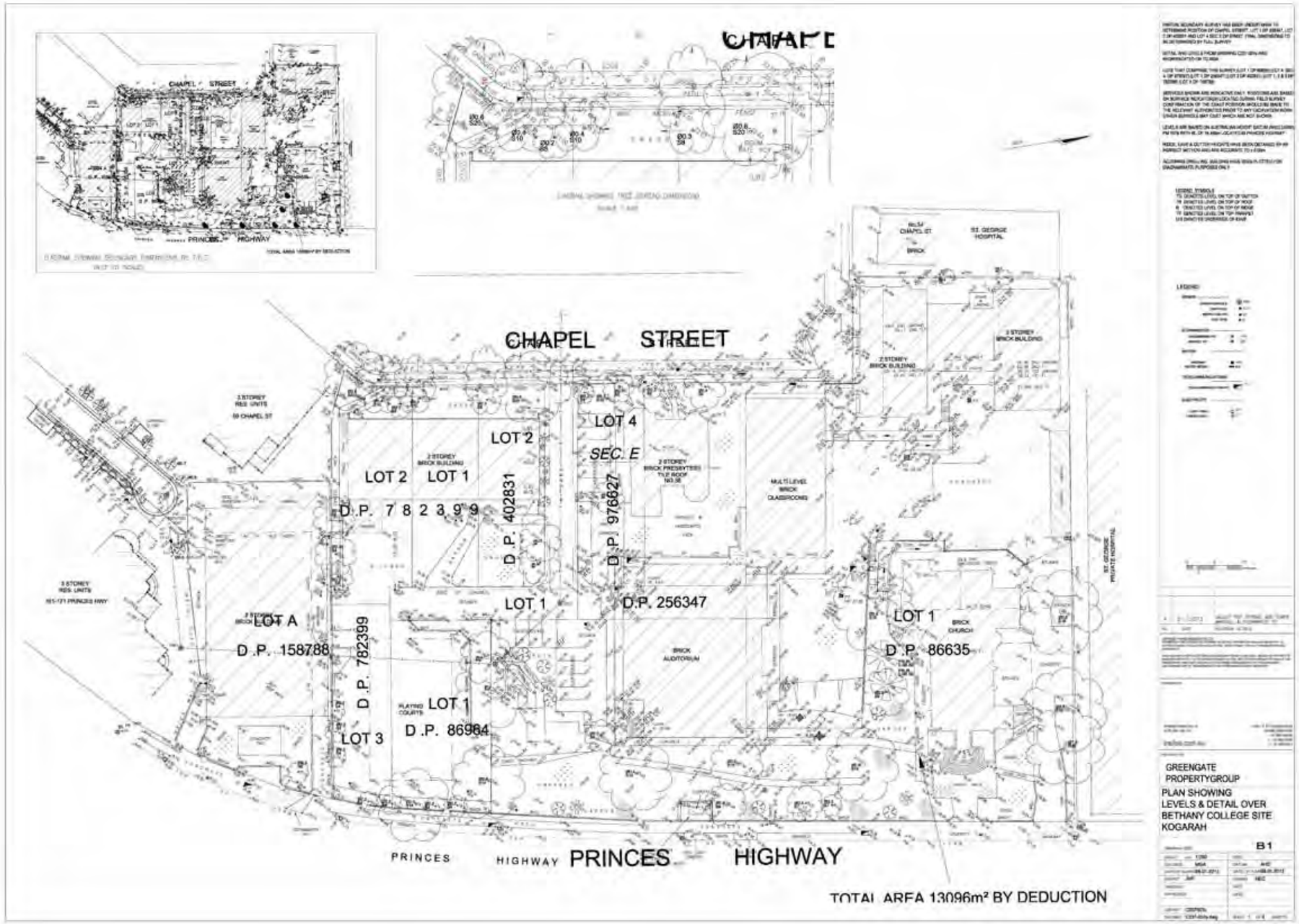
Shower Trolley
Bathroom

Bedroom Plan Scale 1:100 @ A3,1: 140 @ A4

Turning Circles

INTERIOR VIEW OF STANDARD ROOM

APPENDIX D: SITE SURVEY


CHAPEL STREET
PRINCES HIGHWAY
LOT 2
LOT 1
D.P. 782399
D.P. 402831
LOT 4
SEC. E
D.P. 976627
LOT 1
D.P. 256347
LOT A
D.P. 158788
LOT 3
LOT 1
D.P. 86984
LOT 1
D.P. 86635
ST. GEORGE HOSPITAL
2 STOREY BRICK BUILDING
MULTI LEVEL BRICK CLASSROOMS
BRICK AUDITORIUM
BRICK CHURCH
PRINCES HIGHWAY
TOTAL AREA 13096m² BY DEDUCTION
GREENGATE PROPERTYGROUP
PLAN SHOWING LEVELS & DETAIL OVER BETHANY COLLEGE SITE KOGARAH
B1

APPENDIX E : PRELIMINARY SHADOW ANALYSIS

SHADOW ANALYSIS

E.1 SHADOW ANALYSIS

PROPOSED 9:00AM
WINTER SOLSTICE

PROPOSED 10:00AM
WINTER SOLSTICE

PROPOSED 11:00PM
WINTER SOLSTICE

PROPOSED 12:00PM
WINTER SOLSTICE

EXISTING 9:00AM
WINTER SOLSTICE

EXISTING 10:00AM
WINTER SOLSTICE

EXISTING 11:00PM
WINTER SOLSTICE

EXISTING 12:00PM
WINTER SOLSTICE

SHADOW ANALYSIS

PROPOSED 1:00PM
WINTER SOLSTICE

PROPOSED 2:00PM
WINTER SOLSTICE

PROPOSED 3:00PM
WINTER SOLSTICE

EXISTING 1:00PM
WINTER SOLSTICE

EXISTING 2:00PM
WINTER SOLSTICE

EXISTING 3:00PM
WINTER SOLSTICE

The building form of St Patrick's Green is a direct response to the need to maintain solar access to the dwellings along the adjacent the southern boundary. (Key development paragraph #5)

The design process has included an analysis of the existing solar access to the adjoining properties and in particular the extent that the existing Bethany College buildings and dense boundary planting currently overshadow the neighbours on the southern boundary.

No. 161-171 Princess Highway is a three storey residential apartment building. The top floor comprises of two 200sqm apartments with the main living spaces on the top floor orientated east and west. The windows and balcony areas facing north are service areas containing a satellite dish off the kitchen.

