

# URBAN DESIGN STUDY

## PROPOSED RESIDENTIAL DEVELOPMENT

**130 Killeaton St, St Ives, 2075**

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ISSUE : B  
DATE : 28 March 2022



FIGURE 01: Concept massing  
Source: Mackenzie Architects International

## CONTENTS

Executive Summary

### PART I - SITE

- 01.01 Surrounding Context
- 02.01 Present Vegetation
- 02.02 Height and Massing
- 02.03 Yield Analysis
- 02.04 Site Analysis
- 02.05 Traffic Analysis
- 03.01 LEP 2015 Classification
- 03.02 Flood Zones
- 03.03 Physical Features
- 03.04 Solar Access
- 03.05 Site Remediation
- 03.06 Site Access
- 03.07 Site Views

### PART II - PROVISIONS

- 04.01 Public Transport
- 05.01 Hospitals
- 05.02 Doctors/Clinics
- 05.03 Shops
- 06.01 Education
- 07.01 Demographic
- 07.02 Social and Cultural Impact
- 08.01 Stormwater Catchment
- 08.02 Road Network

Conclusion

### APPENDIX

- Appendix 01 Ausgrid Map
- Appendix 02 Ku-ring-gai Stormwater Map
- Appendix 03 Optus Telecommunications Map
- Appendix 04 Jemena Gas Map
- Appendix 05 Sydney Water Map
- Appendix 06 Architectural Drawings

## EXECUTIVE SUMMARY

This Urban design study examines the constraints and opportunities presented by the subject site to support a high-density development containing 40 apartments, varying from 2-3-bedroom sizes, and is intended to form part of the documentation in support of the planning proposal.

The planning proposal is to Ku-ring-gai council for 130 Killeaton st, a 2803sqm lot with a street frontage of 35m in St Ives.

The site is controlled under Ku-ring-gai council's LEP 2015 and DCP 2021 as 1/DP748682.

The site is currently zoned for SP2 (infrastructure). The planning proposal aims to amend the zoning into R4 (High density residential) for use of a high-density apartment building.

The objectives of this Planning Proposal are to provide sufficient evidence supporting the proposal of 1/DP748682 proving capable to support an R4, high-density residential zone and well supported by the surrounding environment's current infrastructure and provisions/services.

Part 1 (i) investigates the site's parameters as well as its current state and situation whilst part 2 (ii) instigates the local provisions and infrastructure to discover if the environment can support a development such as the proposed



FIGURE 02: Realestate location diagram  
Source: Ray White Commercial Real Estate

## 01.01 SURROUNDING CONTEXT

The site is located on 130 Killeaton Street, St Ives and is situated facing NNE in Sydney's Mid North Shore of the North District. The site is situated between 2 R4-zoned lots on both the eastern side and western side, both containing multi-storey, high-density residential apartment building dwellings. According to the Australian Bureau of Statistics (2016), 20.2% of the residential population were attached dwellings or apartments.

132-138 Killeaton street on the eastern neighbor is a 6 building, 4-5 storey complex containing 321 apartments. 124-128 Killeaton street on the western neighbor contains 74 units over 2 buildings cornering mona vale road. The rear of the site faces the Corpus Christi Catholic Church and primary school on the NWW side and faces the Masada Jewish co-education school



FIGURE 03: Subject Site Location  
Source: Six Maps

## 02.01 PRESENT VEGETATION

The Ku-ring-gai LEP 2015 vegetation map portrays the present vegetation on the site, listed as 'other vegetation' only with no evidence of other vegetation traits. The present vegetation on the site includes an array of trees and shrubs that, following an arborist report, do not present any obstructions for removal according to the Ku-ring-gai LEP 2015, vegetation mapping, and biodiversity protection.



FIGURE 04: Vegetation map  
Source: Ku-ring-gai LEP 2015 MAP

## 02.02 HEIGHT AND MASSING

A prominent challenge of many sites such as this one is finding the right balance between various conflicting interests and their priority in terms of height and massing. Similarly, to many, this site is one that could be utilized in many different ways and the size of the land at 2803 square meters is one that could support an array of buildings and uses. Due to the versatility, massing and accessibility of the site, there is no conflicting interests or priorities for the proposed development.

Address contamination is an issue that will not propose any issues as the address is 130 Killeaton street, detached from any neighboring lots.

The current height zone of the lot is listed as 'N/A Area 1' and proposes to be amended similarly to neighboring lots at 124-128 and 132-136 at 17.5m ('P' Zone).

With all considerations to the versatilities and limitations of this site, the concept settled upon was a 5-storey, 40-apartment, multi-storey dwelling building. The land will need to be excavated to achieve such depth.

The analysis conducted within this urban design study identifies the benefits of the concept design for this site. The design concept features 35, 2-bedroom apartments ranging from 78-84 square meters in size with 10-15 square meter courtyards and balconies and 5, 3-bedroom penthouse apartments ranging from 100-105 square meters in size with terraces ranging from 50 to almost 110 square meters in size. The average unit size dimensions 9500 in width and 10000 in length with others varying in size and shape. The ground floor consists of 8, 2-bedroom units, whilst floors 1-3 consist of 9, 2-bedroom units. The top floor consists of 5 3-bedrooom units. There are 2 basements to this concept consisting of 52 resident car spaces and 10 visitor car spaces and multiple storage areas, service rooms etc. The building features a building articulation of 28800mm from the north side to south side and stands below the proposed height limit of 17.5m. Existing trees remain within this building articulation and do not interfere with each other. The canopy of the existing trees acts as a shade for the landscape area in the communal open space. The positioning of the site facing NNE and the position of the apartments and balconies etc. ensure each apartment is met with sufficient sunlight at appropriate times of the day and adequate ventilation to ensure this building is highly responsive to its environment.



FIGURE 05: Concept massing  
Source: Mackenzie Architects International

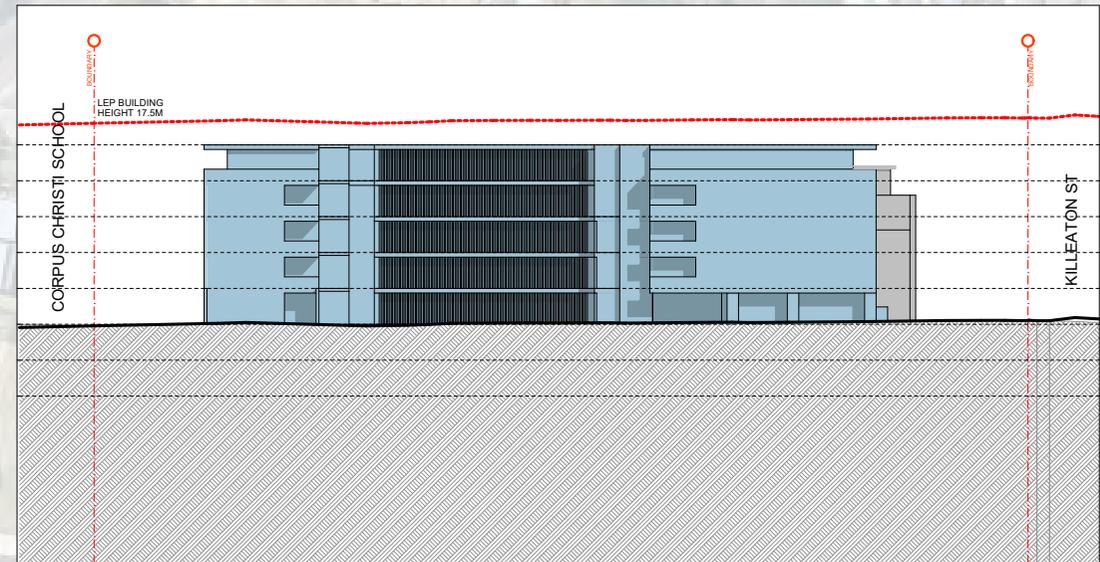


FIGURE 06: Concept East Elevation  
Source: Mackenzie Architects International

## 02.02 YIELD ANALYSIS

As represented earlier, the planning proposal is predicated on a yield of 40 apartments of varying sizes across the site in order to ensure the site's remediation is financially viable. With this under account, the below study examines the site's capacity and FSR.

TOTAL SITE AREA	Developable site area 2,803m <sup>2</sup>	2,803m <sup>2</sup>
DEEP SOIL	Front setback West side setback Rear setback East side setback excluding access and basement	13 x 28.6 = 371.8m <sup>2</sup> 6 x 58.8 = 352.8m <sup>2</sup> 9.5 x 34.6 = 328.7m <sup>2</sup> 370.9m <sup>2</sup> (by calc.)
TOTAL ESTIMATED DEEP SOIL	1,424.4m <sup>2</sup>	50.8m <sup>2</sup>
GROSS FLOOR AREA (GFA) CALCULATIONS	<p><u>Massing area Calculations</u></p> <p>Building footprint 996.2m<sup>2</sup></p> <p>Driveway/access 225.5m<sup>2</sup></p> <p>Basement 180m<sup>2</sup></p> <p><u>Gross Building Area</u></p> <p>Ground floor 1083.4m<sup>2</sup></p> <p>First floor 1026.1m<sup>2</sup></p> <p>Second floor 1026.1m<sup>2</sup></p> <p>Third Floor 1026.1m<sup>2</sup></p> <p>Top Floor 1041.3m<sup>2</sup></p> <p>TOTAL GBA 5,203m<sup>2</sup></p> <p><u>Estimate GFA</u></p> <p>Ground floor 710.52m<sup>2</sup> (65.6% efficiency)</p> <p>First floor 796.93m<sup>2</sup> (77.7% efficiency)</p> <p>Second floor 796.93m<sup>2</sup> (77.7% efficiency)</p> <p>Third Floor 796.93m<sup>2</sup> (77.7% efficiency)</p> <p>Top Floor 541.87m<sup>2</sup> (52.0% efficiency)</p> <p>TOTAL ESTIMATED GFA 3,643.18m<sup>2</sup></p>	
ALLOWABLE GFA	2,803m <sup>2</sup> (site area) X 1.3	3643.9m <sup>2</sup>
ESTIMATED FLOOR SPACE RATIO	3,643.18m <sup>2</sup> (GFA) : 2,803m <sup>2</sup> (site area)	1.3:1
AVERAGE DWELLING AREA (GFA)	3,643.18m <sup>2</sup> (GFA) : 40	91.3m <sup>2</sup>

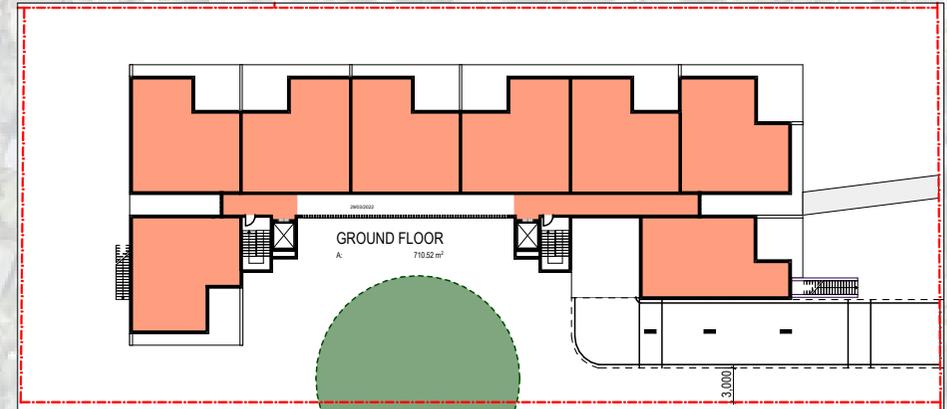


FIGURE 07: Ground floor GFA diagram  
Source: Mackenzie Architects International

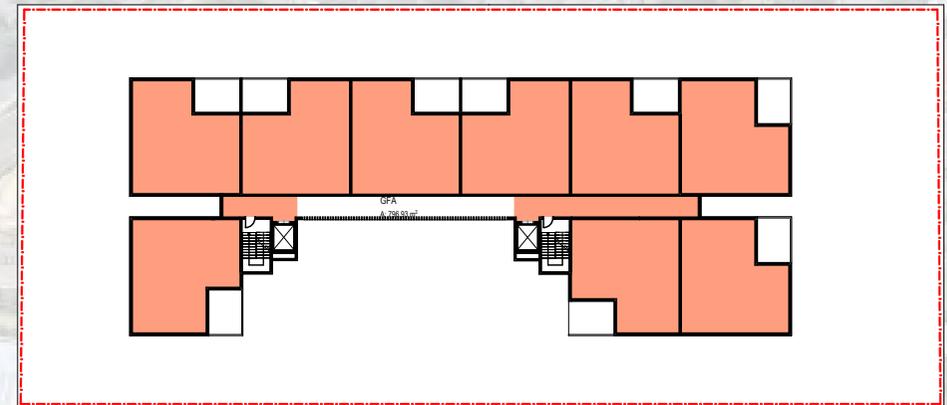


FIGURE 08: Typical floor GFA diagram  
Source: Mackenzie Architects International

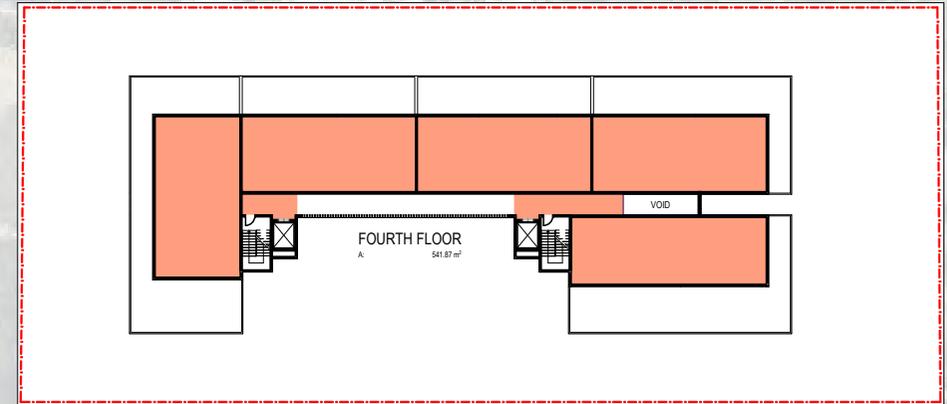


FIGURE 09: Fourth floor GFA diagram  
Source: Mackenzie Architects International

**02.04 SITE ANALYSIS**  
**SITE PLAN**



**SITE CONTEXT PLAN**

FIGURE 10: Existing Site Context Analysis  
 Source: Mackenzie Architects International



**POTENTIAL NOISE SOURCES**

FIGURE 11: Existing Site Context Analysis  
 Source: Mackenzie Architects International

**02.04 SITE ANALYSIS**  
**SITE PLAN**



**PREVAILING WINDS + SUN PATH**

FIGURE 12: Existing Site Context Analysis  
 Source: Mackenzie Architects International



**NEIGHBOURING SETBACKS**

FIGURE 13: Existing Site Context Analysis  
 Source: Mackenzie Architects International

## 02.04 SITE ANALYSIS

### SITE PLAN



**STREET RESERVE**  
Existing footpath + landscaping

FIGURE 14: Existing Site Context Analysis  
Source: Mackenzie Architects International



**EXISTING TOPOGRAPHY**

FIGURE 15: Existing Site Context Analysis  
Source: Mackenzie Architects International



**EVERGREEN**  
124-128 Killeaton St, 74 unit Residential Complex

FIGURE 16: Neighbouring streetscape  
Source: Google Street View



**ALCOVÉ BY MERITON**  
132-138 Killeaton St, 321 unit Residential Complex

FIGURE 17: Neighbouring streetscape  
Source: Google Street View

**02.04 SITE ANALYSIS**  
**SHADOW DIAGRAMS**

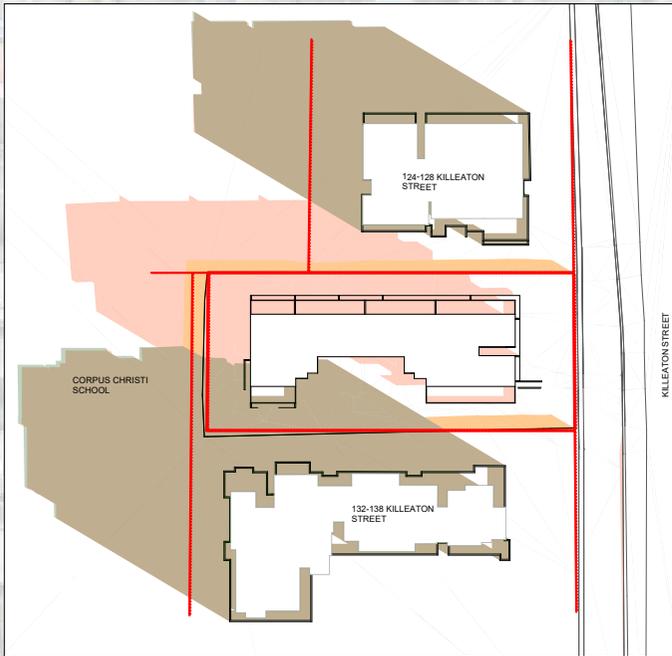


FIGURE 18: 9am 21st June Shadow Diagram  
Source: Mackenzie Architects International

