VARGA TRAFFIC PLANNING Pty Ltd

Transport, Traffic and Parking Consultants 🌔 🌔

ACN 071 762 537 ABN 88 071 762 537

27 February 2024 Ref 23555

Aland Developments

Attn: Mr Chris Tran Chris.tran@aland.com.au

Dear Chris,

# PROPOSED RESIDENTIAL DEVELOPMENT STAGE 2 – LOT 101 DP1267563 SOMME AVENUE, EDMONDSON PARK TRAFFIC & PARKING ASSESSMENT REPORT

# Introduction

This Traffic and Parking Assessment Report has been prepared to accompany a Development Application to Liverpool City Council for a residential development proposal to be located at the abovementioned location.

In September 2022, the Sydney Western City Planning Panel approved DA-1320/2021, involving the Stage 2, two lot Torrens subdivision and construction of three residential flat buildings ranging from three to six-storeys comprising 137 apartments and basement car parking.

This application therefore involves the *addition* of a new 'in-fill affordable housing' component, to the previously approved residential development, resulting in an additional 41 apartments.

# Site

The subject site is located on the western side of Soldiers Parade/Bernera Road, extending through to Somme Avenue and constitutes part of a larger site which has been subdivided into 3 allotments. The Central Lot (Stage 1) was approved for the construction of 3 x new residential apartment buildings which has since been completed, with the remainder Stage 2 site currently *vacant* of structures, as indicated in the aerial image reproduced below.



Suite 6, 20 Young Street, Neutral Bay NSW 2089 - PO Box 1868, Neutral Bay NSW 2089 Ph: 9904 3224

# **Approved Development**

In September 2022, the *Sydney Western City Planning Panel* approved DA-1320/2021 on the Stage 2 site, involving the two lot Torrens subdivision and construction of three residential flat buildings ranging from three to six-storeys, with basement car parking.

The approval included the *deletion* of the ILP street located within the northern portion of the site, thereby rationalising the number of intersections in the vicinity of the site. The remaining ILP roads located throughout the Stage 2 site was to be designed and constructed in accordance with the *Edmondson Park Precinct* Indicative Layout Plan.

A total of 137 residential apartments were approved across the 3 new buildings as part of DA-1320/2021, as follows:

<b>Previously Approved</b>	Northern		Southern	
Stage 2	Bloc	:k	Block	
Unit Mix	Building A	Building B	Building C	TOTAL
1 bedroom dwelling	8	13	17	38
2 bedroom dwelling	10	30	48	88
3 bedroom dwelling	2	3	6	11
TOTAL UNITS	20	46	71	137

Off-street parking in the DA-1320/2021 scheme was approved for a total of 241 cars across the two lots, comprising 204 residential spaces, 35 visitor spaces (including a shared removalist/courier space for each respective block) and 2 dedicated car wash bays, in accordance with Council's *DCP* requirements.

A new local road was approved to be constructed through the Southern Lot to serve these future allotments and will connect onto Bernera Road and Passendale Road. Passendale Road was also to be completed to meet this new road as part of the approved works.

Vehicular access to the Northern Lot's basement parking area was approved via a new entry/exit driveway located at the northern end of the site's Passendale Road site frontage. Vehicular access to the Southern Lot's basement parking area was approved via a new entry/exit driveway located midway along the future east-west road through the site.

Loading/servicing for the approved development was to be undertaken by a variety of light commercial vehicles including trucks up to and including 9.5m long rigid trucks. Dedicated loading areas is to be provided on the western side of the extended Passendale Road as well as the southern side of the 'Future Street', via kerbside collection along Buildings B and C. The loading areas are to service Buildings A, B and C.

A copy of the stamped plans for the DA-1320/2021 scheme is reproduced in Appendix A.

# **Proposed Development**

The proposed development involves the *addition* of a new 'in-fill affordable housing' component, to the approved new residential apartment buildings on the 'Northern' and 'Southern' Lots of the site, resulting in an overall additional 41 apartments across the Stage 2 site.

The in-fill affordable housing is to be provided entirely within Building A, comprising a total of 27 *in-fill affordable units* and will provide opportunities for the delivery of new affordable housing in well-located areas to meet the needs of a wide range of households on very low to moderate incomes.

A total of 178 residential apartments are proposed across the 3 buildings, as follows:

Proposed new	Nor	thern	Southern	
Stage 2 DA	Bl	ock	Block	
Unit Mix	Building A	<b>Building B</b>	Building C	TOTAL
1 bedroom dwelling	11	19	20	50
2 bedroom dwelling	13	34	68	115
3 bedroom dwelling	3	8	2	13
TOTAL UNITS	27	61	90	178

Off-street parking for the proposed development is again to be provided for a total of 239 cars across the two lots, comprising 192 residential spaces, 45 visitor spaces (including a shared removalist/courier space for each respective block), and 2 dedicated car wash bays, which remains generally *unchanged* when compared to the approved DA-1320/2021 parking layout, in accordance with Council's *DCP* and *SEPP* (*Housing*) 2021 requirements.

The previously approved basement footprint, including the approved vehicular access and loading arrangements also remain *unchanged*, consistent with the DA-1320/2021 approved scheme on the site.

Plans of the proposed development have been prepared by *Stanisic Architects* is reproduced in **Appendix B**.

# **Existing Alternate Transport & Essential Services**

The existing public transport services available in the vicinity of the site are illustrated below.

The subject site is conveniently located within 500m walking distance north of the Edmondson Park Railway Station, which is served by the T2 Inner West & Leppington Line as well as the T5 C

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Park Railway Station. These bus services include the 859, 868 and 869, with weekday services every 30 minutes (every 15 to 20 minutes during the morning and afternoon peak) and weekend services every 30 minutes.

The site also lies within close proximity to Edmondson Park Town Centre, which includes a wide range of essential shops and services such as a supermarket, restaurants, specialty shops, post office, and banks.

The site is therefore considered to be well served by public transport services.

### Traffic Assessment

The traffic implications of development proposals primarily concern the effects of the *additional* traffic flows generated as a result of a development proposal and its impact on the operational performance of the adjacent road networks, particularly during the weekday morning and afternoon peak periods.

An indication of the traffic generation potential of the development proposal is provided by reference to the Roads and Maritime Services publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002)* and the updated traffic generation rates in the RMS *Technical Direction* (TDT 2013/04a) document.

The TDT 2013/04a document specifies that it replaces those sections of the RMS *Guidelines* indicated, and must be followed when RMS is undertaken trip generation and/or parking demand assessments.

#### **High Density Residential Flat Dwellings**

AM: 0.19 peak hour vehicle trips unit

PM: 0.15 peak hour vehicle trips unit

The RMS *Guidelines* also make the following observation in respect of high density residential flat buildings:

#### Definition

A *high density residential flat building* refers to a building containing 20 or more dwellings. This does not include aged or disabled persons housing. *High density residential flat buildings* are usually more than 5 levels, have basement level car parking and are located in close proximity to public transport services. The building may contain a component of commercial use.

#### Factors

The above rates include visitors, staff, service/delivery and on-street movements such as taxis and pick-up/set-down activities.

Application of the above traffic generation rates to the 178 residential apartments outlined in the development proposal yields a traffic generation potential of 34 vph during the weekday *morning* peak period and 27 vph during the weekday *afternoon* peak period.

That projected future level of traffic generation potential should however, be offset or *discounted* by the volume of traffic which could reasonably be expected to be generated by the approved DA-1320/2021 scheme on the site, in order to determine the *nett increase (or decrease)* in traffic generation potential expected to occur as a consequence of the new development application.

Application of the above traffic generation rates to the *approved* 137 dwellings within the DA-1320/2021 scheme yields a traffic generation potential of approximately 26 vph during the weekday *morning* peak period and 21 vph during the weekday *afternoon* peak period.

Accordingly, it is likely that the proposed development will result in a *nett increase* of 6-8 additional vehicle trips per hour (vph) during the weekday peak periods, as set out on the following page:

#### Projected Nett Increase in Peak Hour Traffic Generation Potential of the site as a consequence of the new Development Proposal

	AM	PM
Projected Future Traffic Generation Potential:	33.8 vph	26.7 vph
Less Previously Approved Traffic Generation Potential:	-26.0 vph	-20.6 vph
NETT INCREASE IN TRAFFIC GENERATION POTENTIAL:	7.8 vph	6.1 vph

In this regard, it is noted that the target demographic for the proposed *in-fill affordable housing* component is expected to be students and young professionals who traditionally have a low car ownership rate, particularly those that prefer living close to town centres with excellent public transport services, such as the subject site.

In any event, that level of traffic activity as a consequence of the development proposal will clearly not have any unacceptable traffic implications in terms of road network capacity.