During mid winter the upper floor only receives direct sunlight due to the proximity of the Bethany College. As demonstrated by the shadow diagrams almost three hours of sunlight is provided into these windows. The development does not impact on the east/ west facing windows of the apartment main living area.

50-54 Chapel St is also a three storey apartment building with two levels of accommodation located over car parking. The apartments are orientated with the living areas and main balconies facing east and west onto Chapel St and Princes Lane respectively. The windows on the northern elevation are bed rooms, bathrooms and kitchens.

The existing Bethany Collage is located approximately 3m from the boundary and produce substantial overshadowing to the building. In addition existing native trees located between the two building reduce solar access received by the north elevation.

.

As demonstrated by the shadow diagrams reasonable solar access is maintained into the north elevation of the neighboring buildings along the southern boundary and the principle living spaces are not unreasonably impacted by the proposal.

APPENDIX F: DESIGN QUALITY ASSESSMENT

DESIGN QUALITY ASSESSMENT

It is important to note that integrated aged care villages have very different operational and design quality objectives to standard residential projects.

Integrated care residents inhabit and use the spaces very differently to younger demographic which places a different emphasis on different parts the village.

As outlined in section 4, Greengate adopts an eight part theme to the creation of new villages which balances and prioritises:

- Care;
- Sustainability;
- Community;
- Operations;
- Choice;
- Environment;
- Place; and
- Design.