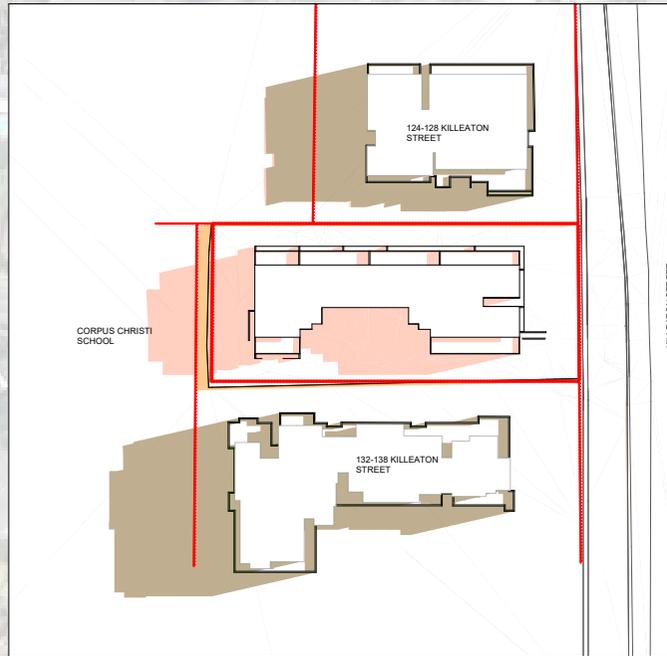


FIGURE 19: Noon 21st June Shadow Diagram  
Source: Mackenzie Architects International

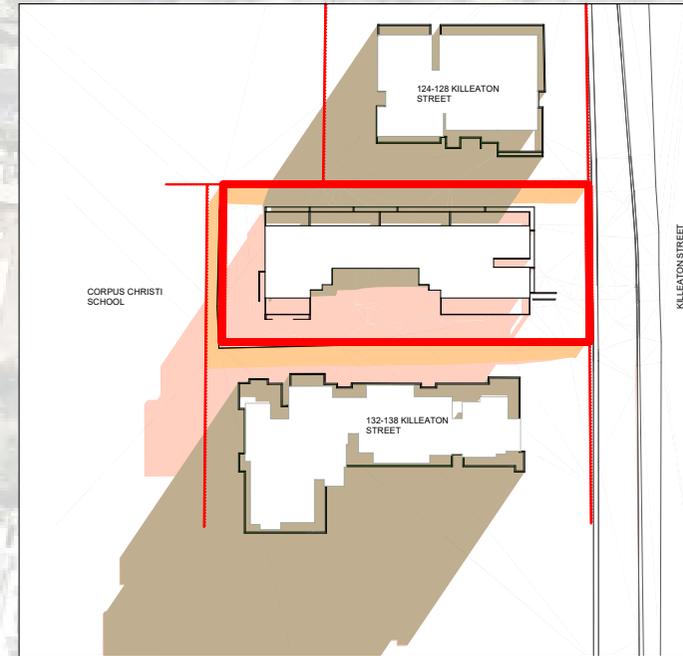


FIGURE 20: 3pm 21st June Shadow Diagram  
Source: Mackenzie Architects International

Full Shadow Diagrams can be found in Appendix 06

## 02.05 TRAFFIC ANALYSIS

### Sydney Traffic

Road traffic within the busy and interconnected city of Sydney, NSW is constantly changing to improve the flow of vehicles on the road, with less road traffic congestions every year based off statistical data. A recently conducted study states the average level of congestion within Sydney in 2018 was 34%, with 2019 presenting a statistic of 33% (1% decrease) and 2020, the latest full year analysis at 28% (5% decrease). (Source: TomTom Traffic Report).

### Local Traffic

Portrayed within Image 16 (Average Daily Traffic Graph) is the average passing cars daily on Mona Vale rd through a permanent classifier opposing Garrick rd, nearby to the subject site. Results through NSW Roads and Maritime services show the average cars passing daily has been 23,478 Northbound and 22,810 Southbound, with a total of 46,288 passing daily.

The vicinity of the subject site shows the road hierarchy of State Roads: Mona Vale rd and Regional roads: Killeaton st and Link rd. Mona Vale rd is classified as a state road performing an arterial road function. This road typically carries three traffic lanes in each direction, separated by a median island. The east side of Killeaton st, where the subject site is situated, acts as a collector road into the primarily low-density residential area. With pavement approx. 9.8m in width, this provides sufficient road width for easy access in either direction, and minimal obstruction. (Traffic, Transport and Parking Assessment Report prepared by Terrafic).

An existing traffic condition assessment was conducted at the intersection of Mona Vale rd and Killeaton st by Terrafic Pty Ltd and resulted in the following data.

The AM peak period occurred between 7:30-8:30AM. During that time 11 vehicles per hour turned eastbound onto Killeaton st, and 17 westbound towards Mona Vale rd for a total of 28 vehicles per hour of 2-way traffic flows on Killeaton st. (Traffic, Transport and Parking Assessment Report prepared by Terrafic).

The PM peak period occurred between 4:15-5:15PM. During that time 7 vehicles per hour turned eastbound onto Killeaton st, and 25 westbound towards Mona Vale rd for a total of 32 vehicles per hour of 2-way traffic flows on Killeaton st. (Traffic, Transport and Parking Assessment Report prepared by Terrafic).

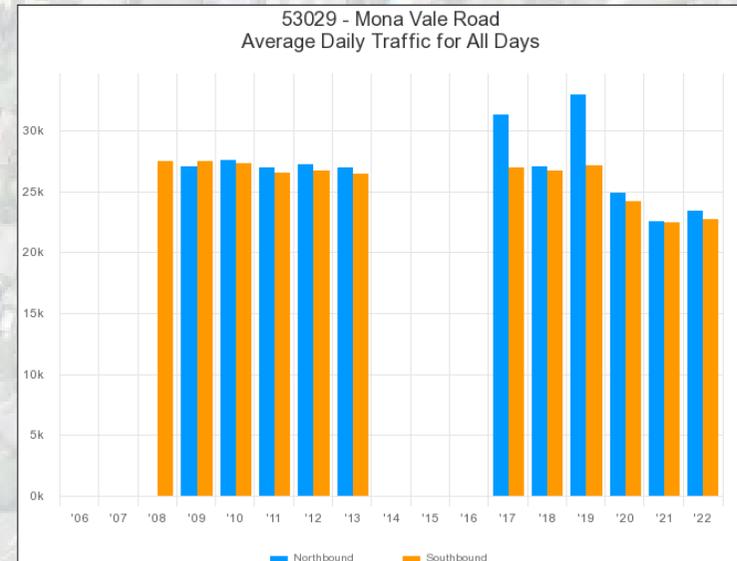


FIGURE 21: Average Daily Traffic Graph  
Source: NSW Transport Roads & Maritime Services

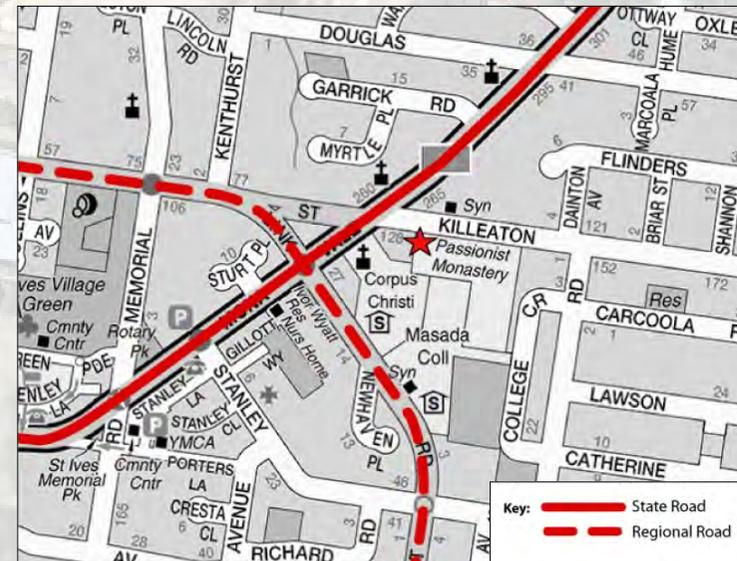


FIGURE 22 : Road Classification  
Source: Terrafic Pty Ltd

## 02.05 TRAFFIC ANALYSIS

### Cyclist Movement

The Traffic and Transport plan 2011-2021 shows local cyclepaths in the Ku-ring-gai council area. Mona Vale Road has no bike path access which may push cycle traffic towards side and semi main roads.

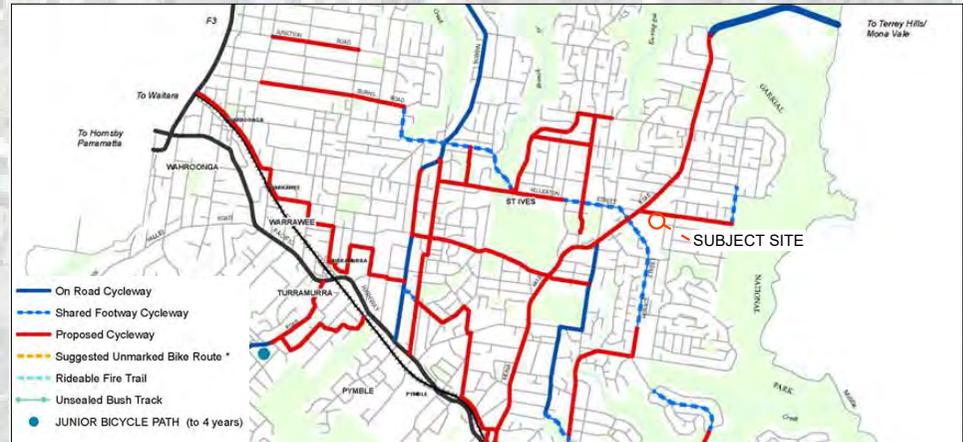


FIGURE 23: Traffic and Transport plan 2011-2021 Cycleways  
Source: Traffic, transport and parking Assessment report, prepared by Terraffic Pty Ltd

### Pedestrian/Cycle Traffic

The pedestrian traffic within the local vicinity of the site on Killeaton street is moderate with only some low-density residential foot traffic and bus stop access from mona vale rd. for other services, and neighboring streets such as Yarrabung rd., Dainton rd., Briar st etc. The site has very accessible foot path access on the corresponding side of the site, linking residents to local bus stops, neighboring streets, mona vale road to walk to the shopping village and a pedestrian crossing at the intersection to reach the western side of Killeaton st for access to St Ives village green and other suburbs. All footpaths are of adequate condition and access

Image 18 shows the footpaths within the local area

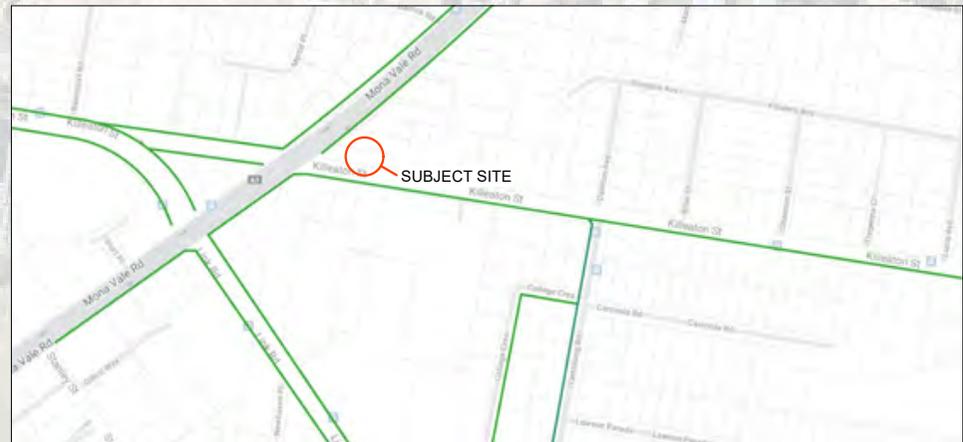
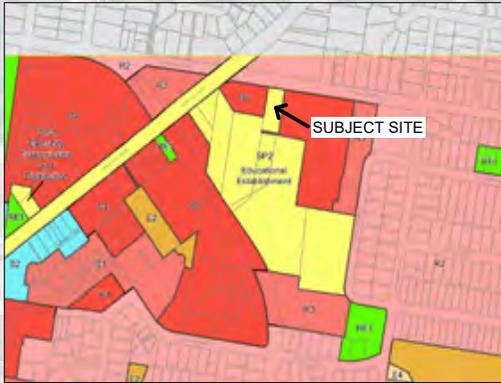


FIGURE 24: Pedestrian footpaths in the vicinity of the site  
Source: Google maps

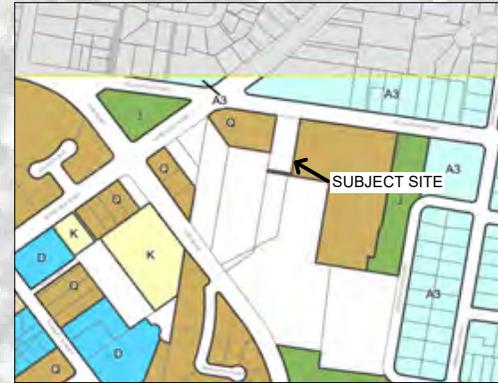
### 03.01 LEP 2015 Classification Mapping (Map 013)



#### Land Zoning Map

The site is situated within SP2 (Educational Establishment Infrastructure), parallel to R4 (High density residential) zoned lots either side. The lot aims to be rezoned to R4 to support proposed multi-dwelling development

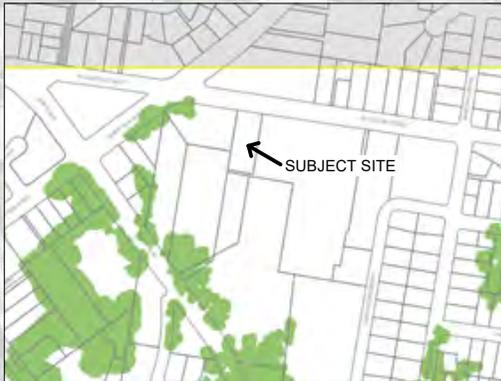
FIGURE 25: Land Zoning Map  
Source: Ku-ring-gai Council LEP 2015



#### Floor Space Ratio Map

The site at 130 Killeaton st, is situated within a Cadastre zone and beside a 'Q' zone either side with a floor-space ratio of 1.3:1. The development proposal aims to achieve the same zone as its neighbours.

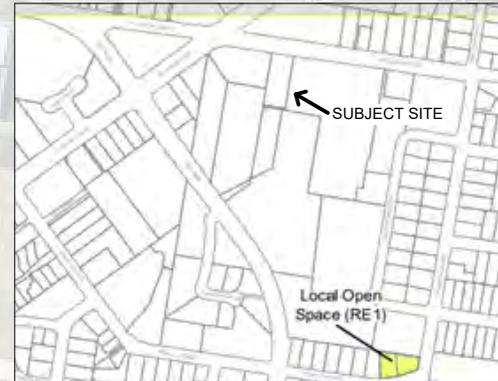
FIGURE 26: Floor Space Ratio Map  
Source: Ku-ring-gai Council LEP 2015



#### Terrestrial Biodiversity Map

The site has no evident terrestrial biodiversity and therefore does not disturb the habitat and ecological system of animals, plants and micro-organisms on the land or create a threat to any endangered species of such.

FIGURE 27: Terrestrial Biodiversity Map  
Source: Ku-ring-gai Council LEP 2015

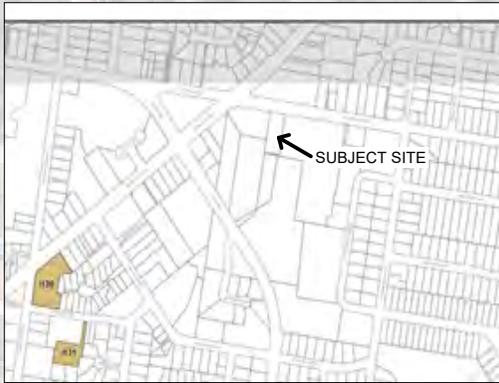


#### Land Reservation Acquisition Map

The lot has no visible reservation acquisitions and therefore does not interfere with any public land reservations when developed.

FIGURE 28: Land Reservation Acquisition Map  
Source: Ku-ring-gai Council LEP 2015

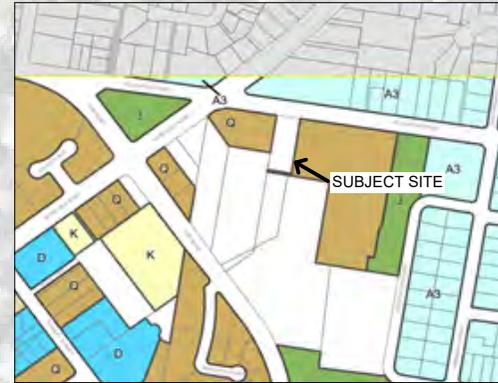
### 03.01 LEP 2015 Classification Mapping (Map 013)



#### Heritage Zoning Map

The lot has no heritage zoning as per the LEP map and therefore will not remove or disturb any listed heritage zoned buildings

FIGURE 29: Land Zoning Map  
Source: Ku-ring-gai Council LEP 2015



#### Height of Buildings Map

The site is within an N/A 'area 1' zone and is situated between a 'P' height zone of 17.5m max height either side and proposes to be classed 'P' zoning to allow for the proposed high density residential apartment building and ultimately increase potential.