#### **Off-street Car Parking Provisions**

The off-street parking requirements applicable to the development proposal are specified in the *State Environmental Planning Policy (Housing) 2021, Chapter 2, Part 2 – Development for Affordable Housing* document in the following terms:

#### Division 1 In-fill affordable housing

#### 19 Non-discretionary development standards– the Act, s 4.15

- (1) The object of this section is to identify development standards for particular matters relating to development for the purposes of in-fill affordable housing that, if complied with, prevent the consent authority from requiring more onerous standards for the matters.
- (2) The following are non-discretionary development standards in relation to development to which this Division applies
  - (e) The following number of parking spaces for dwellings used for affordable housing
    - (i) for each dwelling containing 1 bedroom at least 0.4 parking spaces, or
    - (ii) for each dwelling containing 2 bedrooms at least 0.5 parking space, or
    - (iii) for each dwelling containing at least 3 bedrooms at least 1 parking space.
  - (f) The following number of parking spaces for dwellings not used for affordable housing
    - (i) for each dwelling containing 1 bedroom at least 0.5 parking spaces, or
    - (ii) for each dwelling containing 2 bedrooms at least 1 parking space, or
    - (iii) for each dwelling containing at least 3 bedrooms at least 1.5 parking spaces.

Application of the above *SEPP* parking requirements to the 178 dwellings outlined in the development proposal (27 x affordable and 151 x standard), yields an off-street car parking requirement of 150 parking spaces, as set out below:

CUMULATIVE PARKING REQUIREMENTS		
Affordable Dwellings	Required	
1 bed (11 apartments):	4.4 spaces	
2 bed (13 apartments):	6.5 spaces	
3 bed (3 apartments):	3.0 spaces	
Visitors:	n/a	
Total (27 apartments):	13.9 spaces	
Standard Dwellings	Required	
1 bed (39 apartments):	19.5 spaces	
2 bed (102 apartments):	102.0 spaces	
3 bed (10 apartments):	15.0 spaces	
Visitors:	n/a	
Total (151 apartments):	136.5 spaces	
TOTAL PARKING REQUIRED:	150.4 spaces	

By way of comparison however, the off-street parking rate applicable to the 'standard' residential component of the development proposal are also specified in the *Liverpool DCP 2008, Part 1: General Controls for all development* document in the following terms:

<b>Residential Development</b>	
1 bedroom dwelling:	1 space per dwelling
2 bedroom dwelling:	1.5 spaces per dwelling
3 bedroom dwelling:	2 spaces per dwelling
Visitors:	1 space per 4 dwellings

Application of the above *DCP* parking rates to the 151 x 'standard' residential apartments outlined in the development proposal yields an off-street car parking requirement of 250 spaces, comprising 212 residential spaces and 38 visitor spaces.

In this regard, it should be noted that the *SEPP* does not require off-street parking to be provided for visitors. Notwithstanding, to ensure off-street parking is available for *all* visitors of the 178 residential dwellings outlined in the development proposal, the above *DCP* rate of *1 visitor space per 4 dwellings* has been adopted.

Accordingly, the off-street parking requirement applicable to the 178 apartments outlined in the proposed development is between 150 spaces and 270 spaces as set out below:

Proposed Development	Lower-limit (minimum)	Upper-limit
In-fill Affordable Residential (27 Apartments):	13.9 spaces (SEPP)	13.9 spaces (SEPP)
Standard Residential (151 Apartments):	136.5 spaces (SEPP)	212.0 spaces (DCP)
Visitors (178 Apartments):	n/a (SEPP)	44.5 spaces (DCP)
TOTAL:	150.4 spaces	270.4 spaces

The proposed development scheme makes provision for a total of 239 car parking spaces across the two lots, comprising 192 residential spaces, 45 visitor spaces (including a shared removalist/courier space for each respective block) and 2 dedicated car wash bays, thereby satisfying both *SEPP (Housing) 2021* and Council's *DCP* car parking requirements.

The geometric design layout of the proposed car parking facilities is near-identical to the approved DA-1320/2021 scheme which were designed to comply with the relevant requirements specified in the Standards Australia publications *AS2890.1:2004 & AS2890.6:2009* in respect of parking bay dimensions, driveway widths, ramp grades, aisle width and overhead clearance.

# Conclusion

In essence, the development proposal from a traffic and parking perspective involves the *addition* of a new 'in-fill affordable housing' component, to the previously approved residential development, resulting in an additional 41 apartments and a *reduction* of 2 car parking spaces.

In particular, the previously approved basement footprint, vehicular access and loading/servicing arrangements remain generally *unchanged*.

It is also noted that the proposed modified parking layout complies with the *SEPP (Housing)* 2021, Council's *DCP 2008* numerical requirements and *AS2890* design requirements. In the circumstances, it is concluded that the proposed development application will not result in any unacceptable traffic, parking, access or servicing implications.

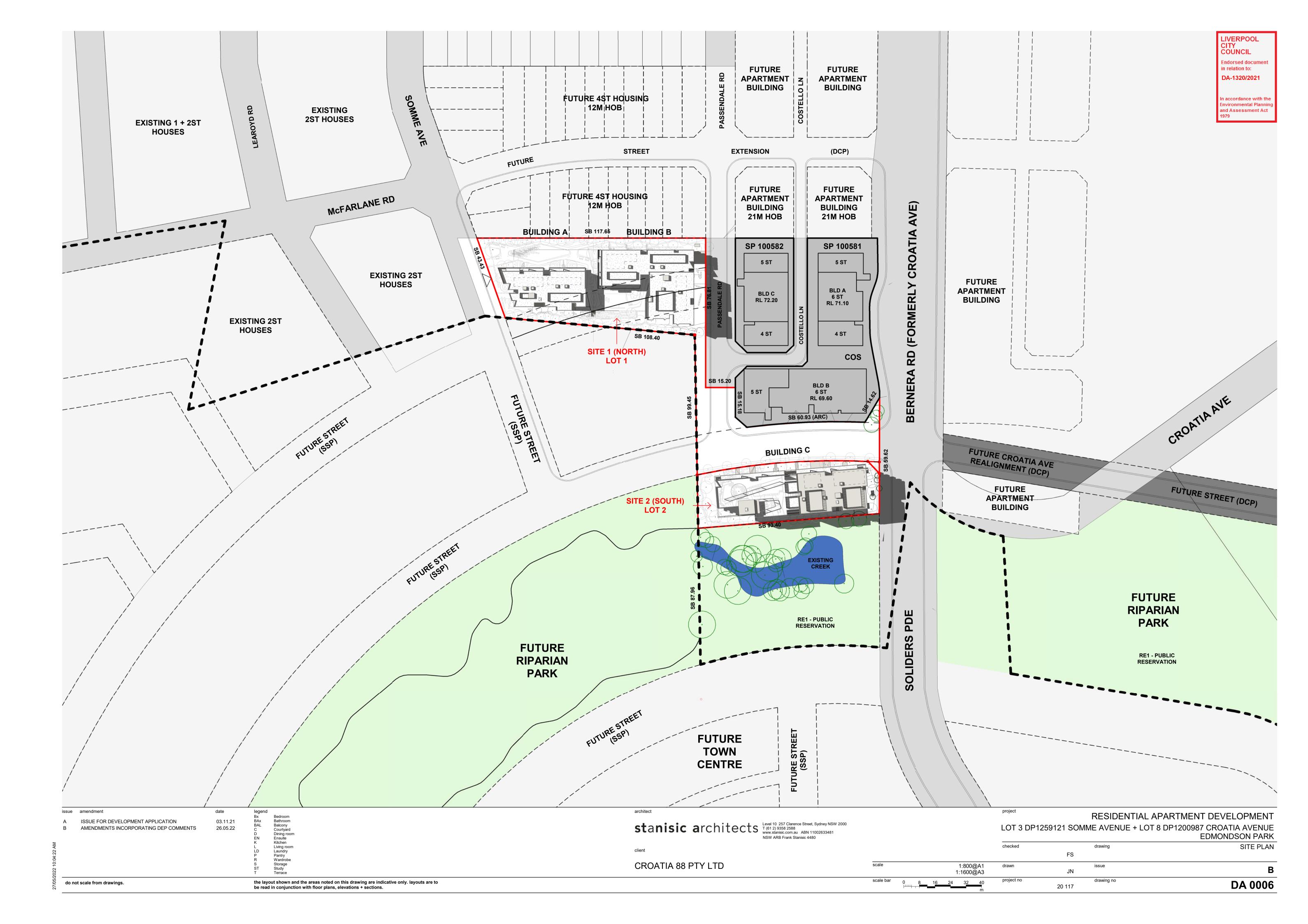
Yours sincerely



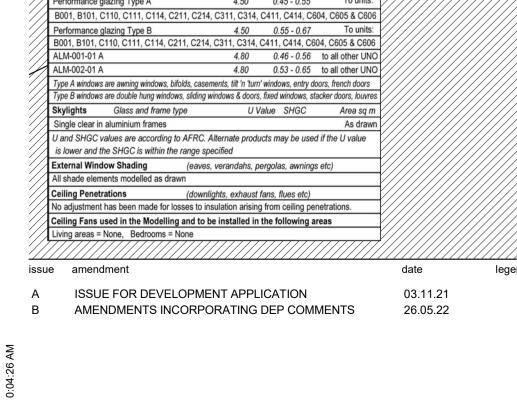
Donald Lee Senior Engineer B.Eng (Civil) Varga Traffic Planning Pty Ltd

# **APPENDIX** A

# APPROVED STAMPED ARCHITECTURAL PLANS DA 1320/2021



the layout shown and the areas noted on this drawing are indicative only. layouts are	to
be read in conjunction with floor plans, elevations + sections.	