In addition to the themes above a specific set of performance criteria provide a guide as to the quality of the village. The criteria specifically relate to aspects of the site, the Residential Aged Care Facility (RACF) and the living units and include:

Site:
Village density- the village density provides an indication of the number of residents in relation to the site area. This measure provides an indication of the critical mass needed to create community feel and provide sufficient capacity to achieve operational and social infrastructure. The ideal village density falls between 250- 500 people per hectare.

Staffing ratio—staffing ratio provides an indication of the levels of care and 'mindfullness' that can be applied across the entire village. A ratio of between 1 staff to 5-8 residents is the operational and care ideal. The proposed staff ratio is 5:2.

Deep soil- achieving buildings in a landscape setting in inner urban environments is challenging. A deep soil area above 10% is a minimum. The proposed deep soil area is 19% of the site area.

Solar access to communal areas providing good solar access to communal area is important for the amenity and enjoyment of all residents as they spend more time in the village as they age in place A minimum of 2 hours sun in the AM and PM to indoor areas and sun access to at least part of the outdoor communal area between 9am and 3pm is a priority - this criteria can be achieved.

RACF:
Private space per resident- this metric provides an indication of the average size of the rooms for residents. In a quality high care extra service facility the minimum should be 20 sqm. The proposal is 23.5sqm.

Communal space per resident- this metric provides an indication of the common areas for lounge, dining, TV etc. In a quality high care extra service facility the minimum should be directly accessible on the floor with a minimum of10 sqm per resident. Dining and living areas should also ideally have a north orientation. The proposal achieves this criteria.

Rooms with outlook- In a quality high care extra service facility 100% of beds should have a window and outlook.

ILU's;
Affordability- providing a range of unit types to ensure the greatest range of elderly can be accommodated is important. A minimum of one third of the product should be priced within 75% of the median house price of the catchment. The proposal acheives over half of the total project as affordable.

Private open space- providing ample balcony and terrace space for apartments is a priority for people whose mobility decreases over time. An average of 10sqm per units . The proposal has an average of 12.6sqm.

Communal space- a target of 10sqm per resident is a target for both indoor and outdoor common space

Outlook- providing a quality outlook such as long district views, courtyard vistas or street outlook is a priority as the elderly spend less time outside the village as they age in place. A minimum of two thirds of units should receive a quality outlook.

The St Patrick's village performs well against these performance criteria

The themes and performance criteria outlined above take a high order priority. However, a design quality assessment under the established planning principles outlined below is also necessary.

While it is important to address the planning principles of solar access and private open space it is vital that the particular requirements of the frail and elderly are prioritised in the design. Only if this occurs can an exemplar care village result.

PRINCIPLE 1: CONTEXT
"Good design responds and contributes to its context which can be defined as the key natural and built features of the area."

The design of the proposed integrated aged care village at Chapel Street contributes to its context by responding to existing buildings and future built forms of the St George Hospital and the rest of Kogarah Town Centre.

The site consists of 2 separate college buildings and a central open space. It is a mid-block site with an area of approximately 5,400sqm. Apart from the small recess in the south west corner it is broadly square in shape with an overall depth of 80m. It has a 60m frontage to Chapel Street and 80m to the highway.

The site falls approximately 6 metres from west to east. The eastern frontage overlooks Botany Bay and the southern frontage overlooks Kogarah and Beverley Park.

The site is located on the eastern boundary of Kogarah Town Centre. The Princes Highway is a strongly defining, linear edge to the town centre. The proposed built form consists of a form that emphasizes the built edge along the highway and defines the edge of town centre.

The surrounding uses in Chapel Street are an untidy mix of residential, commercial and health related uses. To the north is the densely built out St Patrick's School and immediately to the south are residential flat buildings. To the west is a mix of temporary and poorly maintained buildings with large hospital holdings ripe for redevelopment.

The surrounding precinct is characterised by buildings ranging from 2 to 13 storeys (residential equivalent) with the taller buildings located on the fringes of the hospital.

PRINCIPLE 2: SCALE
"Good design provides an appropriate scale in terms of bulk and height that suits the scale of the street and the surrounding buildings."

The bulk and height of the proposed building has been designed to complement the scale of the future surrounding buildings as defined in the Hospital DCP and the surrounding built form.