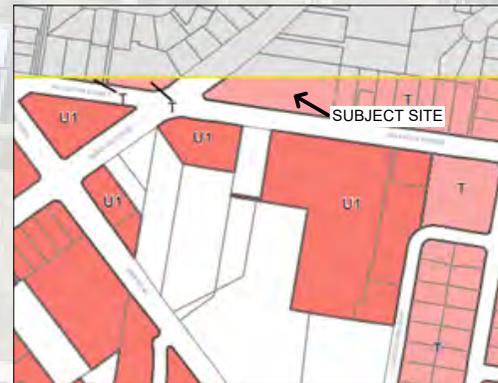
FIGURE 30: Height of Buildings Map  
Source: Ku-ring-gai Council LEP 2015



#### Acid Sulfate Soils Map

The site in St Ives is situated on class 5 acid sulfate soil, indicating acid sulfates are not typically found within this area as per the NSW planning portal.

FIGURE 31: Acid Sulfate Soils Map  
Source: Ku-ring-gai Council LEP 2015



#### Lot Size Map

The lot size of the site is unspecified and is situated between a U1 zone either side (min 1200 sqm). The lot size of the site is 2803sqm.

FIGURE 32 : Lot Size Map  
Source: Ku-ring-gai Council LEP 2015

### 03.02 FLOOD ZONES

There are no flood zones within the immediate vicinity of the site or through the site at 130 Killeaton Street and the nearest exposed flood zone is approximately 2.56km away (Figure 33). Therefore, the site is not exposed to any potential flood zones and is safe to build the proposed development on the site.



FIGURE 33: Flood Zone Map  
Source: Six Maps

### 03.03 PHYSICAL FEATURES

The topography of mainland St Ives is almost a mountainous plateau in contrast with the valley below facing east towards Belrose known as the Garigal National Park. The altitude of mainland St Ives varies between 141-177m with the Garigal National Park sloping to altitudes as low as 29m.

The nature of St Ives presents the beauty of varying landscapes from suburban plateau land to overlooking steep valleys of nature.

The site is a rectangular frontage block located in the heart of St Ives, adjacent off Mona Vale Road with a street frontage of 35 meters to Killeaton St. The land is highest on the eastern side and gradually slopes towards the western side with the greatest gradient on the western side. The gradient of the site positively supports the drainage flow to the stormwater access shown on the Sydney water stormwater map. The gradient of the site does not propose any development issues.

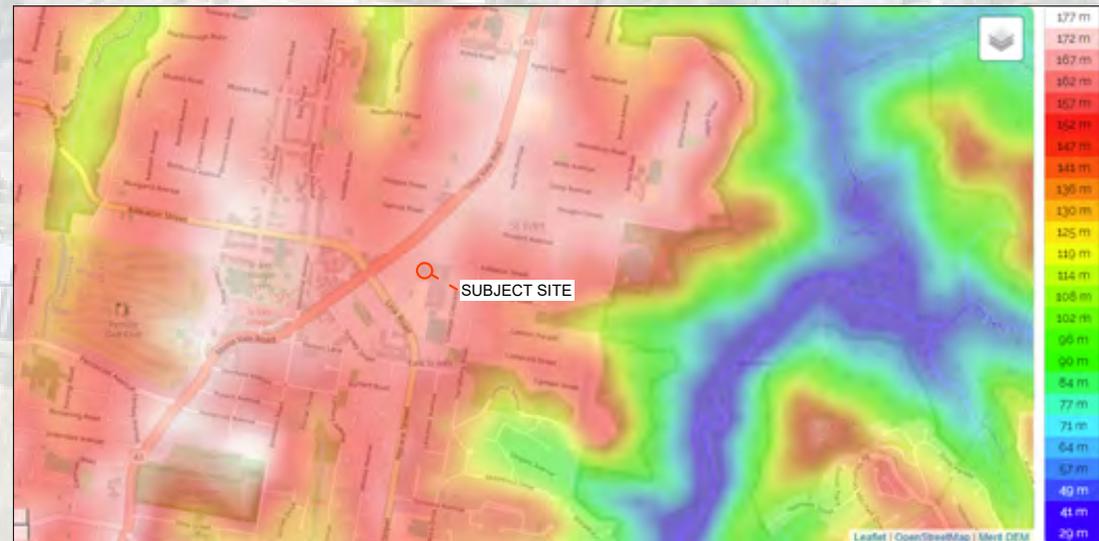


FIGURE 34: St Ives Local Topography  
Source: Topography Maps

### 03.04 SOLAR ACCESS ANALYSIS

The site frontage face NNE onto Killeaton St and therefore has excellent sun exposure as demonstrated on the solar analysis diagramming. With majority of sun exposure on the NW, N and NE face. The North-East face receives morning sun while the North face receives the morning to afternoon sun. The North-west side lastly receives most afternoon sun and the sunset evening sun.

Full Solar Access analysis can be found in Appendix 06

### 03.05 SITE REMEDIATION

Remediation of the site will involve removal of Arborist advised vegetation and all buildings. This proposes no obstructions as there are no heritage-listed buildings or protected ecology on the site. Whilst typically, the extent of vegetation, its quality, connectivity and potential for biodiversity would normally be a significant feature driving the urban design response to the distribution of built form on a site, in this instance almost all obstructing vegetation is to be cleared. As a result, the extent of vegetation on the site has limited influence on the built form. The site itself or remediation will not interfere with neighboring lots.

This application is support by a Biodiversity Impact Assessment prepared by Keystone Ecology and Arboricultural Impact Assessment prepared by Advanced Treescape



FIGURE 35: Existing tree locations  
Source: Biodiversity Impact Assessment prepared by Keystone Ecology

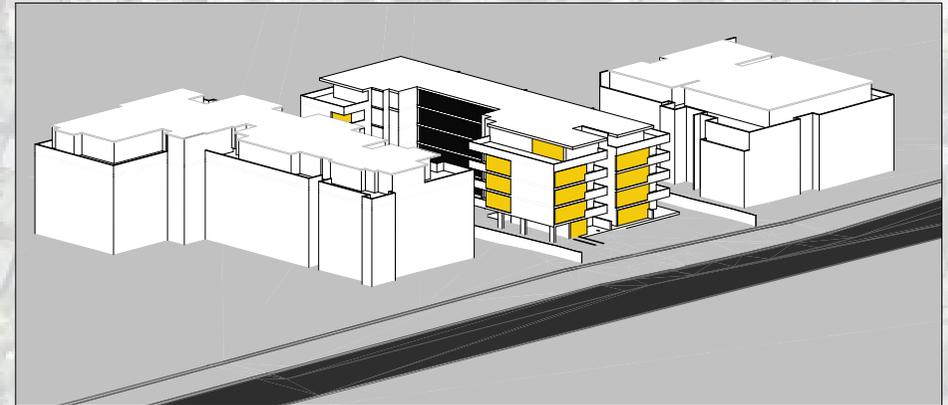


FIGURE 36: 9am 21st June Solar Access Living Spaces  
Source: Mackenzie Architects International

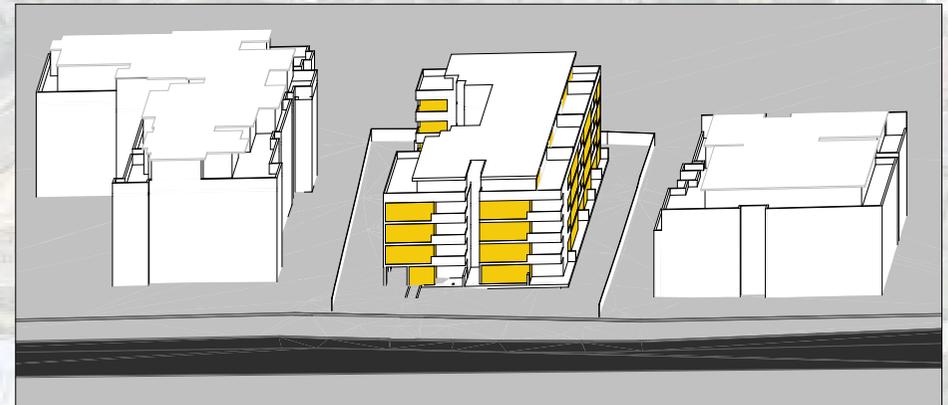


FIGURE 37: Noon 21st June Solar Access Living Spaces  
Source: Mackenzie Architects International

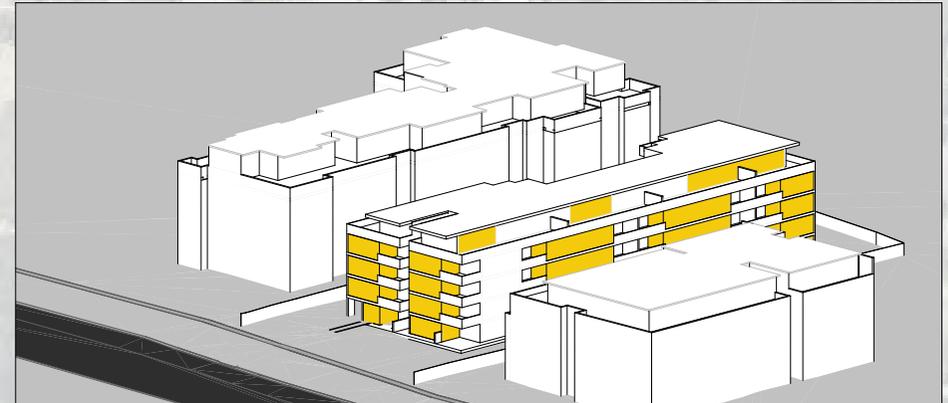


FIGURE 38: 3pm 21st June Solar Access Living Spaces  
Source: Mackenzie Architects International

### 03.06 SITE ACCESS

The main access to the site is predetermined via Killeaton street with frontage access, making entry and exit easy onto the semi-main road. The location of the site constraints the ability for access to be relocated. Direct access onto Mona Vale means there is a medium but constant flow of traffic, being the primary road connecting east St Ives to central St Ives and to Mona Vale Road for access to Gordon and further Sydney to the city, and also the medium connecting to the Northern beaches.

The location of where the site is situated results in potential added car and pedestrian traffic for the Corpus Christi Church and primary school, St Ives-Pymble Presbyterian church and the Masada Synagogue and school. This inevitably will mean addition parked cars throughout the street due to the street's convenient location and accessibility. The great amount of bus stops throughout the street also indicates there could be additional parked cars to access the bus stops for many catching public transport.

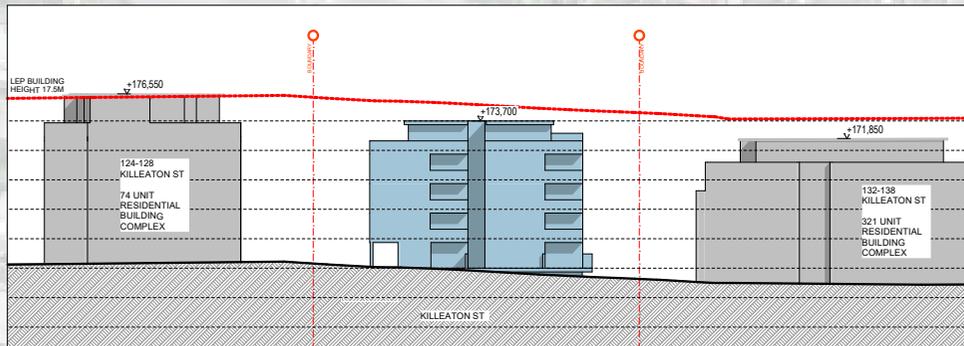


FIGURE 39: Concept North Elevation (STREET VIEW)  
Source: Mackenzie Architects International

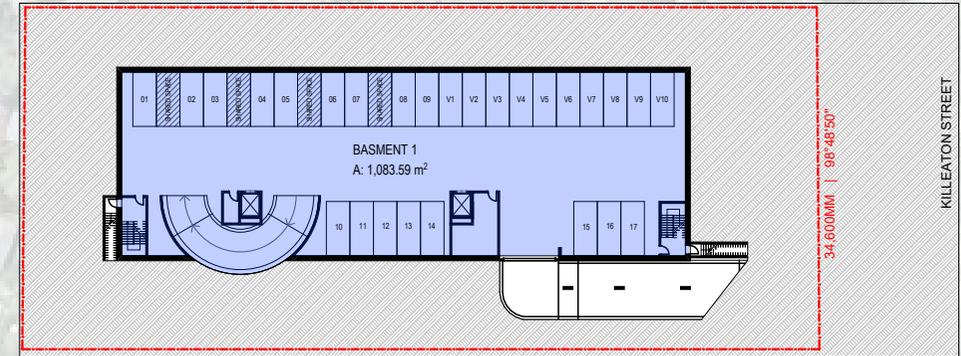


FIGURE 40: Concept Basement Plan  
Source: Mackenzie Architects International



FIGURE 41: Concept Ground Floor Plan  
Source: Mackenzie Architects International

### 3.07 SITE VIEWS

The site at 130 Killeaton st is distantly visible from Mona Vale Road and the rear from Link Road behind the catholic church and school. Current visibility is largely obstructed by the dense trees and vegetation all throughout the site. The current vegetation situation creates a large canopy over the existing house.

Views from the site are facing the neighboring apartment building development of 14-128 on the west, the Meriton apartment complex on 132-136 on the eastern side. The rear of the lot has views of the school and synagogue. The North (front) face has views of the opposing low density residential housing on Killeaton St. As a result, privacy may be limited from the neighboring buildings' elevations of 4 storey onto the site.

Due to the topography of the lot, the site does not have any elevated views from ground level or throughout the site. The proposed new development will add new and interesting views from the higher elevations, outlooking the nature of St Ives, whilst adding additional levels of privacy to the residents.



FIGURE 42: 124-128 Killeaton street to the West of subject site  
Source: Mackenzie Architects International



FIGURE 43: Killeaton street to the North of subject site  
Source: Mackenzie Architects International



FIGURE 44: 132-138 Killeaton street to the East of subject site  
Source: Mackenzie Architects International



FIGURE 45: View of site from Killeaton Street  
Source: Mackenzie Architects International



FIGURE 46: Existing house  
Source: Mackenzie Architects International

#### 4.01 PUBLIC TRANSPORT

Provisions for seamless transport have been well integrated within the surroundings of the site and the suburb of St Ives, to easily and efficiently connect residents around the area and around Sydney and to the CBD.

As seen in Figure 47, there are over 24 bus stops within a 1km radius of the site with adequate footpaths to reach them from any location.



FIGURE 47: Local bus stop locations  
Source: Google Maps

#### Bus Route to Nearest Train Station (Pymble Station)

Public transport to the nearest train station at Pymble is 3.7km away driving and 20 mins on the 197-bus route that is scheduled for every 10 minutes, ensuring frequent transport options as seen in Image 48.

Pymble train station is on the T1 North shore train network line connecting to Hornsby station for changes to Far Northern Sydney and Gordon for the T9 service and Chatswood station for the Metro. The T1 connects to central station for changes to other networks, light rail or the light rail and directly to stations within the Sydney CBD.

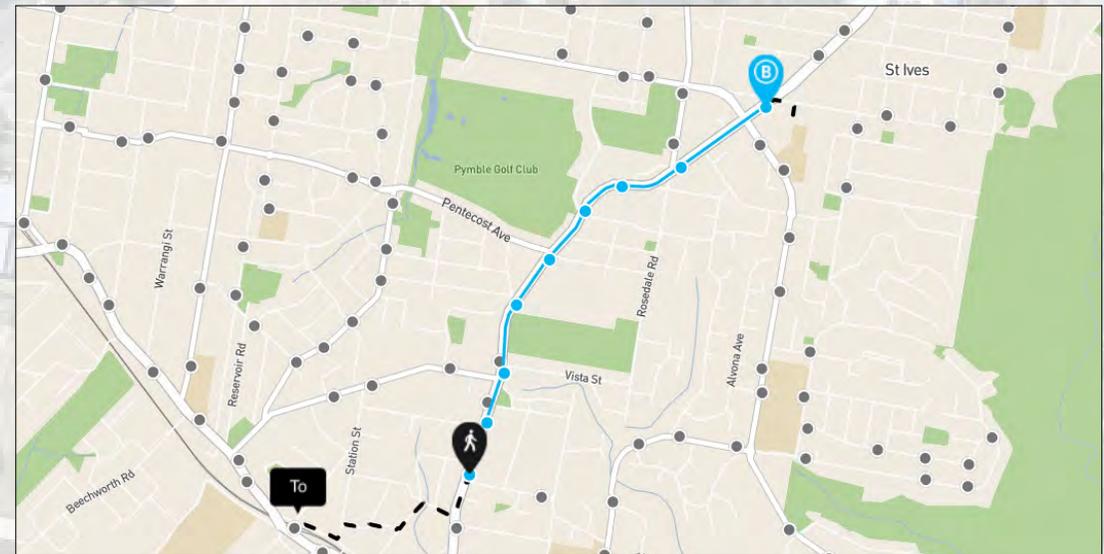


FIGURE 48: Public transport  
Source: Transport NSW

## LOCAL SERVICES

The location of the site ensures residents have access to sufficient health services including hospitals, doctors etc. with extensive capabilities and capacity to comfortably accommodate for this development.

### 5.01 HOSPITALS

The nearest hospital to 130 Killeaton St is only 5.6km away at Gordon private hospital, easily accessible via mona vale rd., making it less than a 10-minute drive or 20-minute bus trip. Another nearby private hospital is the Sydney Adventist hospital at Wahroonga, only 7.6km away. The nearest public hospital is only 7.4km away at Hornsby-Ku-rin-gai hospital, with state-of-the-art facilities and services and the capacity to accommodate for many patients.

### 5.02 DOCTORS/CLINICS

Pymble Health care clinic is 1.5km away and the nearest medical practice being 700m away, the high-density residential development is ensured to have sufficient health services for any demand. St Ives shopping center contains various other medical practices and health clinics to accommodate for any resident's needs.