BSA Reference: 17145 Ph: (02) 4962 3439

Added Insulation

Added Insulation

Added Insulation

Added Insulation

Added Insulation

R3.5 to ceilings adjacent to roof space and decks above

R1.0 to floors adjacent to carpark to units:

4.50 0.45 - 0.55

A107, B001, B002, B003, B101, C107, C110, C111 & C112 only

None

None

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External Wall Construction

35mm AAC Veneer Internal Wall Construction

Plasterboard on studs

Ceiling Construction Plasterboard

Concrete

Concrete

Roof Construction Colour

Performance glazing Type A

do not scale from drawings.

Floor Construction Covering

Any

As drawn

180mm Concrete + Plasterboard

Building Sustainability Assessments

enquiries@buildingsustainability.net.au www. buildingsustainability.net.au

Important Note The following specification was used to achieve the thermal performance values indicated on the Assessor Certificate and takes precedence over any other specification. If different construction elements are applied then the Assessor Certificate is no longer valid.

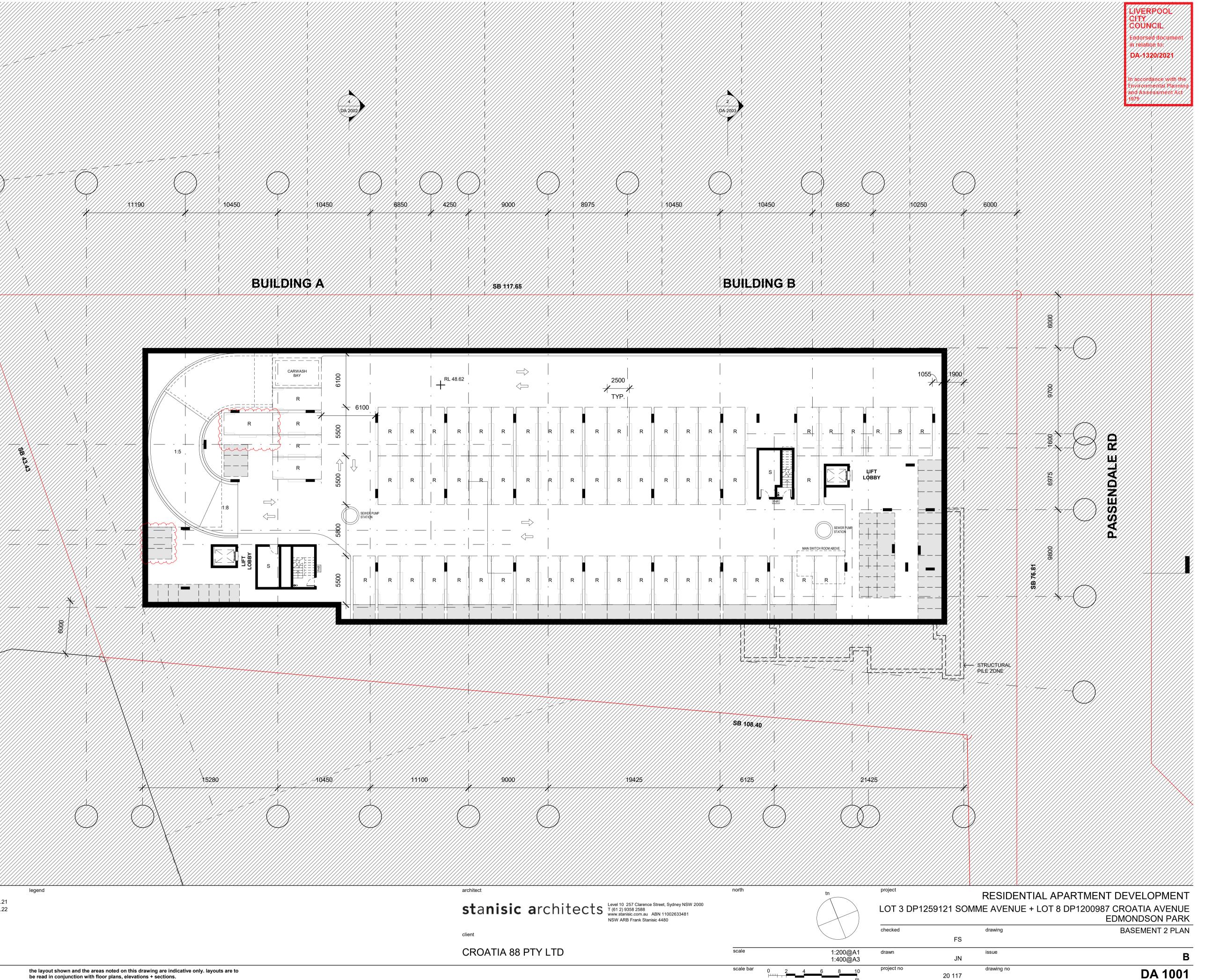
Thermal Performance Specifications (does not apply to garage)

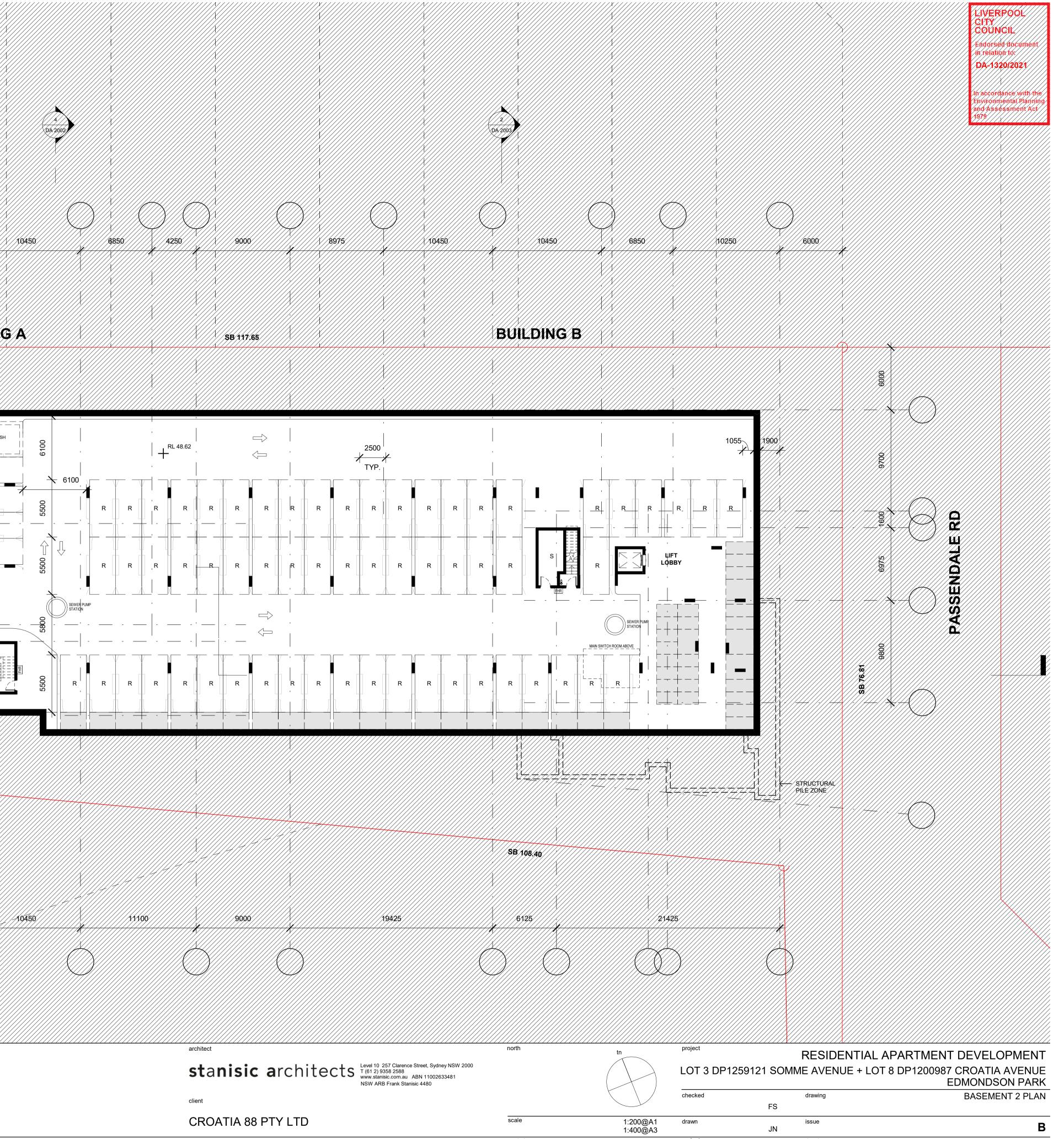
Plasterboard + studs + 35mm AAC block + studs + Plasterboard (party walls) None