The design proposal for the integrated care village has emerged from a close and detailed contextual analysis of the existing and future urban form, streetscape and environmental impacts.

The building presentation to Chapel Street creates a four level podium reflecting the scale of existing trees and human street scale. Set back from the street level are taller forms which respond to the existing health precinct and the new built forms proposed as part of the recent development control plan. The ground level is activated with the main entry, community spaces and an open and transparent appearance

The building bulk presenting to the street has been broken down into several more slender and carefully proportioned forms to reduce its visual bulk and respond to the scale of the existing and future context.

The proposed building heights are a mix of 4,9 and 12 stories which have been defined from first principles as there are no existing planning controls for the land.
The building height has been determined by contextual relationships, to minimise the overshadowing of dwellings to the south and sit comfortably within the proposed existing and future built edge along the Highway.

PRINCIPLE 3: BUILT FORM
"Good design achieves an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and manipulation of building elements."

The proposed use of integrated aged care village is logical use to transition between health and community uses to residential.

The built form is appropriate to the adjacent future residential developments, contributing to the character of the streetscape and providing internal amenity and outlook.

The green spaces comprise a central village green, with podium terraces and potentially a roof garden. The village functions as space of conversation and meetings for residents and contains planting, seating, pathways and a water element.

The development has a hybrid form that is a unique fusion of three types: a traditional podium and tower with companioned midrise slab buildings. The forms are articulated with strong framed elements and defined recesses to break down its visual bulk and mass. The recesses of the building mediate between the scale of the slab form and the adjoining context while retaining the urban scale.

The taller form responds in terms of scale and proportion to the existing clinical services building of the hospital. Together they create a defined edge to the community and health precinct at the end of the Chapel Street.

The Prince Highway frontage is also defined by a strong built edge in a linear form. Building setbacks are increased on the southern boundary improving the outlook of neighbouring properties . The Chapel Street setback is approximately five metres allowing the retention of significant trees.

PRINCIPLE 4: DENSITY
'Good design has density appropriate to the site and its context, in terms of floor space yield or number of units or residents'

The dwelling density is appropriate for the site and its future urban context. The proposed floor space ratio (FSR) is approximately 3:1 (16,200sqm GFA) which is largely compatible with current town centre DCP albeit now 10 years old.

The height is 4 to 12 storeys and has 63 beds and 125 ILU's on a site area of 5,400sqm giving a net dwelling density equivalent to 348 dwellings per hectare.

The development has the potential to increase housing diversity and affordability for the local elderly entirely consistent with local, state and commonwealth policy.

The density is sustainable for a town centre location of the that is within 700m of the rail station and less than 150 from a bus stop. The site is well serviced with utilities such as sewer, water, gas and electricity.

PRINCIPLE 5: RESOURCE, ENERGY AND WATER EFFICIENCY
"Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction."

The design makes efficient use of natural resources, energy and water throughout its full cycle, including construction.

It will aim to meet the benchmarks of 25% energy reduction and 40% water reduction set out in the Building and Sustainability Index (BASIX) for the ILU component.

Energy efficient building response is developed through extensive passive design and sun control elements. The building design is characterised by dynamic qualities of space, natural light, air flow and solar access to achieve high personal comfort and low energy consumption.

The building is organised around multiple access cores to give flexibility of staging and reduce long corridors. Most living areas and main balconies are located on the north or east façades to capture the solar access and take advantage of view amenity.

South facing and some lower east facing living rooms have winter gardens enclosed in multi-folding glass which reduce heat loss and noise. Many of the apartments are dual aspect, with cross flow or corner natural ventilation.

A site-based, water retention system has been incorporated into the development. It comprises a concrete storage tank and filtration and pump unit in the basement car park that is used to recycle roof and ground rainwater for the irrigation of courtyard planting.

The building will have energy efficient appliances, fittings and services such as water reduction showerheads, dual flush toilets, cook tops and microwaves.

All dwellings will be fitted with energy efficient, reverse cycle, split AC systems consisting of a single condenser unit with individual controls reduces energy consumption. Waste and recycling facilities with bin chutes are provided in the basement with recycling trays on each residential floor.