### 5.03 SHOPS

The nearest shopping center away is St Ives shopping village at only 1.4km away, it is easily accessible via driving, bus or walking, providing over 100 specialty stores and services accommodating for any needs.

### 6.01 LOCAL SCHOOLS

The location of the site within St. Ives ensures the residents have access to an abundance of quality schools and educational services within Sydney's mid North Shore to support residents with sufficient educational services to cater for all different needs.

Within a 5km radius of the site there are 60 schools including

- 20 public primary schools
- 4 public high schools
- 11 Catholic primary schools
- 2 private boy's high schools
- 3 private girl's high schools
- 1 Jewish school
- 19 pre-education schools (pre-schools)

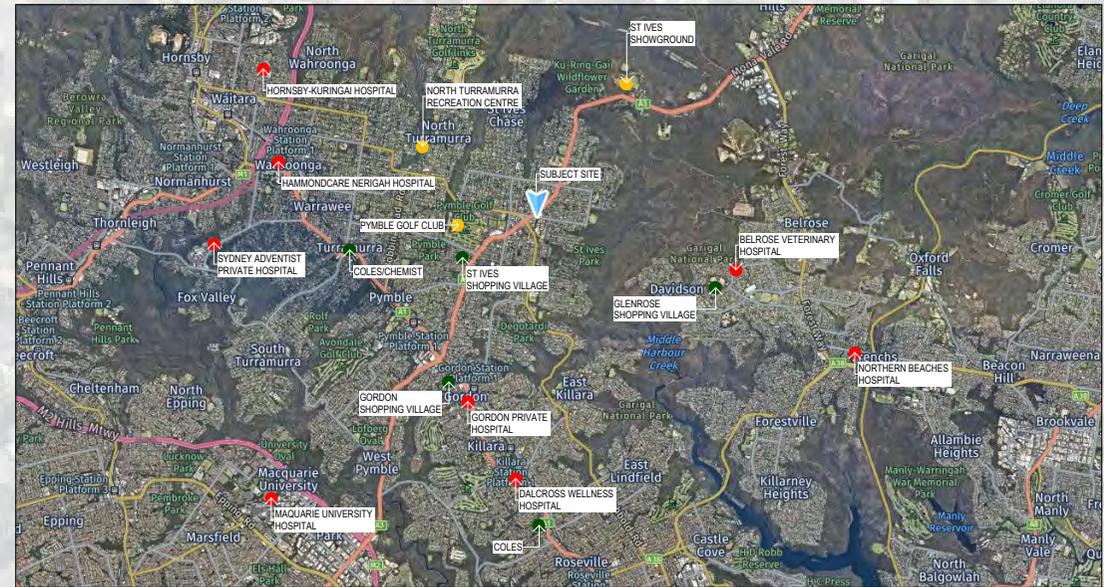


FIGURE 49: Services Map  
Source: Mackenzie Architects International

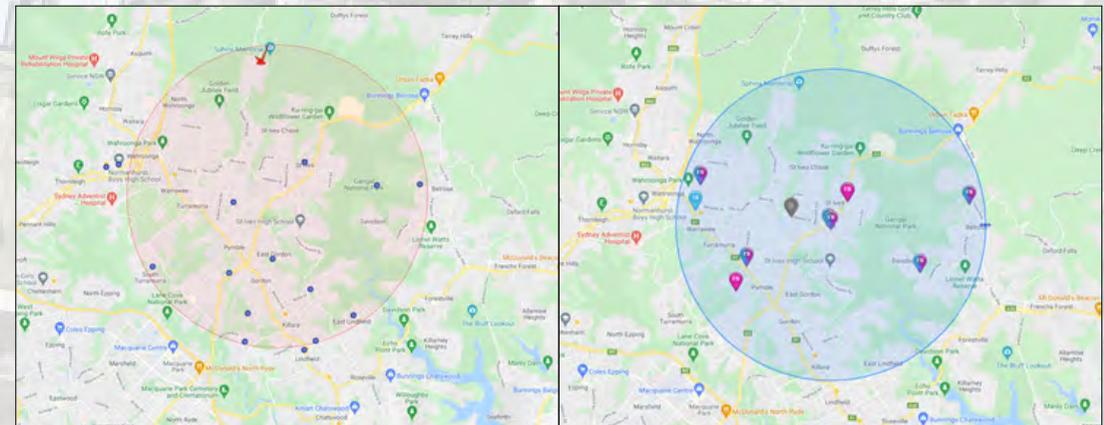


FIGURE 50: Public School Map  
Source: NSW School finder

FIGURE 51: Private School Map  
Source: NSW School finder

## 7.01 DEMOGRAPHICS

The demographic of St Ives as shown in the Australian Bureau of Statistics (2016 Census) presents a total population of 17,300, with a median age of 42 years old.

- 20.8% of the immediate population were ages 0-14, 59.5% were ages 14-64 and 19.7% of the population was 65 or over.
- The most common nationality was South African at 8.6%, followed by Chinese then English.
- 82.9% of the demographic were family households whilst 16.2% were single family households
- Religion in St Ives is highest with No religion at 28.6%, 17.6% Anglican, 17.3% Catholic and 7.6% Judaism

The location of the site within the North District of Sydney shows a projection of the aging population change from 2016-2036. The graph provided by The Greater Sydney Commission shows a large increase of population within the 64-84-year-old range as well as the 85+ range. The building will have to be built to accommodate to this changing demographic (Image 52). (Northern District projected population)

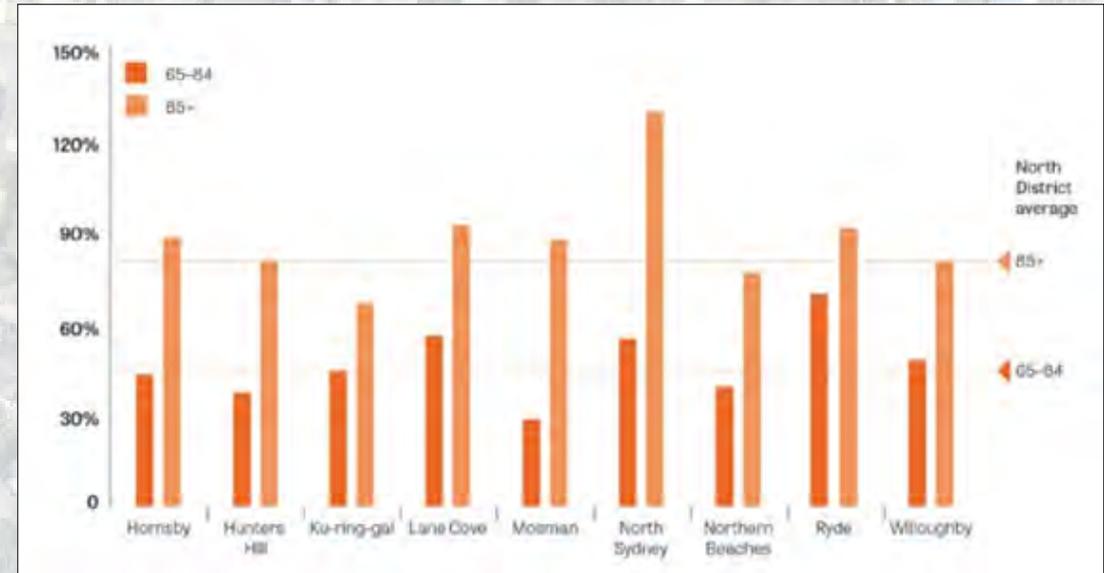


FIGURE 52: North District projected population change 2016-2036 by LGA  
Source: NSW Department of Planning + Education NSW State and Local Government Area Household Projections and Implied Dwelling Requirements 2016 to 2036, NSW Government, Sydney

## 7.02 SOCIAL AND CULTURAL IMPACT

The social and cultural impact of the proposed development is an inevitable impact of a residential development. The main impact with a residential development is the added density of people within a specific area. The increase in population may create more of a demand for infrastructure upgrades, added shops, services etc. as the increased population may create more traffic, both road and pedestrian within Killeaton st and the whole of St Ives as well. The increased population may have a positive economic impact with the increase of demand for goods and services from more people and may see local shops prospering with the increased traffic and overall boosting the local economy. The increased population will perhaps create greater diversity among the local region with a supply of new local residents, diversifying the culture of religion and nationality. Another social impact is increased socialisation within the community with the added population, potentially creating new and growing communities.

## 8.01 STORMWATER CATCHMENT

This map indicates the site is located approximately 5km from Sydney Water's nearest stormwater catchment zone at East Lindfield (Figure 53)

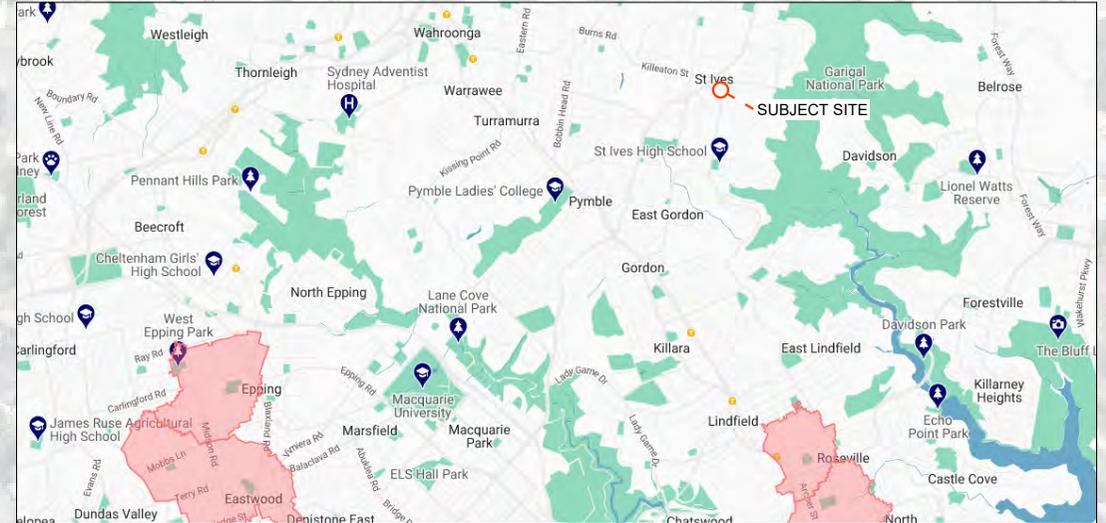


FIGURE 53: Stormwater Catchment  
Source: Sydney Water

## 8.02 ROAD NETWORK

The location of St Ives within Sydney ensures the road network infrastructure is sufficient to accommodate for the needs of any transportation. The situation of St Ives within the upper north shore denotes that, roads to connect residents to the rest of the city are very accessible from Sydney's CBD to the northern beaches, St Ives provides a demanded gateway for accessible living supported by an extensive road network. Killeaton Street acts as a bridge between east and west St Ives, easily connecting residents to the Shopping village and other services, whilst channeling traffic onto Mona Vale Road. Mona Vale Road acts as the gateway connecting St Ives and the rest of the North Shore to the Northern Beaches, as well as connecting St Ives back to Pacific Highway for the CBD, Chatswood and Hornsby, and Ryde Road for easy access to Epping, Ryde and the M4

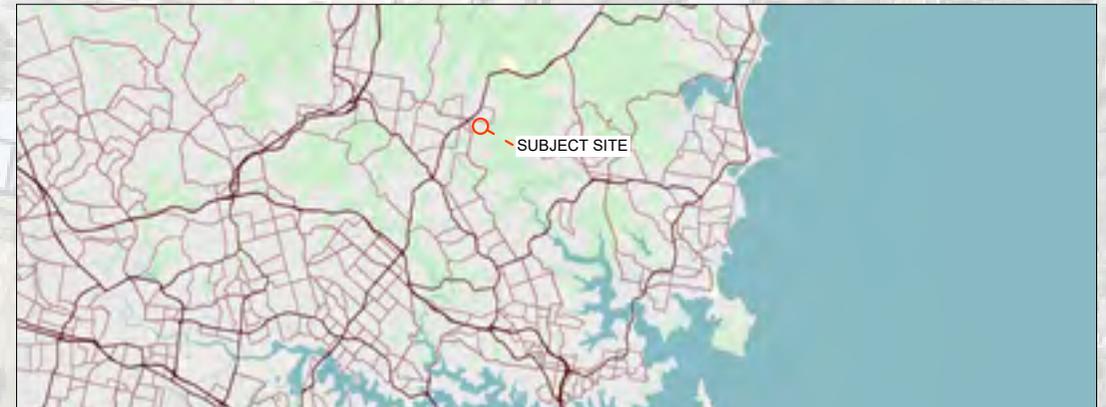


FIGURE 54: Sydney Road Network  
Source: Google Maps

## CONCLUSION

An urban design study has been conducted on the proposed site at 130 Killeaton Street, St Ives, 2075, and has been assessed for the reality of the physical lot as well as the provisions in place to supported the proposed amendments. Through extensive analysis of the proposed site, we have exposed the potential of the site and its ability to support the proposed zoning amendments through sufficient infrastructure, physical properties and characteristics.

Proposed Amendments Include the following:

- Land zoning > Amended from SP2 to R4
- Floor Space ratio zoning > Amended from Cadastre to 'Q' Zoning (1.3:1)
- Building Height Zoning > Amended from N/A Area 1 Zone to 'P' Zone (17.5m)



FIGURE 55: Realestate location diagram  
Source: Ray White Commercial Real Estate

APPENDIX 06 - AUSGRID MAP



# APPENDIX 02 - KU-RING-GAI STORMWATER MAP

Sequence No: 204616421  
 Job No: 30791094  
 Location: 130 Killeaton Street, St Ives, NSW 2075



Legend | Scale: 1:1000

Stormwater Main	Irrigation Power	Rock Anchor
Stormwater Pit	House Service Connection	Survey Marker
Sewer Main	Communication Cable	Easement
Recycled Main	Electrical (Lighting) Cable	Land Parcel

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APPENDIX 03 - OPTUS TELECOMMUNICATIONS MAP



**Tile No: 1**

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Date Generated: 28 Oct 2021

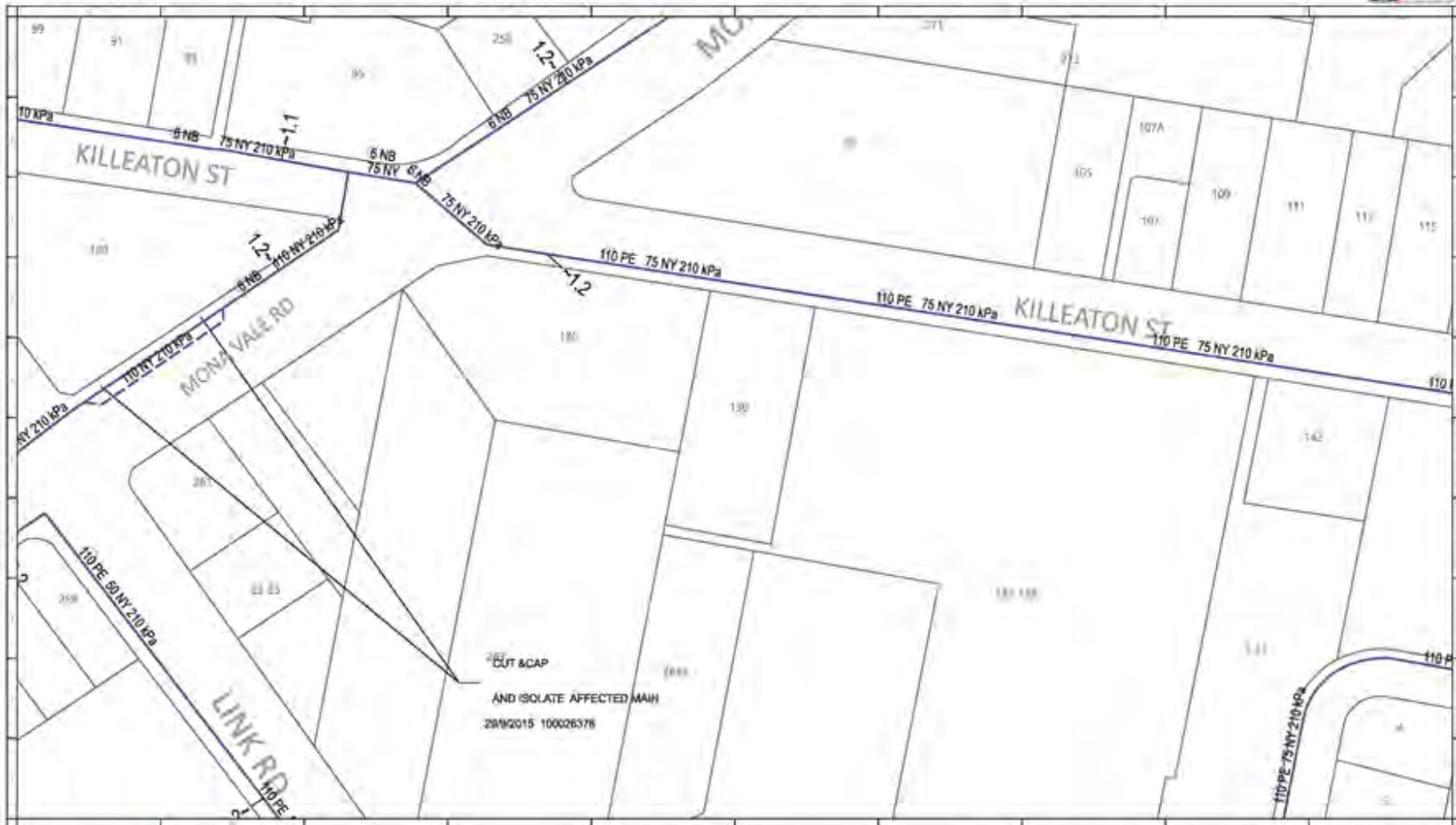
For all Optus DBYD plan enquiries –  
Email: [fibre.locations@optus.net.au](mailto: fibre.locations@optus.net.au)  
For urgent onsite assistance contact 1800 505 777  
Optus Limited ACN 052 833 208



APPENDIX 04 - JEMENA GAS MAP

DBYD Authority: Jemena Gas Networks (NSW)

DBYD Location: 130 Killaleah Street St Ivel NSW 2075



For legend details, please refer to the Coversheet attachment provided as part of this DBYD response.