 Windows
 Glass and frame type
 U Value
 SHGC Range
 Area sq m

 Performance glazing Type A
 4.50
 0.45 - 0.55
 To units:

November 2021





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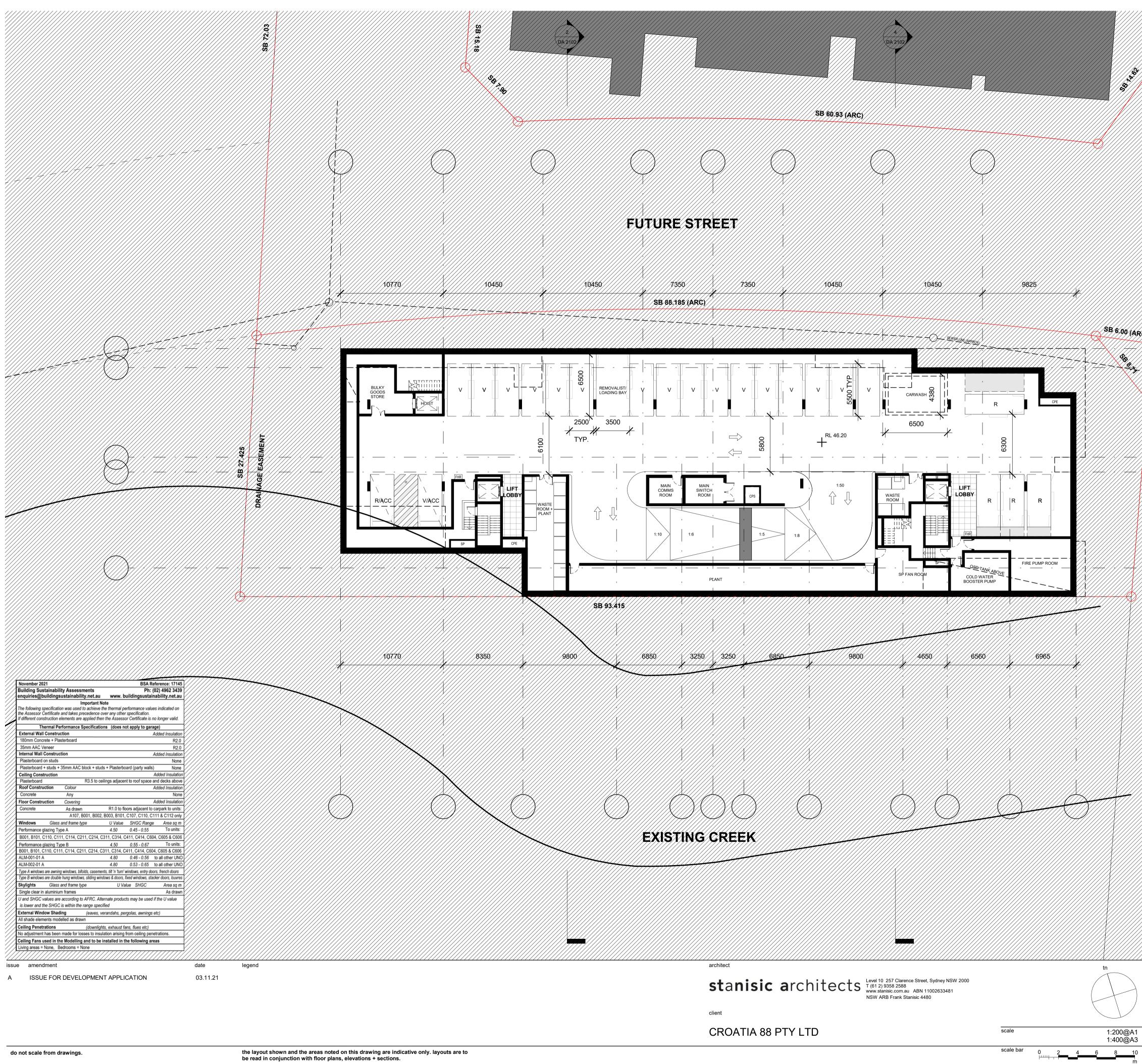


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<b>st</b> a <b>nisic a</b> rchitects	Level 10 257 Clarence Street, Sydney NSW 2000 T (61 2) 9358 2588 www.stanisic.com.au ABN 11002633481 NSW ARB Frank Stanisic 4480			
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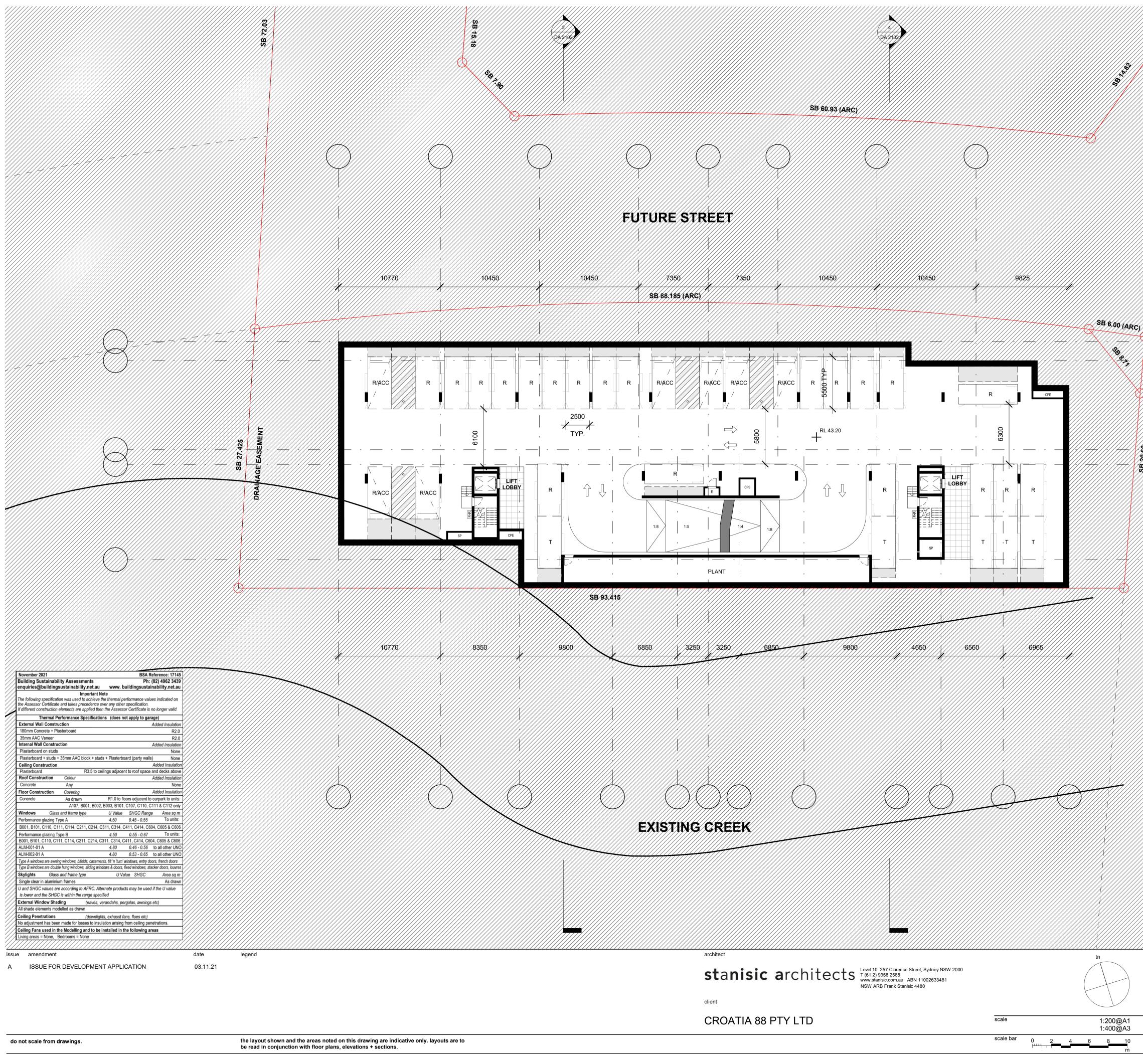


stanisic	<b>a</b> rchitects	Level 10 257 Clarence Street, Sydney NSW 2000 T (61 2) 9358 2588 www.stanisic.com.au ABN 11002633481 NSW ARB Frank Stanisic 4480