PRINCIPLE 6: LANDSCAPE
"Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic and amenity for both the residents and or the public domain."

The communal open space and building have been designed as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both residents and the adjoining public domain.

The green spaces comprise a village green courtyard, podium terraces and boundary treatments that complement and incorporate existing vegetation.

The village green functions as space of conversation and meetings for residents and contains planting, seating, gravel pathways and a water element. It provides a social space that is an apron to the communal facilities on the ground floor.

Public domain improvements are focused on Chapel Street and the cross site link to the Church designed a shared way. The blank end to the school hall is also proposed to receive an upgrade such as a green wall or mural

PRINCIPLE 7: AMENITY
"Good design provides amenity through the physical, spatial, and environmental quality of a development."

The architectural design provides amenity through the physical, spatial and environmental qualities of the development. The dwellings have been designed to achieve access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts, service areas, outlook and ease of access and mobility for all ages.

The accommodation consists up to 80 beds and 135 dwellings suited to a variety of lifestyles.

The minimum ceiling height of living rooms is 2.7m, the floor to floor height is generally 3.0m. Each dwelling has access to a secure private open space, such as a balcony, terrace or court.

Most dwellings have considerably more private open space than the minimum. Southern facing private open space is provided in the form of winter gardens.

Covered and secure parking is provided for residents and visitors adopting a 'minimalist' approach to encourage public transport usage, and innovative parking management.

There are a total number of car parking spaces over two basement car parking levels will comply with the SEPP HS.

PRINCIPLE 8: SAFETY AND SECURITY
"Good design optimises safety and security, both internal to the development and for the public domain."

The design of the buildings optimises safety and security, of both the development and the public domain. Safety and security has also been considered in accordance with CPTED principles of surveillance, access, territorial reinforcement and space management.

The safety of the public is enhanced by the village design that improves casual surveillance of the street by orientating living rooms to Chapel Street and the central village green.

The safety and security of residents and visitors to buildings is enhanced by locating the access to lobbies directly from the street and providing a fully accessible compliant environment.

Controlled vehicular access to the project is provided by secured car park access from Chapel Street with direct access from the car park to the main lobbies for residents, the audio intercom system at the main entries and the car park entry to communicate with residents, and key card access for residents and staff.

PRINCIPLE 9: SOCIAL DIMENSIONS

"Good Design responds to the social context and needs of the local community in terms of lifestyles, affordability and access to social facilities."

The design responds to the social context and needs of the local community in terms of providing care and accommodation for the elderly. The village provides range of units types to allow affordability and aging in place.

The site is within the Kogarah Town Centre which is well serviced with public transport in the form of rail and buses.

The development will have exceptional pedestrian amenity with accessible access to all levels of the building. The site is will have direct access to Chapel Street and links through the hospital site to Belgrave and Kensington Streets
.
The development has a positive social benefit through the provision of care and accommodation for the elderly as well as stimulating further renewal of the Chapel Street Health Precinct.

The aged care facility will also provide options for;

- Potential for the village to provide sub-acute packages to the hospital reducing the demand on post-acute outpatient care packages
- Ability for the village to provide rehabilitation services to facilitate early discharge
- Potential transitional care services to facilitate early discharge;
- Increased opportunity for primary health care student placements eg. nursing , medical, allied health, pharmacy, physio.

PRINCIPLE 10: AESTHETICS

"Quality aesthetics require the appropriate composition of building elements, texture and colours and reflect the use, internal design and structure of the development."

The building has a modern aesthetic that expresses the nature of the use, aspirations of the village and as an exemplar model of care and accommodation or the elderly.

The expression of the elevations responds to many factors including site, sun control, construction, technology and resident amenity.

The appearance of the building avoids the overused expression of cellular, crate-like elements. Special attention has been given to the composition of building elements and materiality.

The development presents a unique opportunity to create an aesthetic based on environmental and urban design principles, untainted by sentimentality and contextual gestures.

The building appearance primarily emphasizes its multiple orientations, views and aspect.