Issue Date: 29/10/2021  
 DBYD Seq No: 2046158111  
 DBYD Job No: 40791084

Scale: 1:2000



**WARNING:** This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.

APPENDIX 05 - SYDNEY WATER MAP



A4

DBYD Address:  
130 Killeaton Street  
SI 1v45 NSW 2075  
DBYD Job No: 30791094  
DBYD Sequence No: 204616422

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No warranty is given that the information shown is complete or accurate.  
SYDNEY WATER CORPORATION  
Scale: 1:1000

Date of Production: 28/10/2021  
Plan 1 of 1



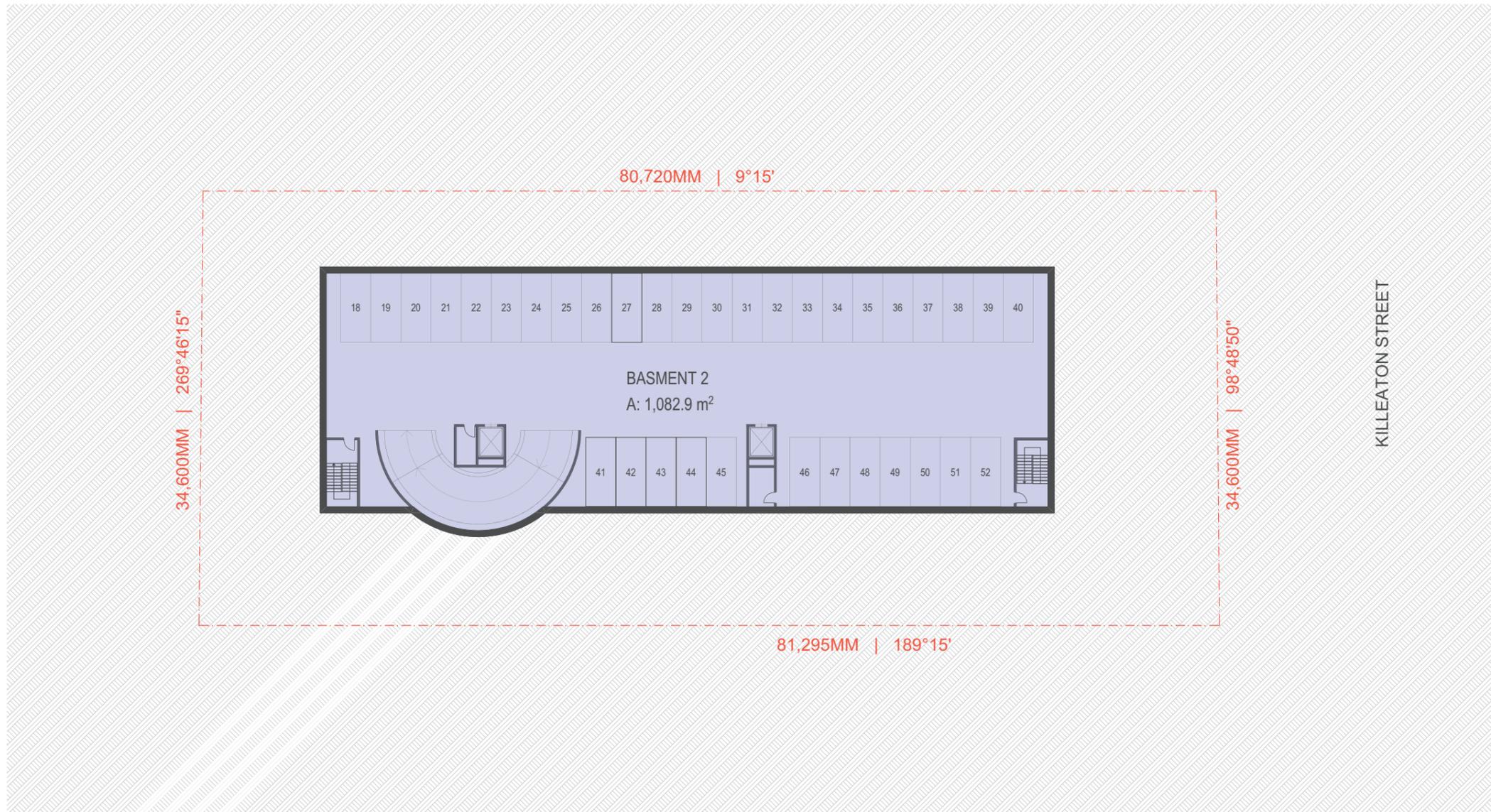
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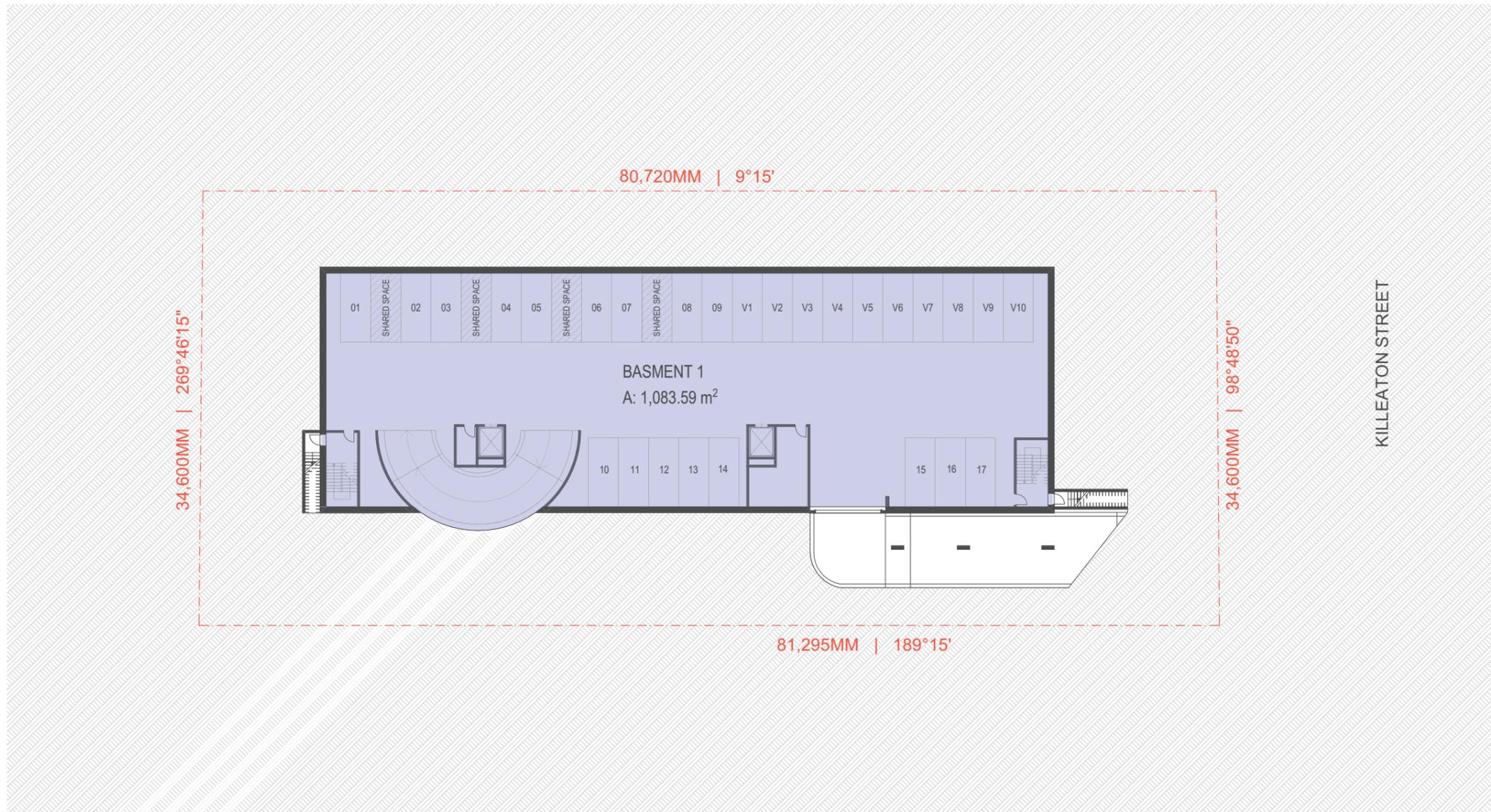
## 130 Killeaton Street, St Ives, NSW 2075



DRAWING SCHEDULE				
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A0001	COVERPAGE		A	29/03/2022
A1000	BASEMENT PLAN 02	1:200	A	29/03/2022
A1001	BASEMENT PLAN 01	1:200	A	29/03/2022
A1002	GROUND FLOOR PLAN	1:200	A	29/03/2022
A1003	TYPICAL FLOOR PLAN	1:200	A	29/03/2022
A1004	FOURTH FLOOR PLAN	1:200	A	29/03/2022
A2001	NORTH & EAST ELEVATIONS	1:200	A	29/03/2022
A2002	SOUTH & WEST ELEVATIONS	1:200	A	29/03/2022
A2101	SECTIONS	1:200	A	29/03/2022
A3001	GFA CALCULATIONS	1:300	A	29/03/2022
A4001	9AM-11AM SOLAR ACCESS		A	29/03/2022
A4002	12PM-1PM SOLAR ACCESS		A	29/03/2022
A4101	9AM-11AM PROPOSED SHADOW DIAGRAMS		A	29/03/2022
A4102	12PM-1PM PROPOSED SHADOW DIAGRAMS		A	29/03/2022
A4103	2PM-3PM PROPOSED SHADOW DIAGRAMS		A	29/03/2022

	<b>mackenzie architects</b> international	4/3 The Postern, Castlereag NSW 2068 Phone: (02) 9967 9966 Fax: (02) 9967 9977 info@mackenzieinternational.com.au www.mackenzieinternational.com.au Nominated Architect No.6033 ABN 76 091 107 201 ACN 091107201	CLIENT & DEVELOPER:  CONSTRUCTION COMPANY:	CONSTRUCTION COMPANY:  CLIENT & DEVELOPER:	AMENDMENTS <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>REVISION</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>PLANNING PROPOSAL APPLICATION</td> <td>JE</td> <td>29/03/2021</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	REVISION	BY	DATE	A	PLANNING PROPOSAL APPLICATION	JE	29/03/2021													MULTI RESIDENTIAL DEVELOPMENT PROJECT <b>130 Killeaton Street, St Ives, NSW 2075</b> PROJECT NO. 21/16 STATUS NOT FOR CONSTRUCTION	DRAWING: COVERPAGE DRAWN BY: J.E. SCALE: NTS DRAWING NO.: A0001 ISSUE: A CHECKED BY: B.C.
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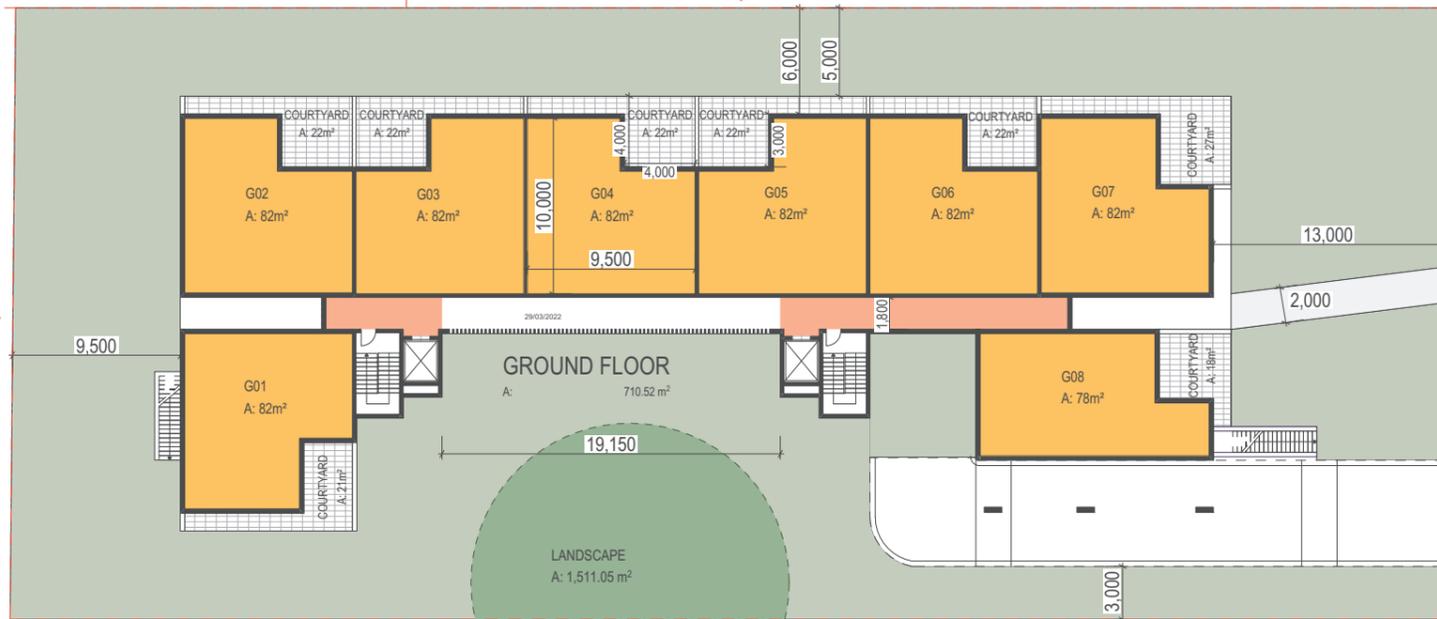




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CORPUS CHRISTI SCHOOL

34,600MM | 269°46'15"



124-128  
KILLEATON ST

80,720MM | 9°15'

34,600MM | 98°48'50"

KILLEATON STREET

132-138  
KILLEATON ST

81,295MM | 189°15'

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CORPUS CHRISTI SCHOOL



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 Nominated Architect No.6033  
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 ACN 091107201

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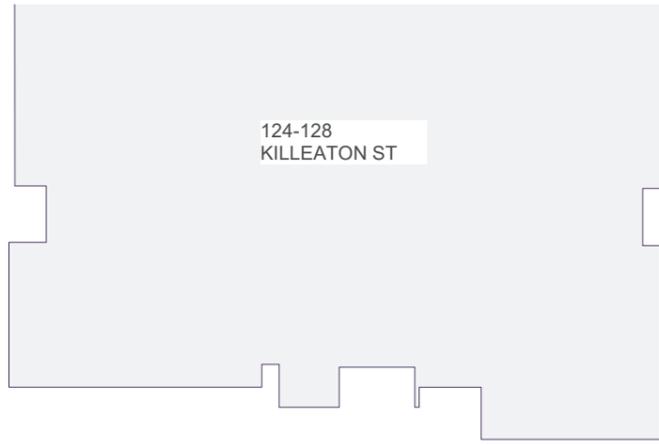
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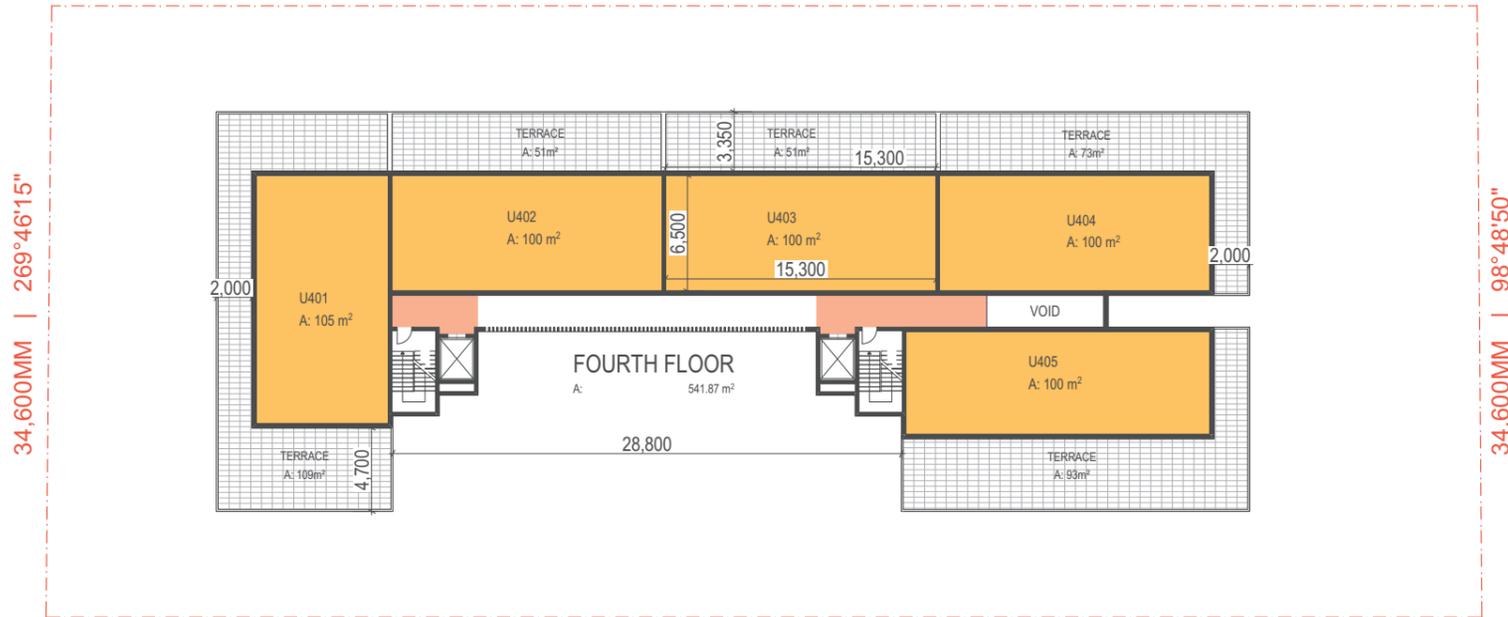
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MULTI RESIDENTIAL DEVELOPMENT  
**130 Killeaton Street, St Ives, NSW 2075**  
 PROJECT NO: 21/16 STATUS: NOT FOR CONSTRUCTION

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CHECKED BY	B.C.		