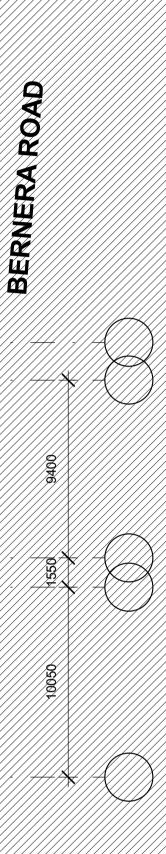
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	BERNERA ROAD	

checked		drawing	BASEMENT 1 PLAN - BLD C
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project no	00.447	drawing no	DA 1104
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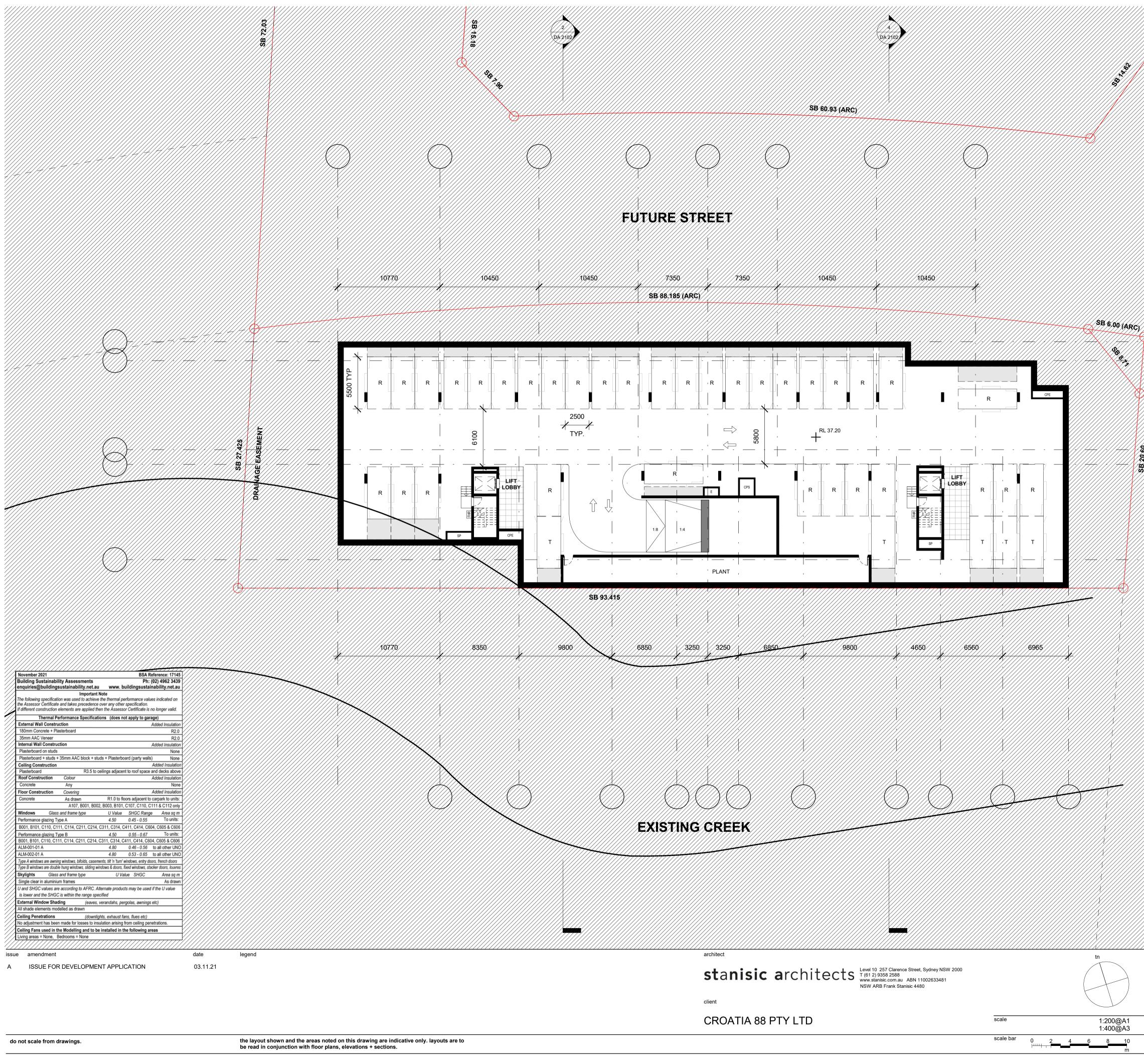
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04-Nov-21	

# relation to: DA-1320/2021



project RESIDENTIAL APARTMENT DEVELOPMENT LOT 3 DP1259121 SOMME AVENUE + LOT 8 DP1200987 CROATIA AVENUE EDMONDSON PARK

BASEMENT 2 PLAN - BLD C	drawing	checked drawing	
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DA 1103	drawing no	20 117	project no



ÓÚNÉIL relation to: DA-1320/2021



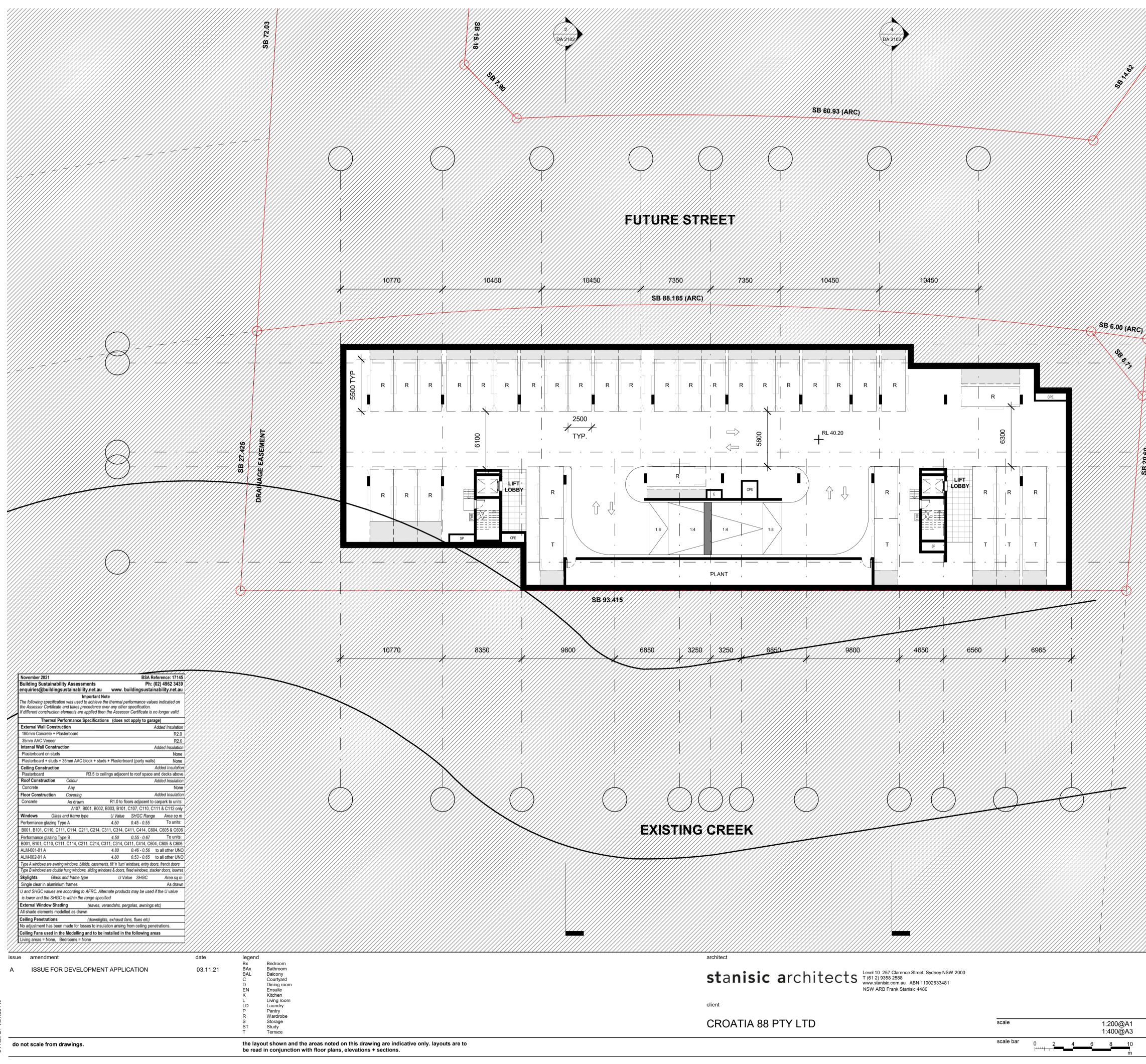






project RESIDENTIAL APARTMENT DEVELOPMENT LOT 3 DP1259121 SOMME AVENUE + LOT 8 DP1200987 CROATIA AVENUE EDMONDSON PARK

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project no	20 117	drawing no	DA 1101
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relation to: DA-1320/2021 ROAD