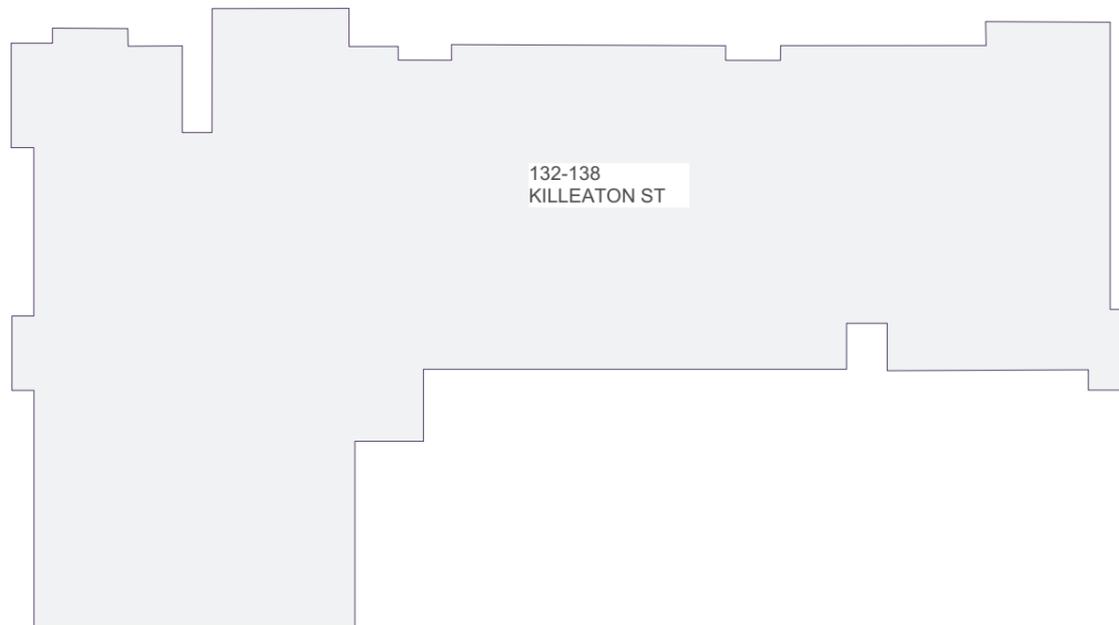


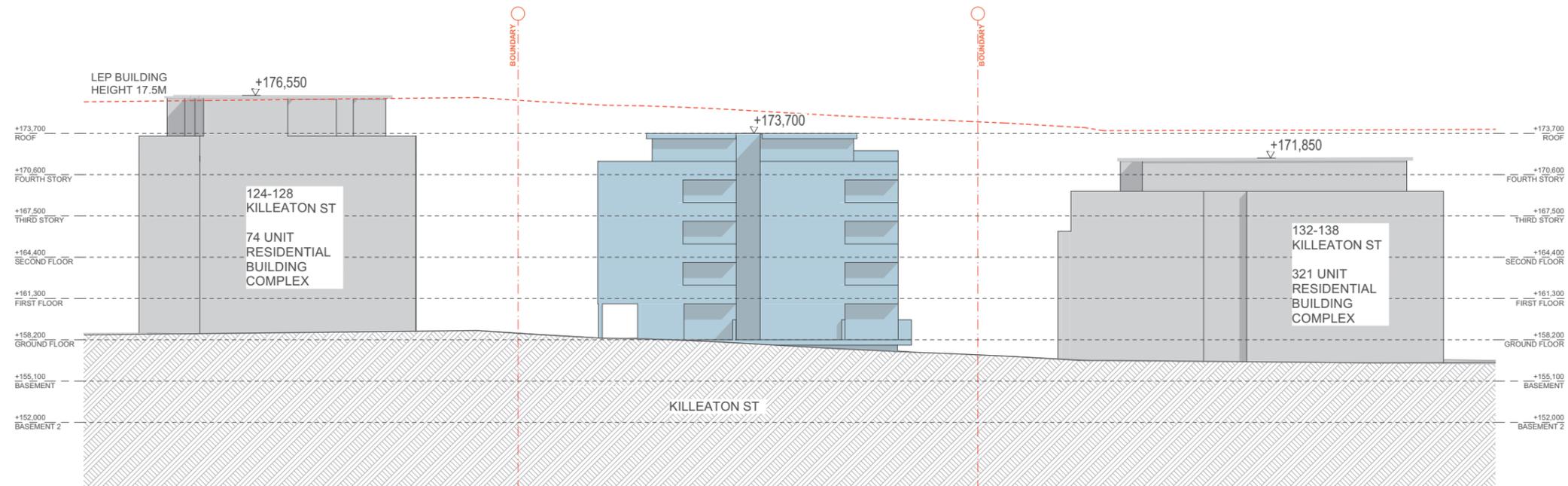
80,720MM | 9°15'



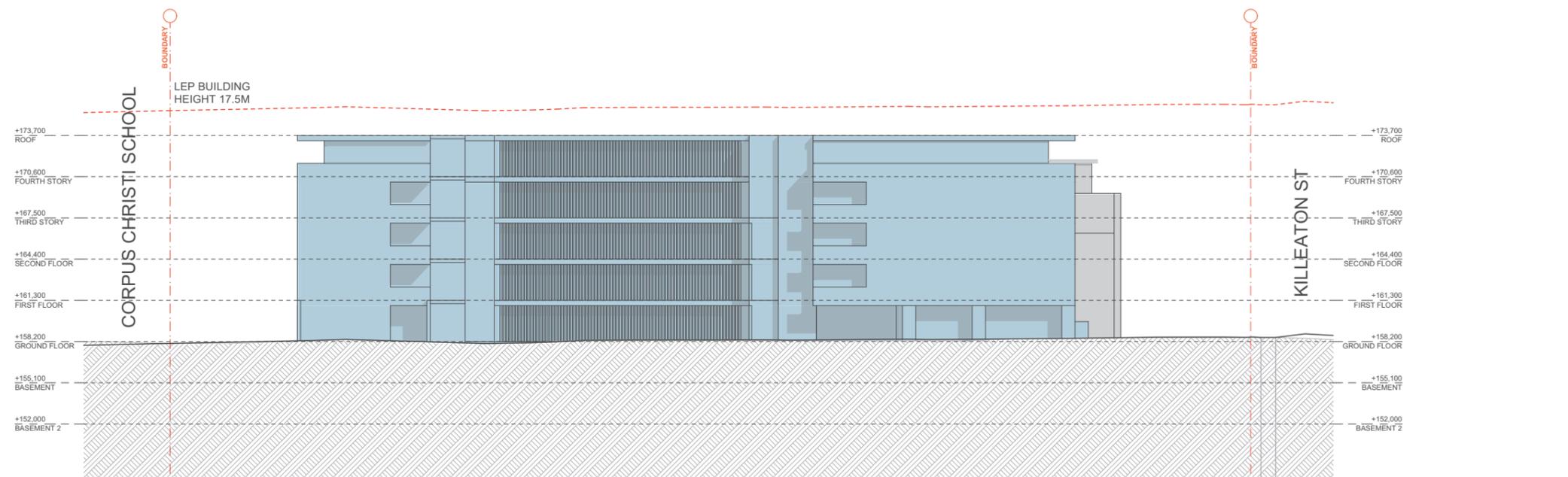
CORPUS CHRISTI  
SCHOOL

FOURTH STORY

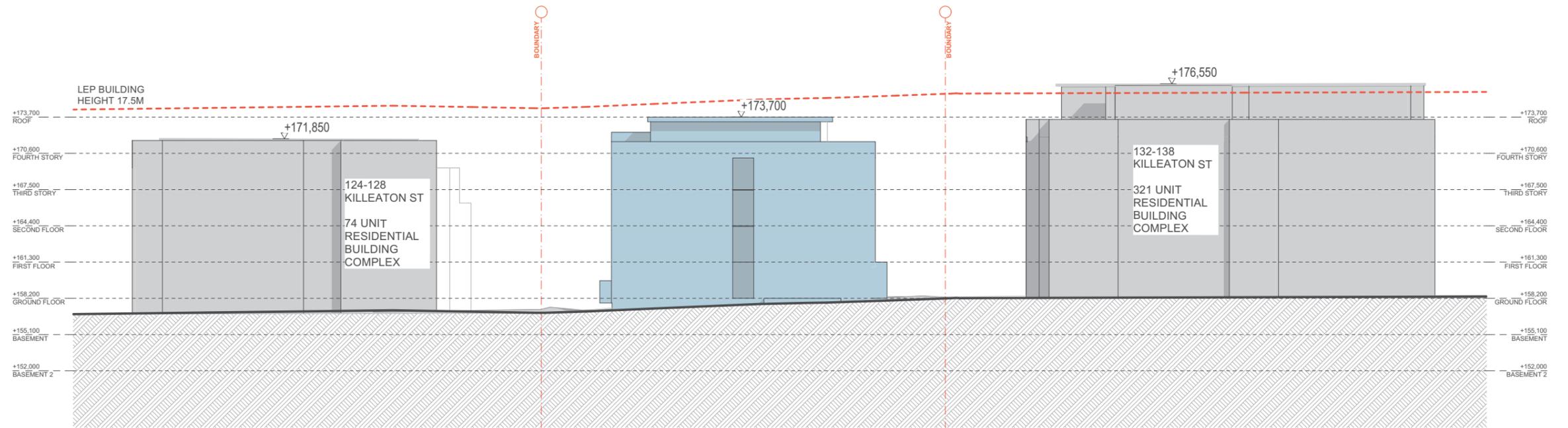




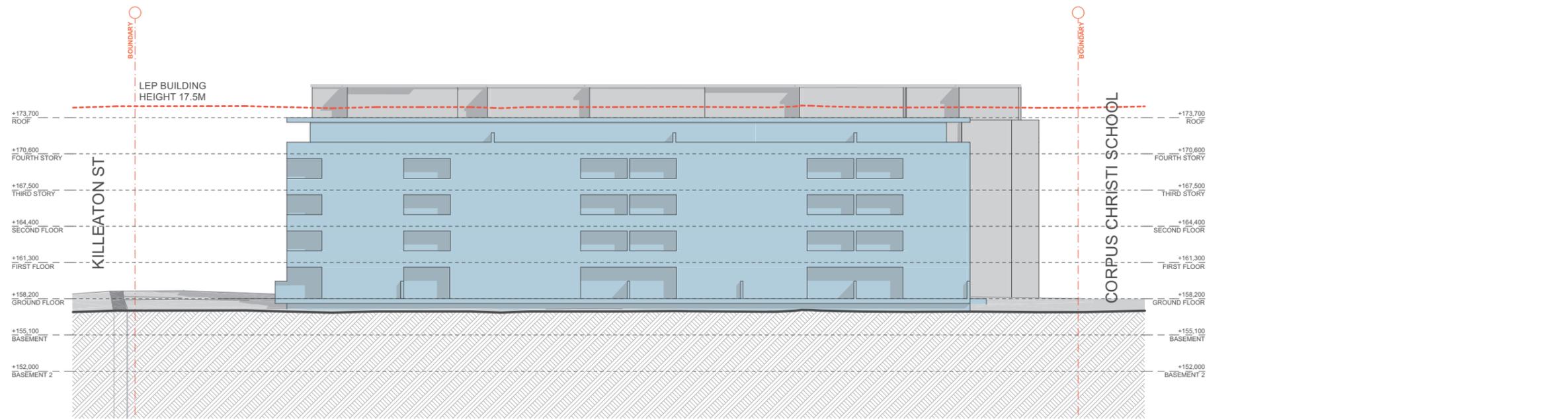
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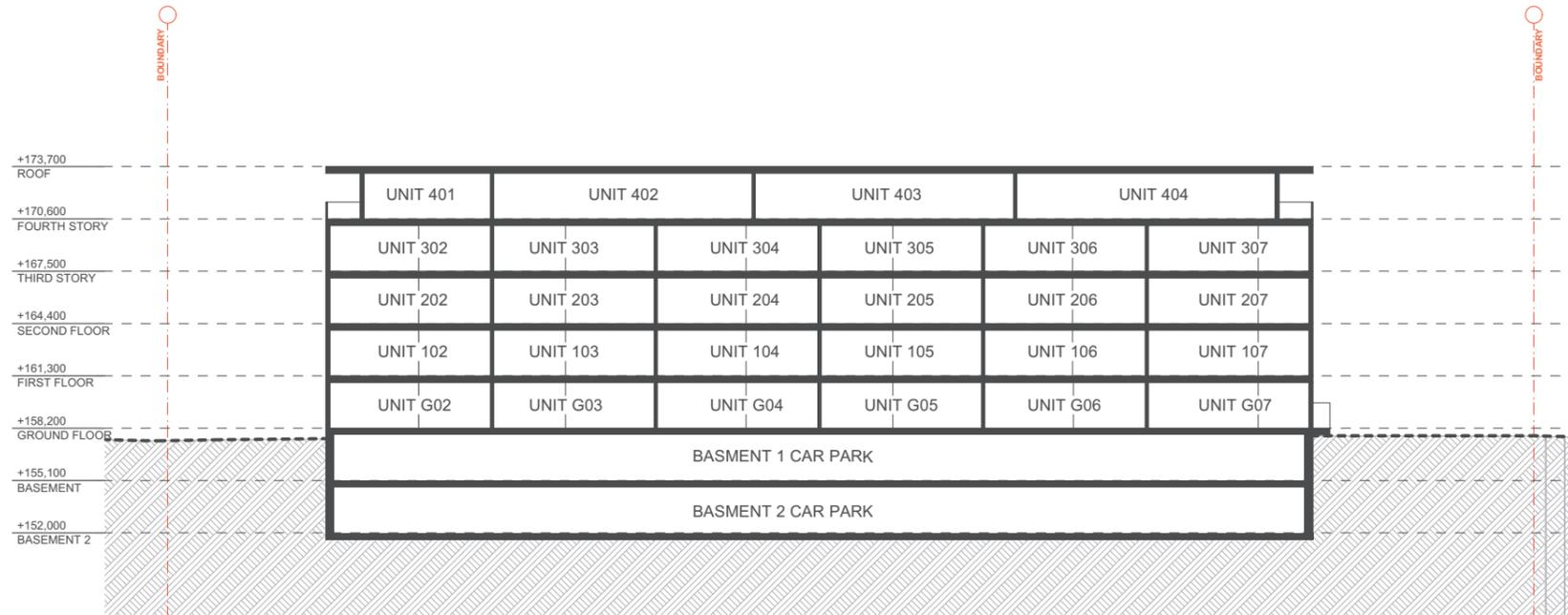
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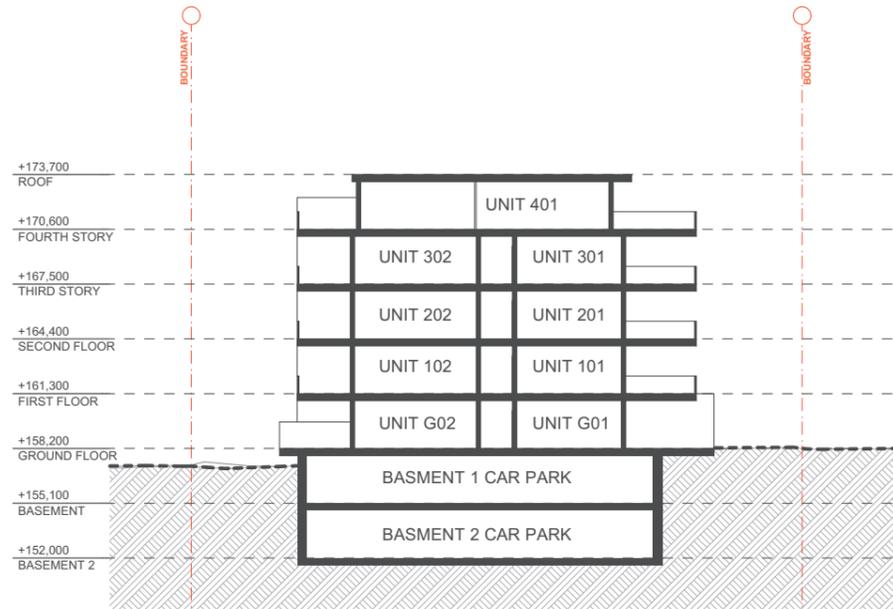
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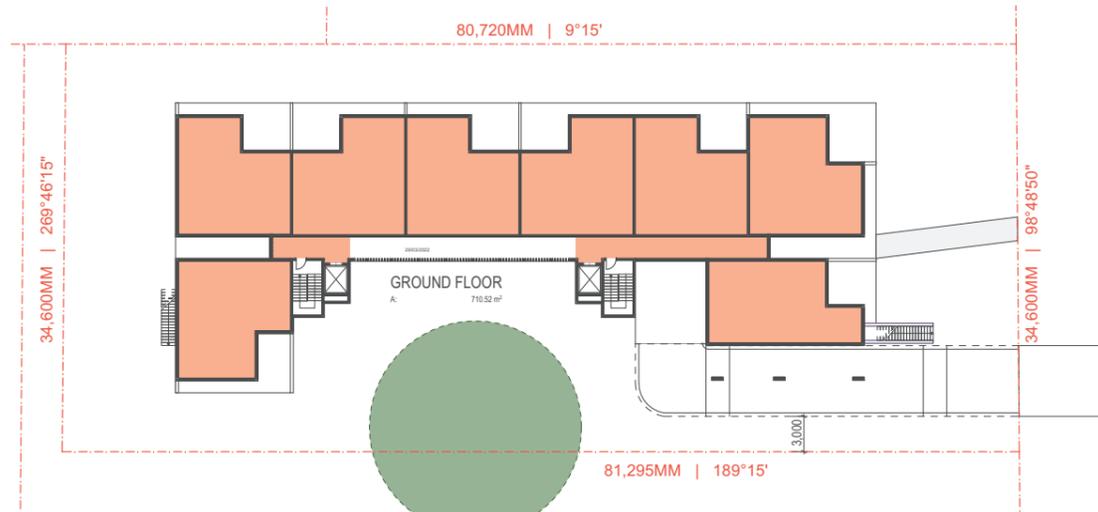
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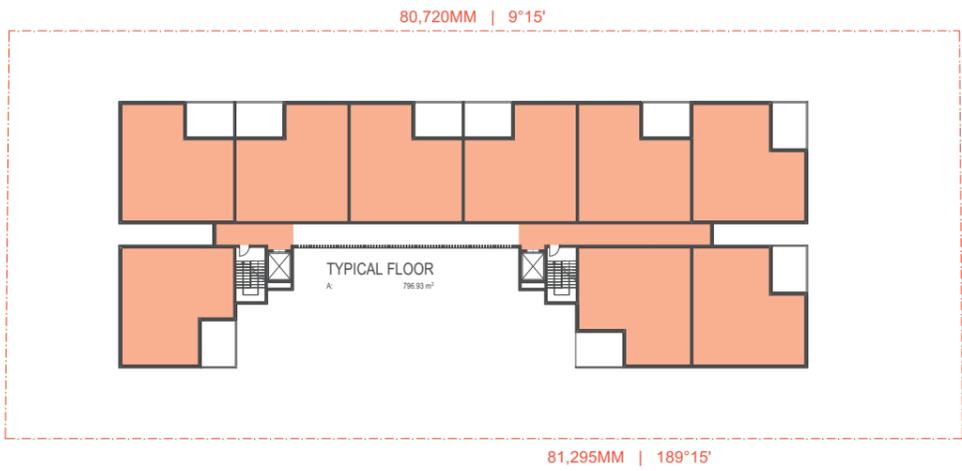
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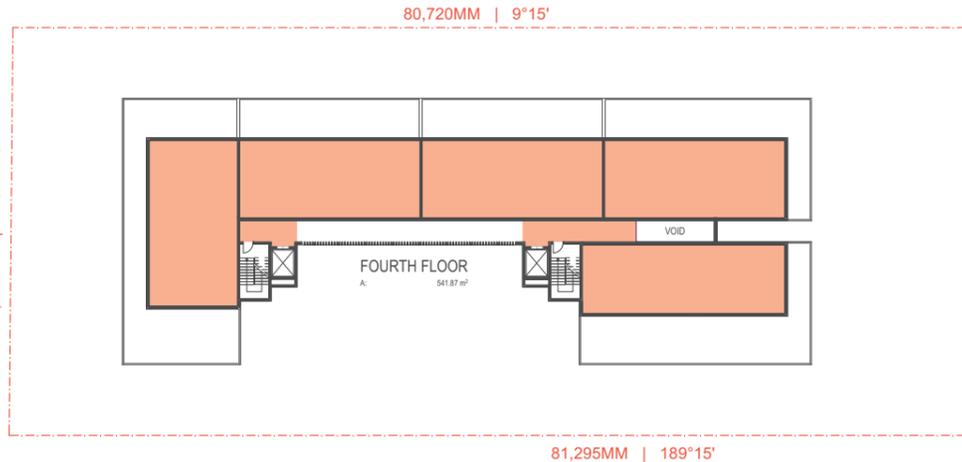
SECTION BB