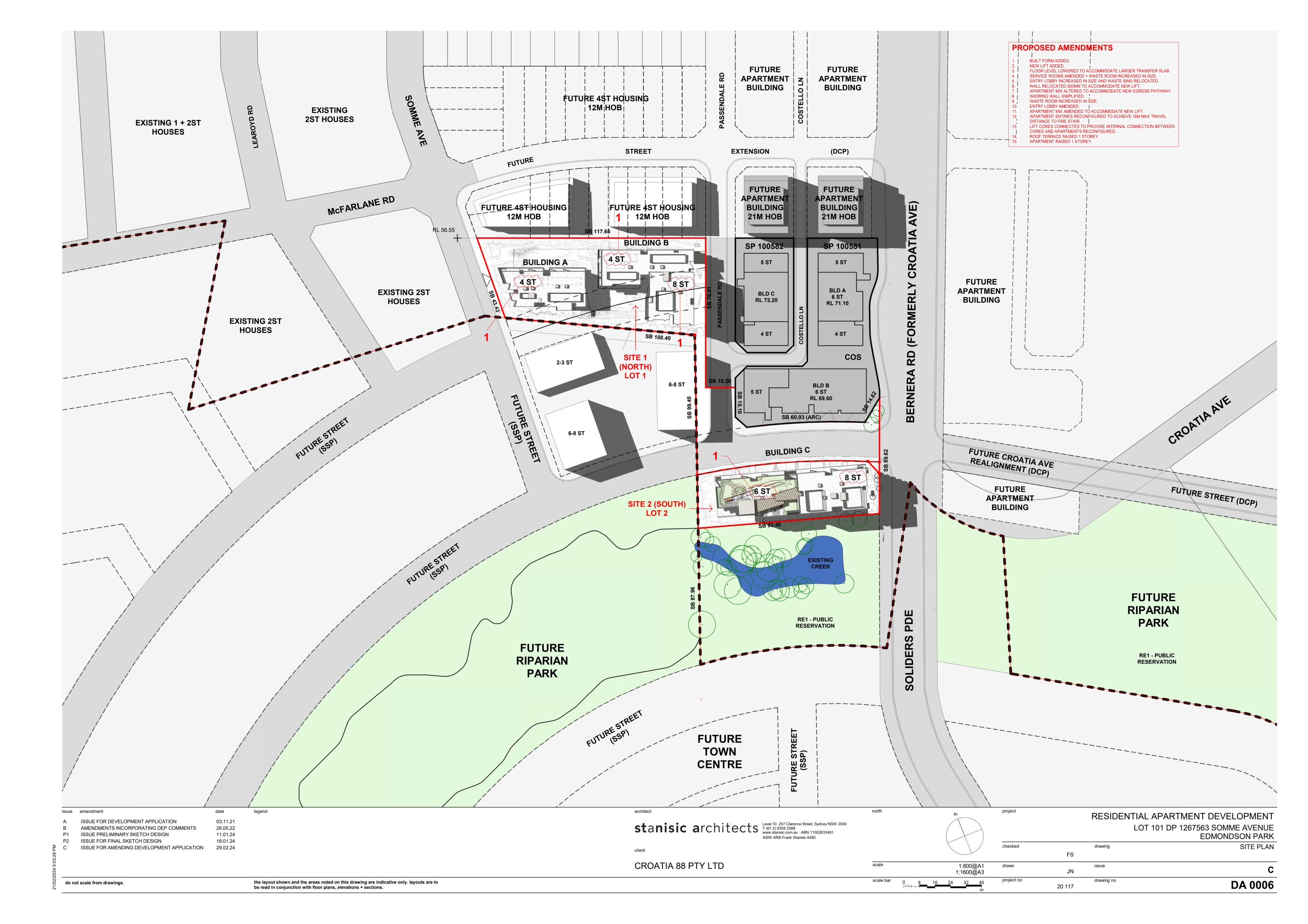
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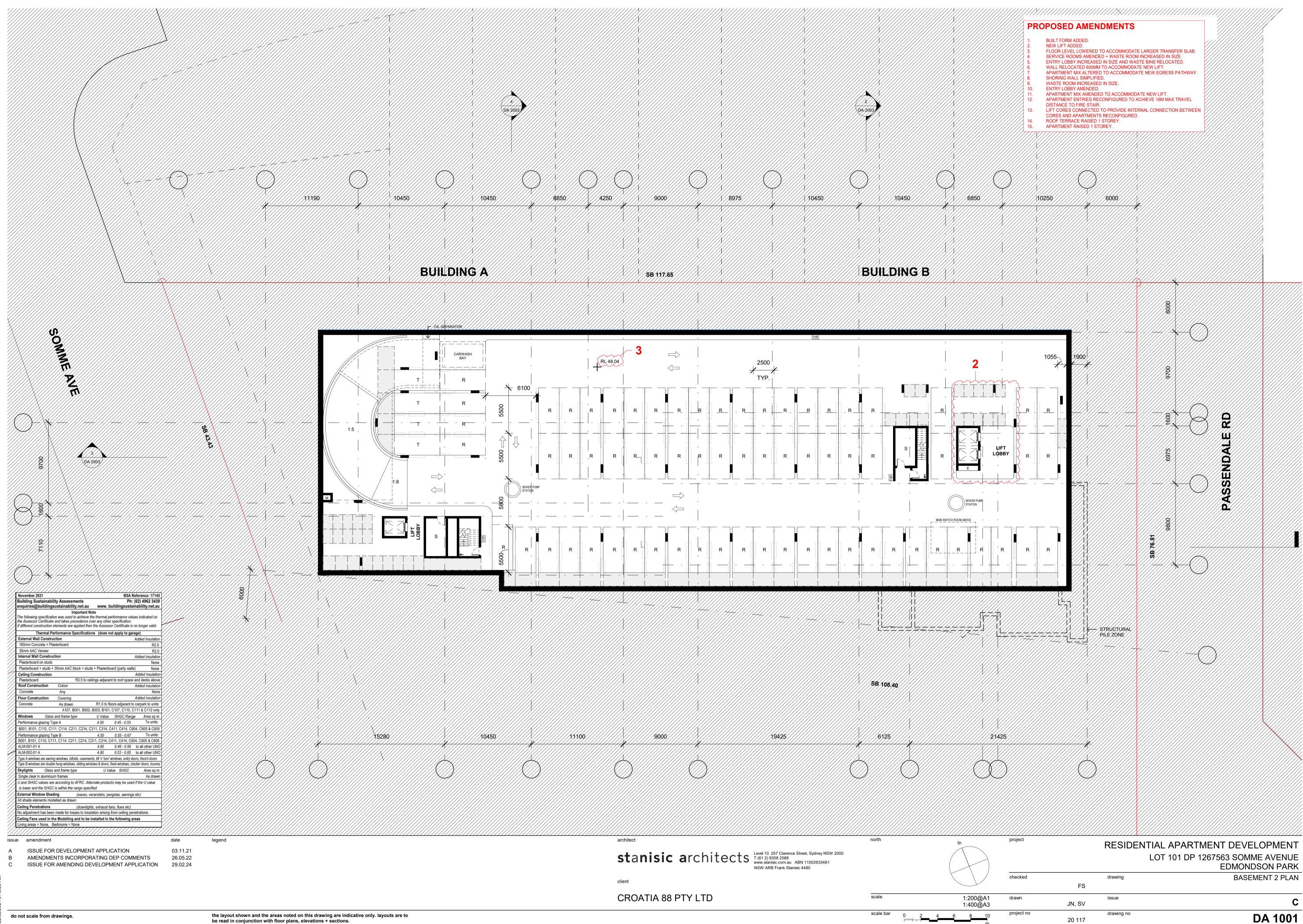
project RESIDENTIAL APARTMENT DEVELOPMENT LOT 3 DP1259121 SOMME AVENUE + LOT 8 DP1200987 CROATIA AVENUE EDMONDSON PARK