TYPICAL FLOOR



TYPICAL FLOOR



FOURTH STORY

GROSS FLOOR AREAS	
	AREA (m2)
GROUND FLOOR	710.52
FIRST FLOOR	796.93
SECOND FLOOR	796.93
THIRD STORY	796.93
FOURTH STORY	541.87
	3,643.18 m <sup>2</sup>
	GFA AREAS MEASURED

FSR CALCULATIONS	
SITE AREA	2803m <sup>2</sup>
LEP ALLOWABLE FSR RATIO	1.3:1
LEP ALLOWABLE GFA AREA m <sup>2</sup>	3643.9m <sup>2</sup>
PROPOSED GFA m <sup>2</sup>	3643.18m <sup>2</sup>
PROPOSED FSR RATIO	1.3:1

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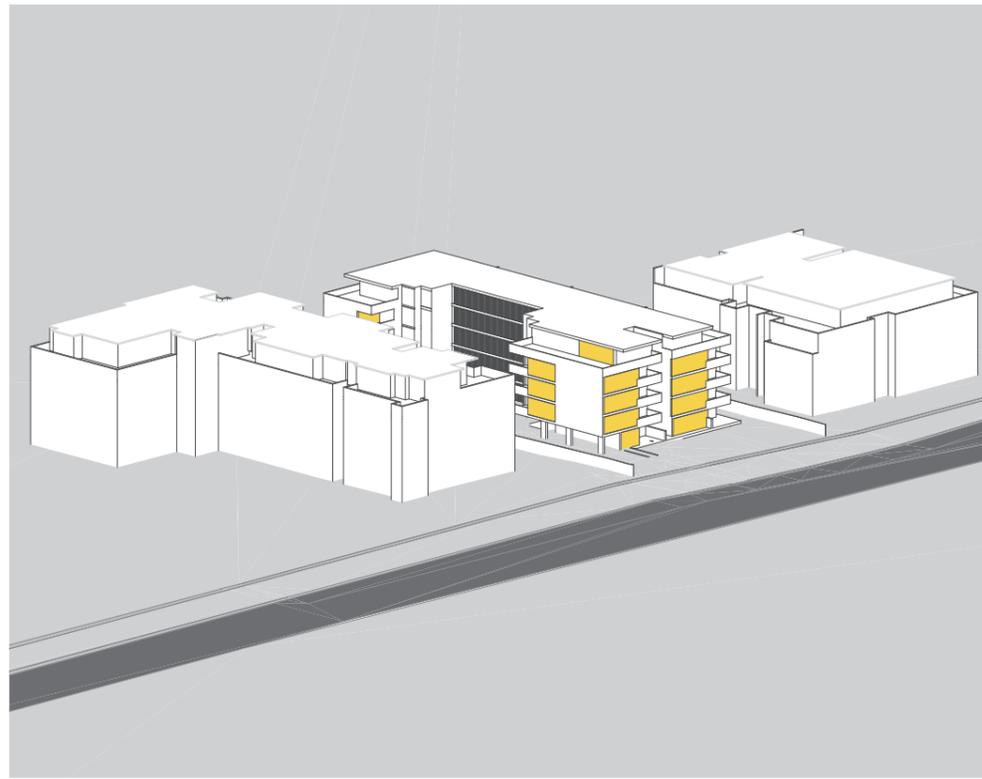
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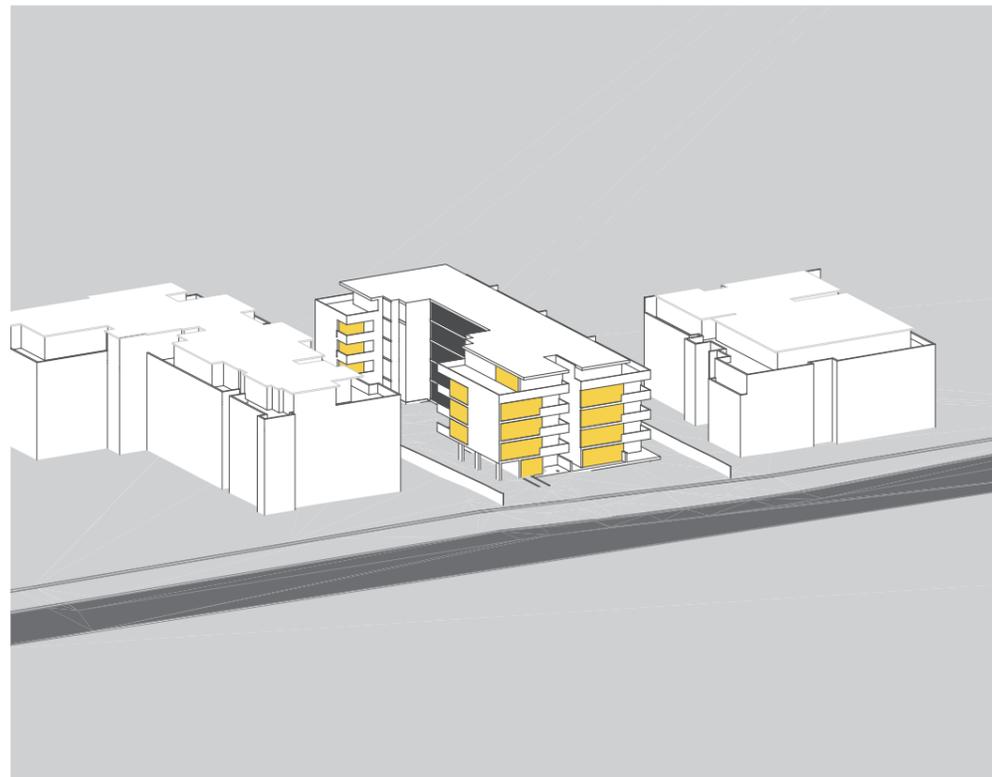
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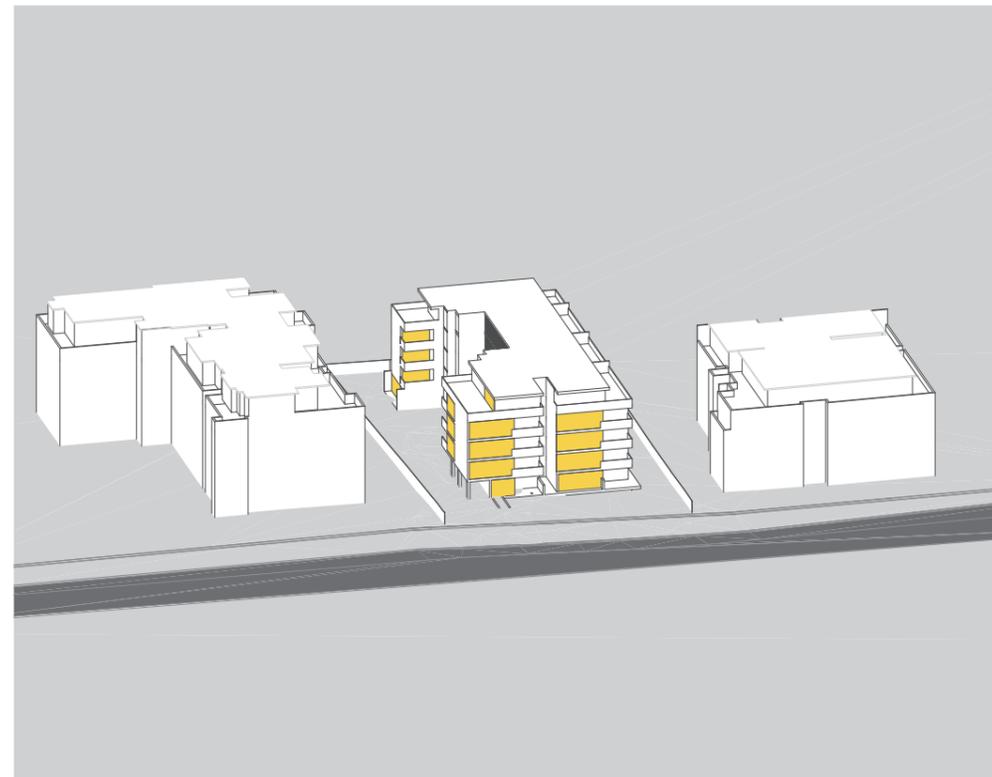
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CHECKED BY: B.C.			



9AM 21 JUNE



10AM 21 JUNE



11AM 21 JUNE

LIVING AREA



**mackenzie  
architects  
international**

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CONSTRUCTION COMPANY:

CONSTRUCTION COMPANY:

CLIENT & DEVELOPER:

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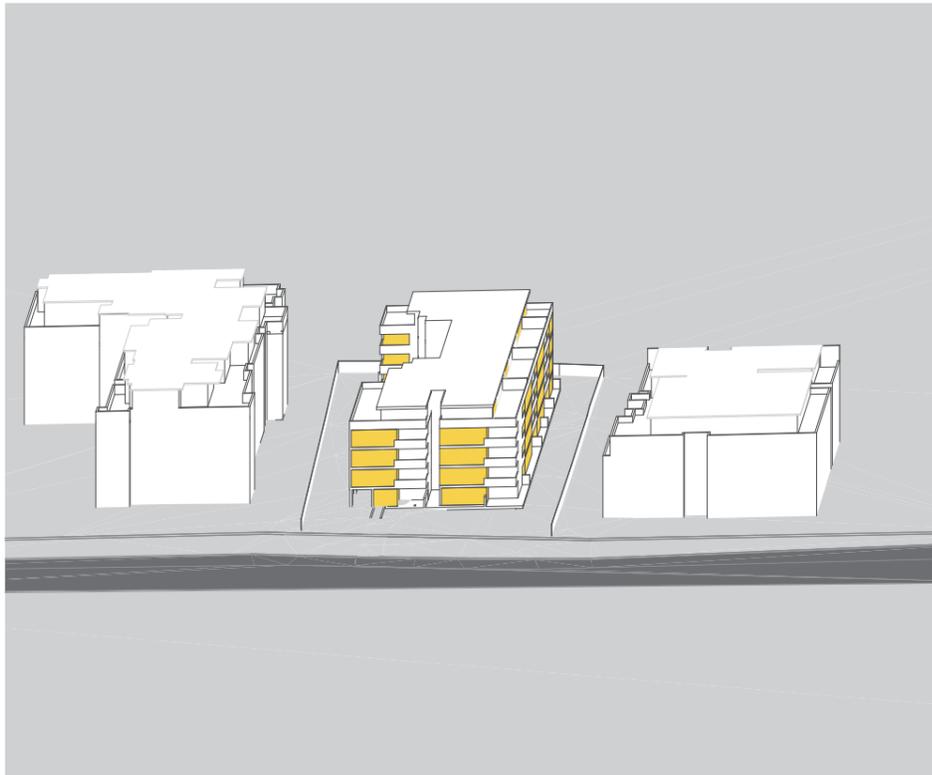
No.	REVISION	BY	DATE
A	PLANNING PROPOSAL APPLICATION	JE	29/03/2021

**MULTI RESIDENTIAL DEVELOPMENT**

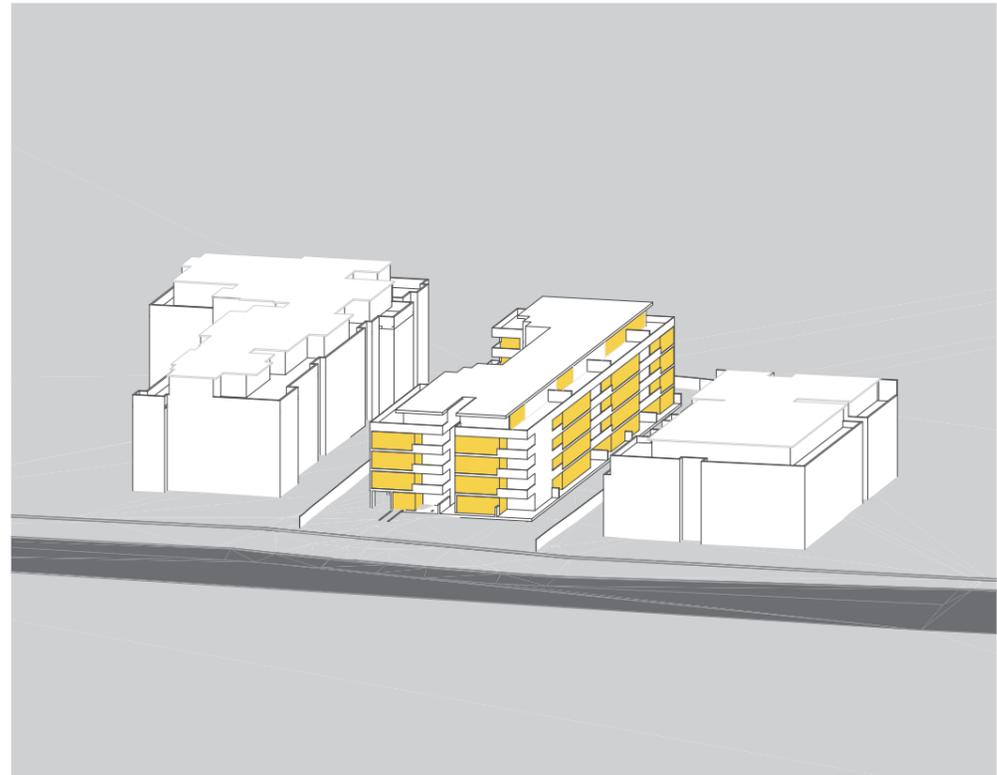
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PROJECT NO. 21/16 STATUS NOT FOR CONSTRUCTION