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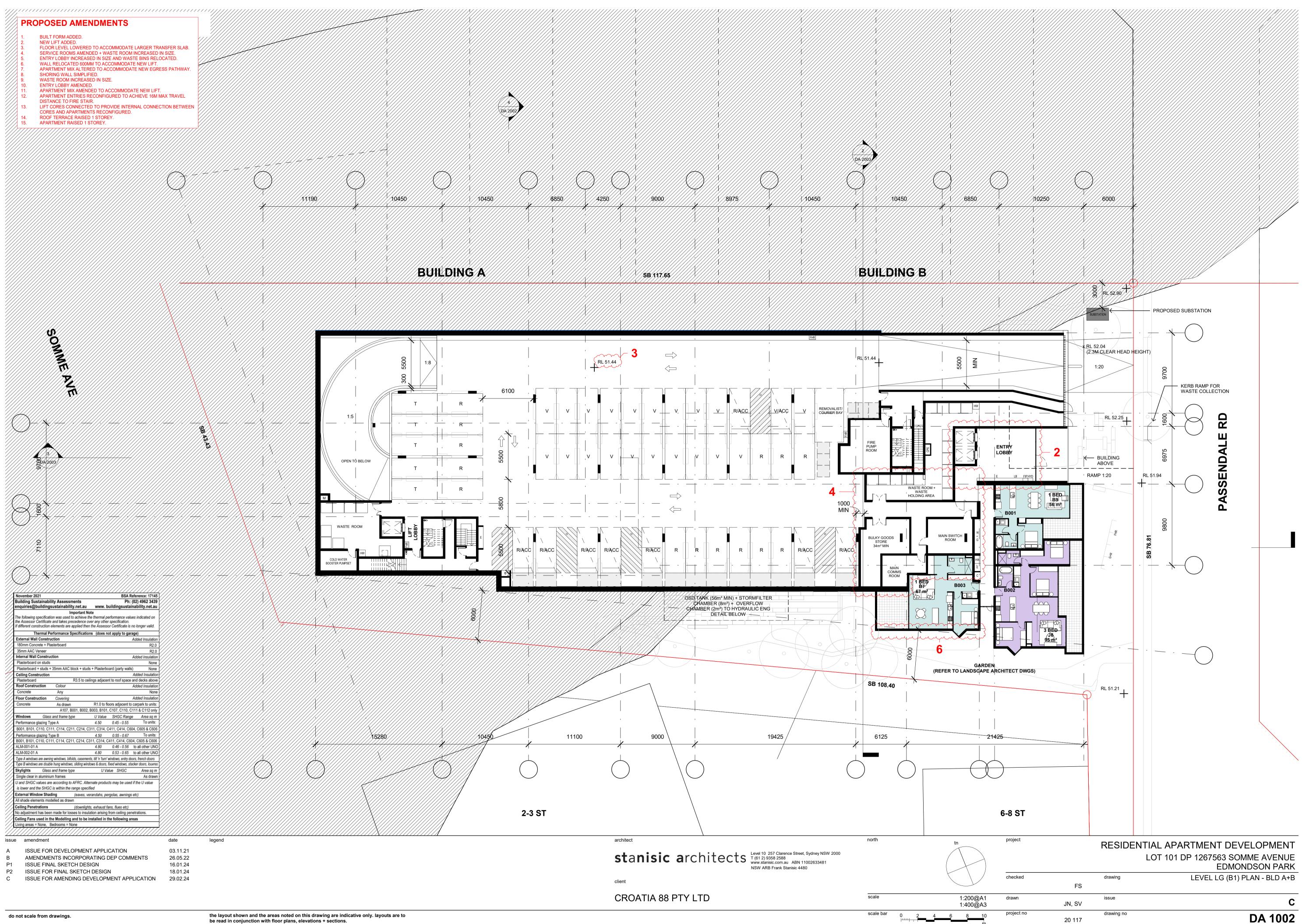
# **APPENDIX B**

# PROPOSED ARCHITECTURAL PLANS



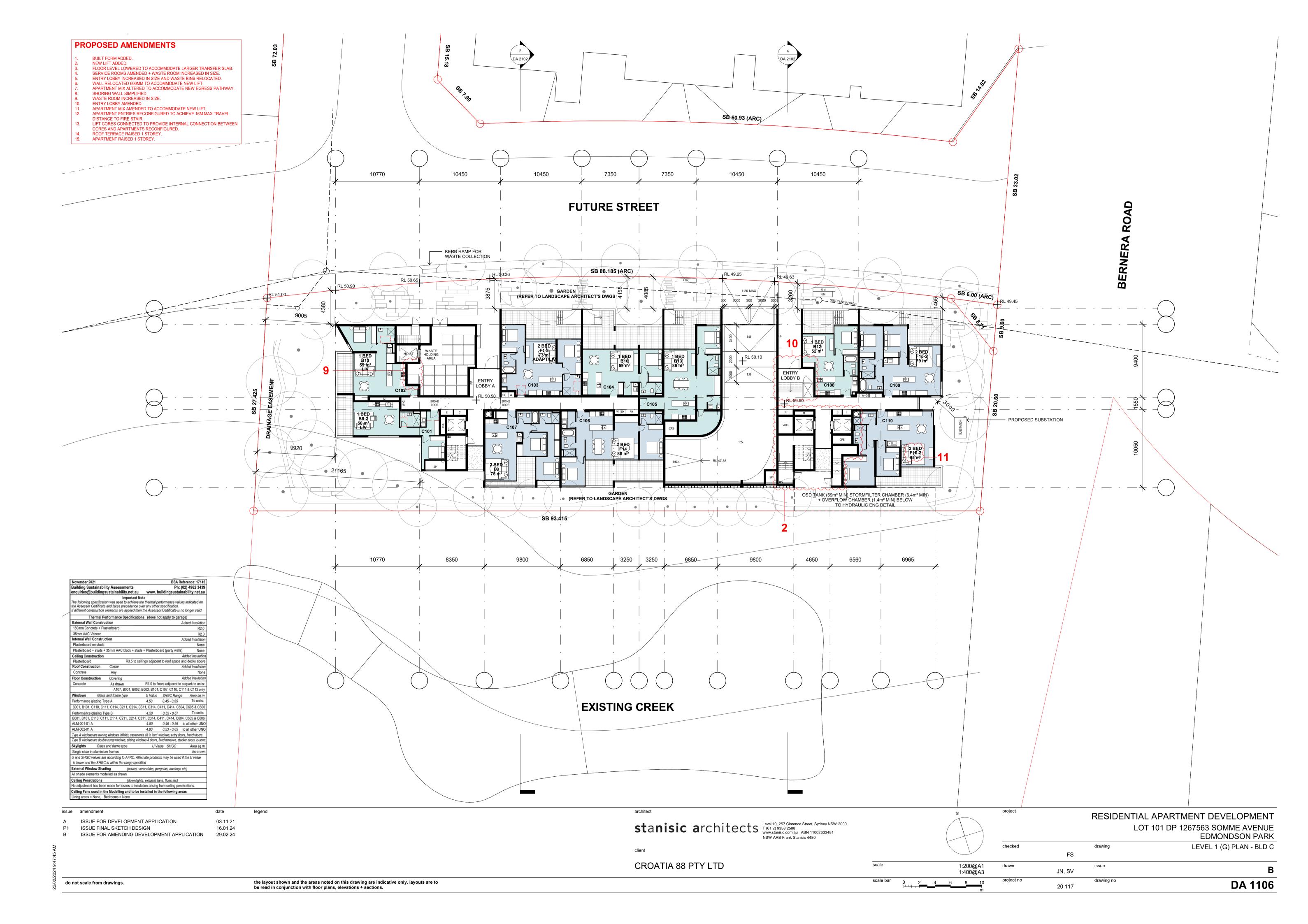


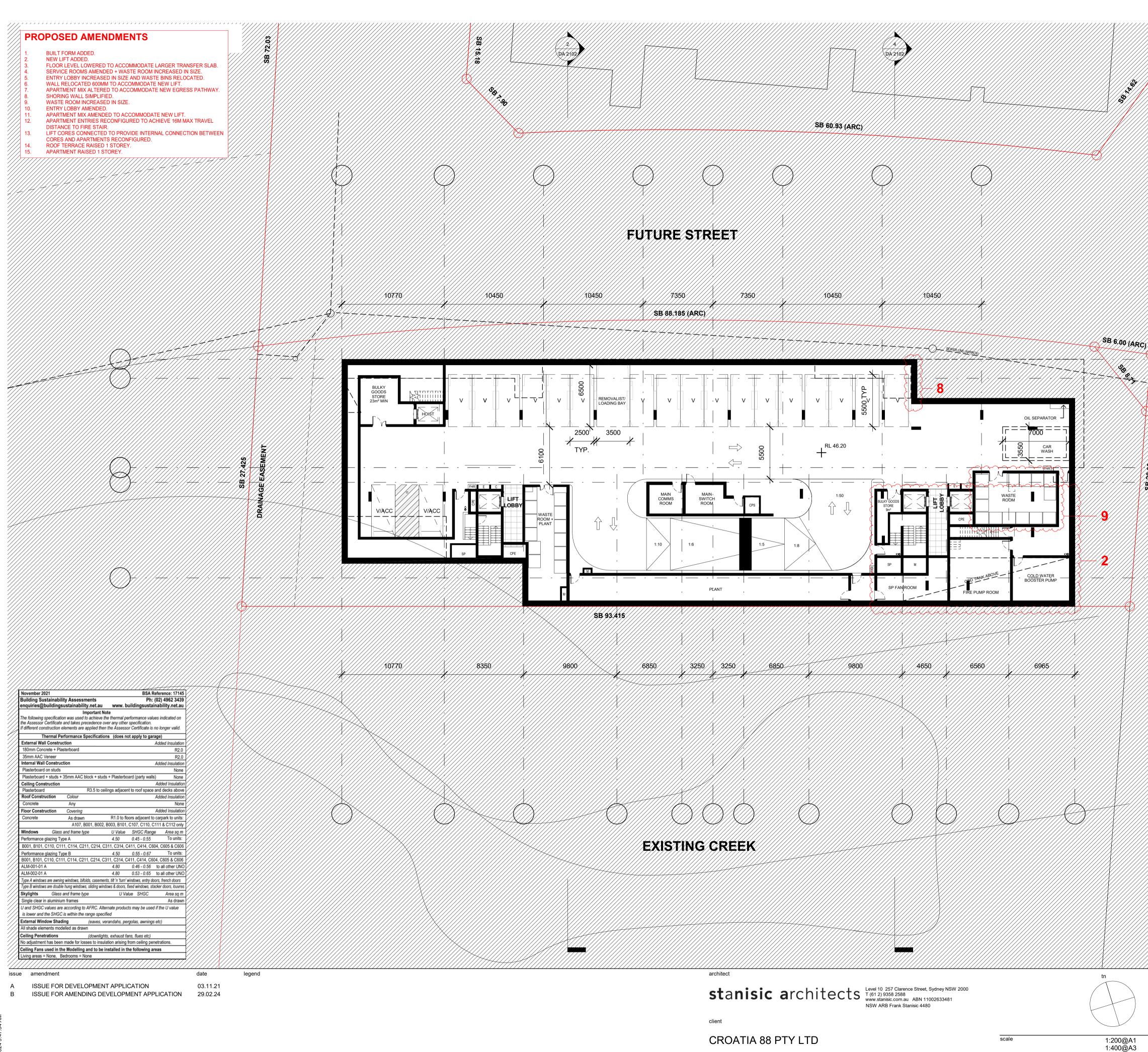
the layout shown and the areas noted on this drawing are indicative only. layouts are to be read in conjunction with floor plans, elevations + sections.