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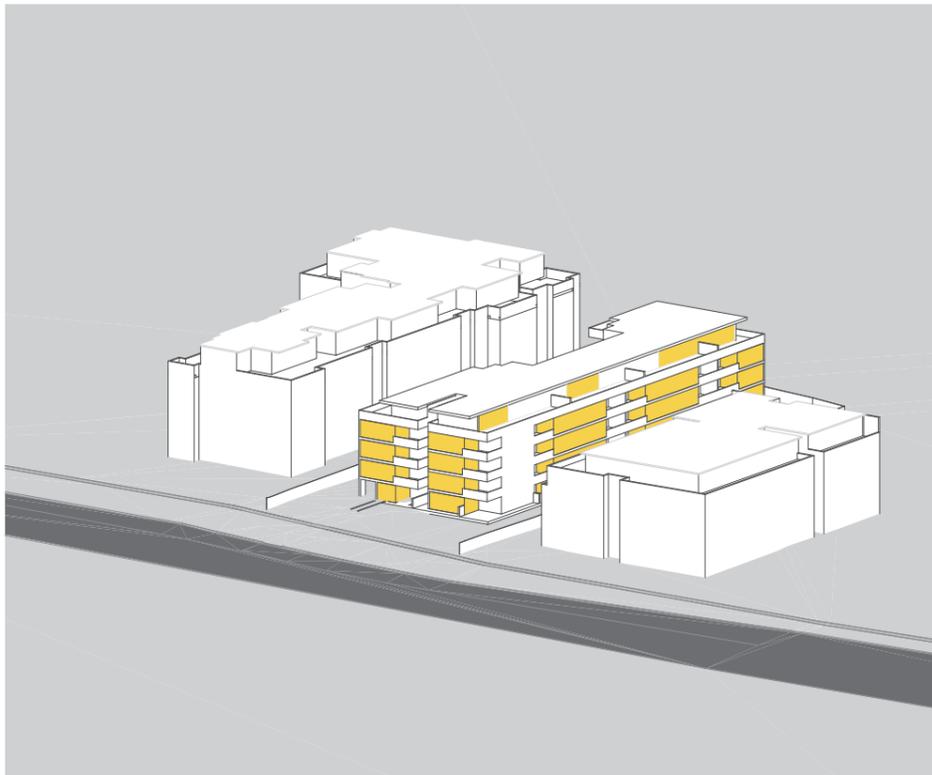
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CHECKED BY			
B.C.			



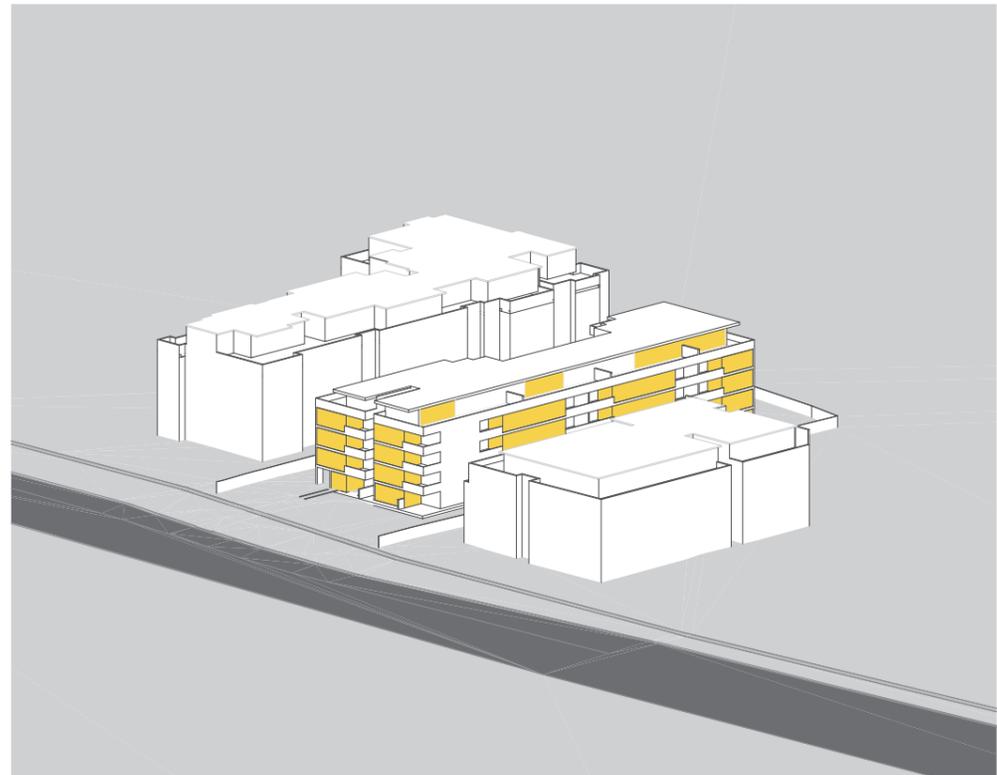
12PM 21 JUNE



1PM 21 JUNE



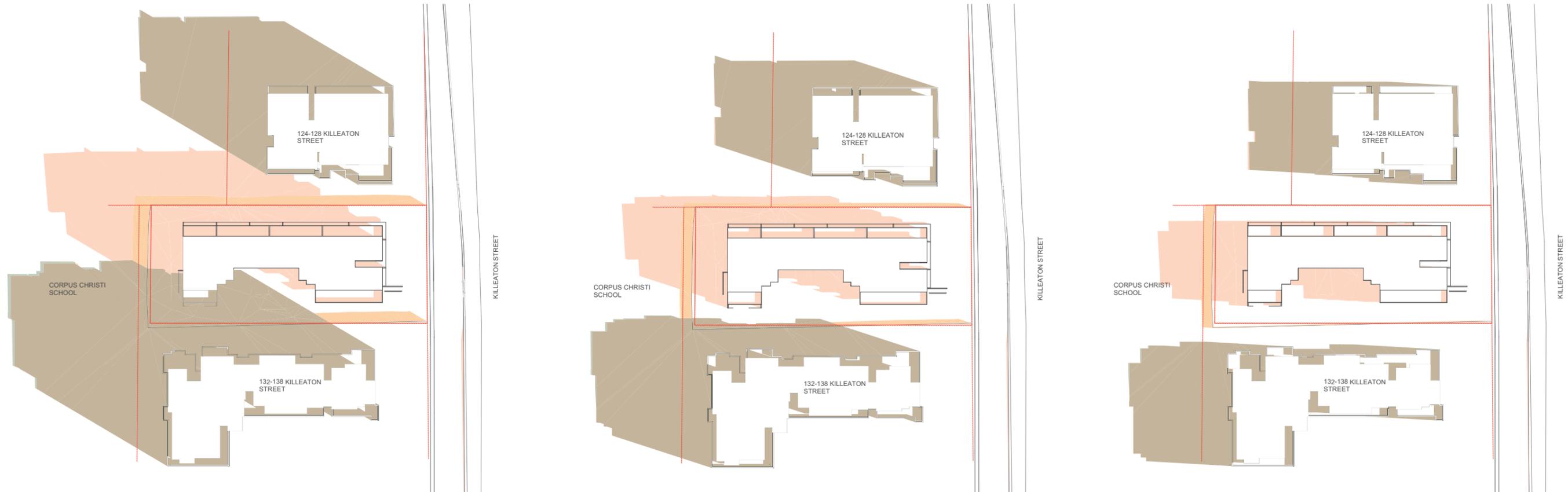
2PM 21 JUNE



3PM 21 JUNE

 LIVING AREA

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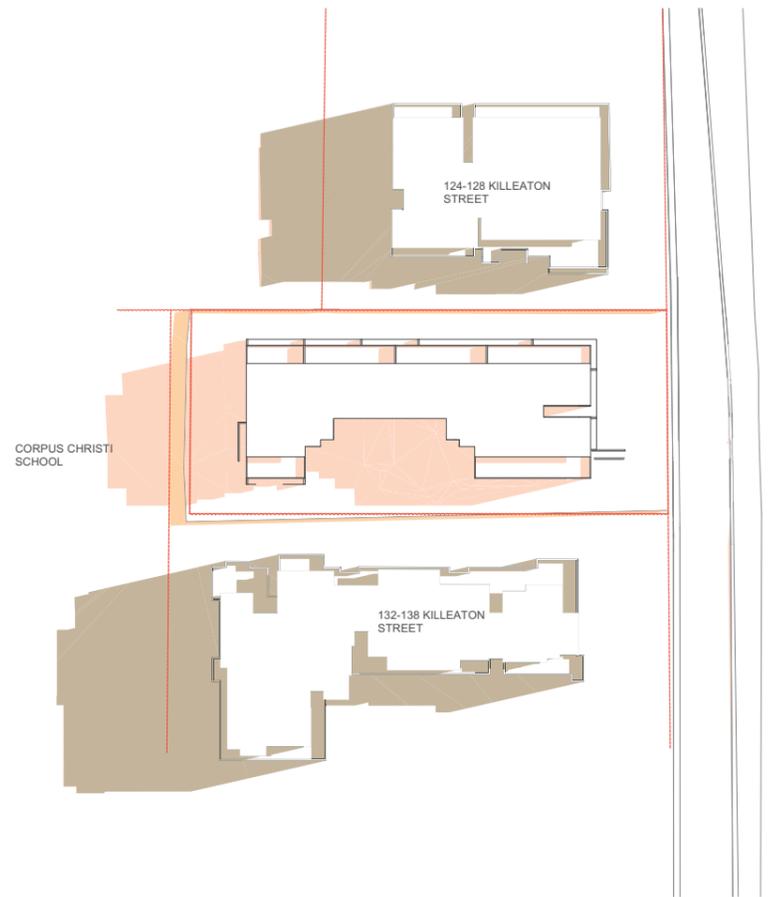


9AM 21 JUNE

10AM 21 JUNE

11AM 21 JUNE

- EXISTING FENCE
- NEIGHBOUR SHADOWS
- PROPOSED BUILDING SHADOWS

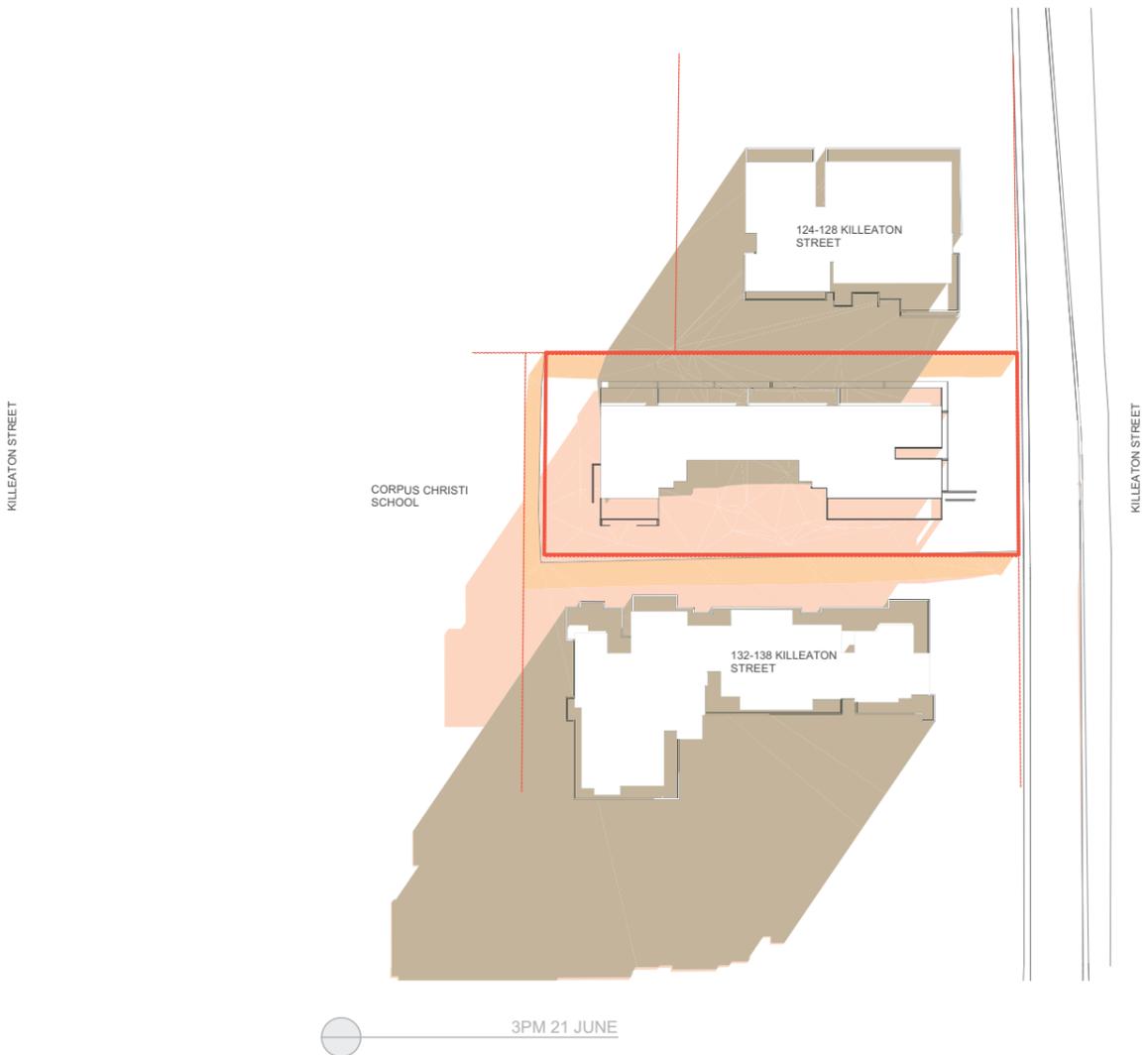
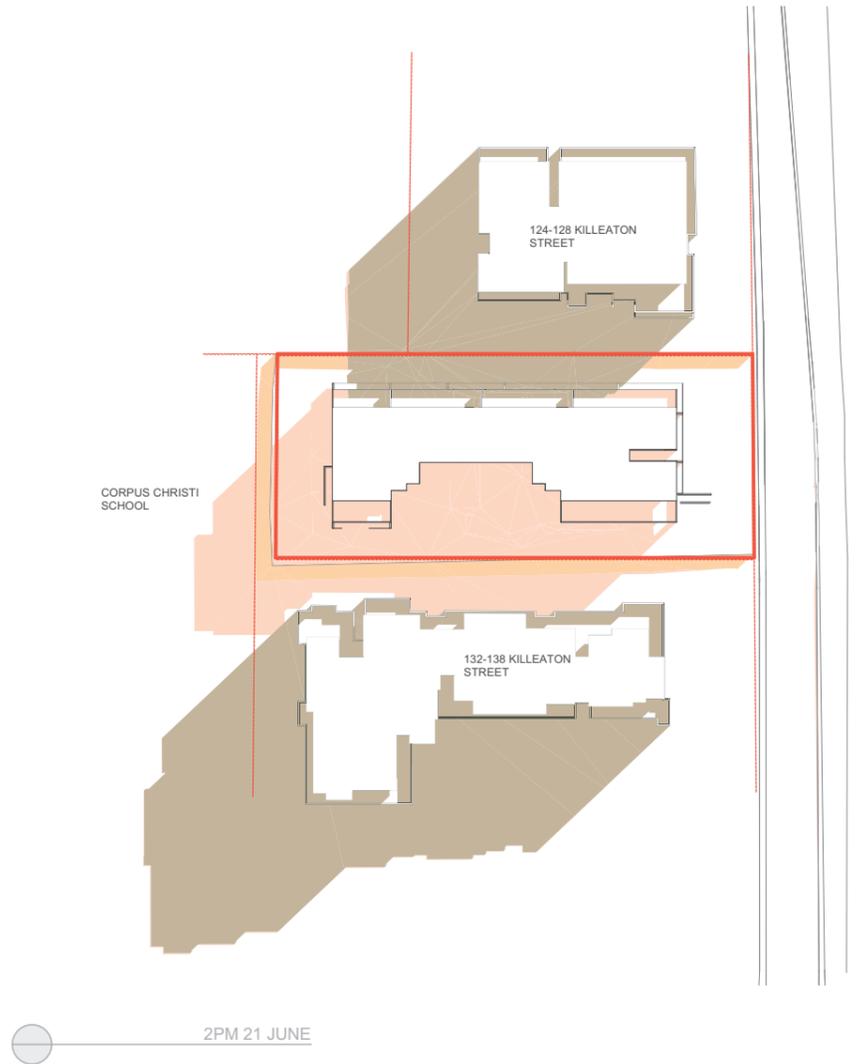


12PM 21 JUNE



1PM 21 JUNE

- EXISTING FENCE
- NEIGHBOUR SHADOWS
- PROPOSED BUILDING SHADOWS



- EXISTING FENCE
- NEIGHBOUR SHADOWS
- PROPOSED BUILDING SHADOWS