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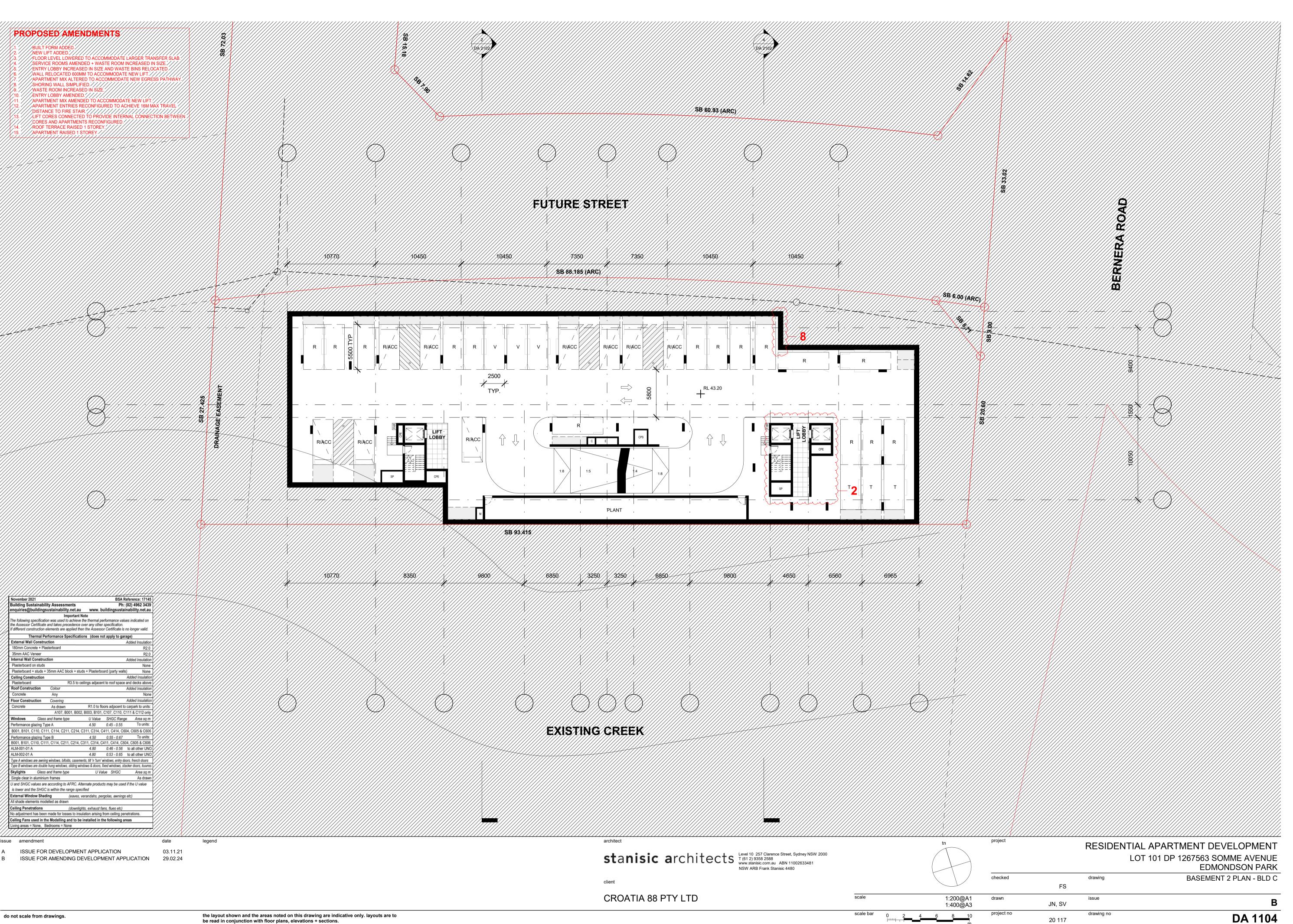


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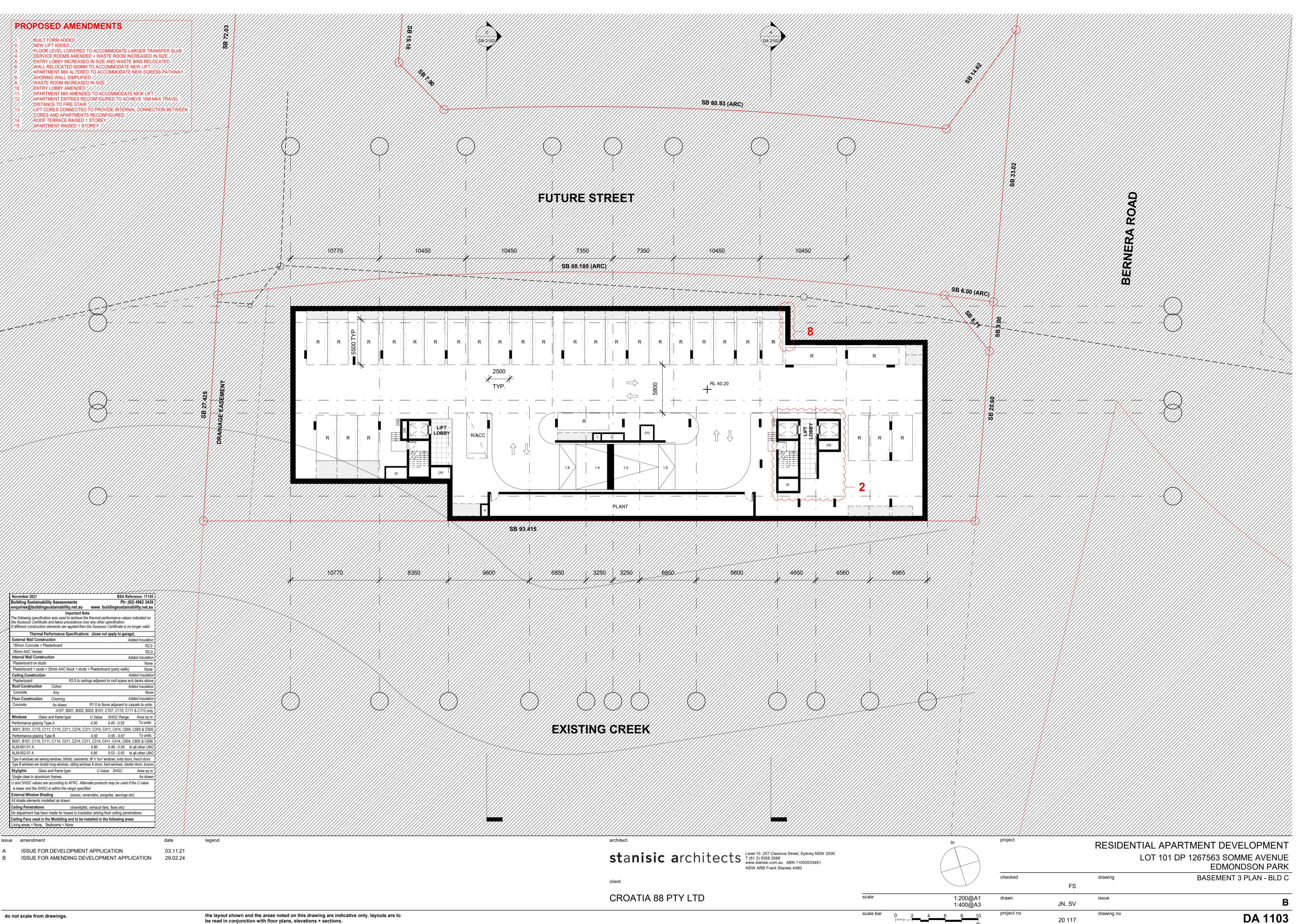
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project				
drawn project no	FS JN, SV 20 117	issue drawing no		B DA 1105



issue amendment Α





issue amendment Α

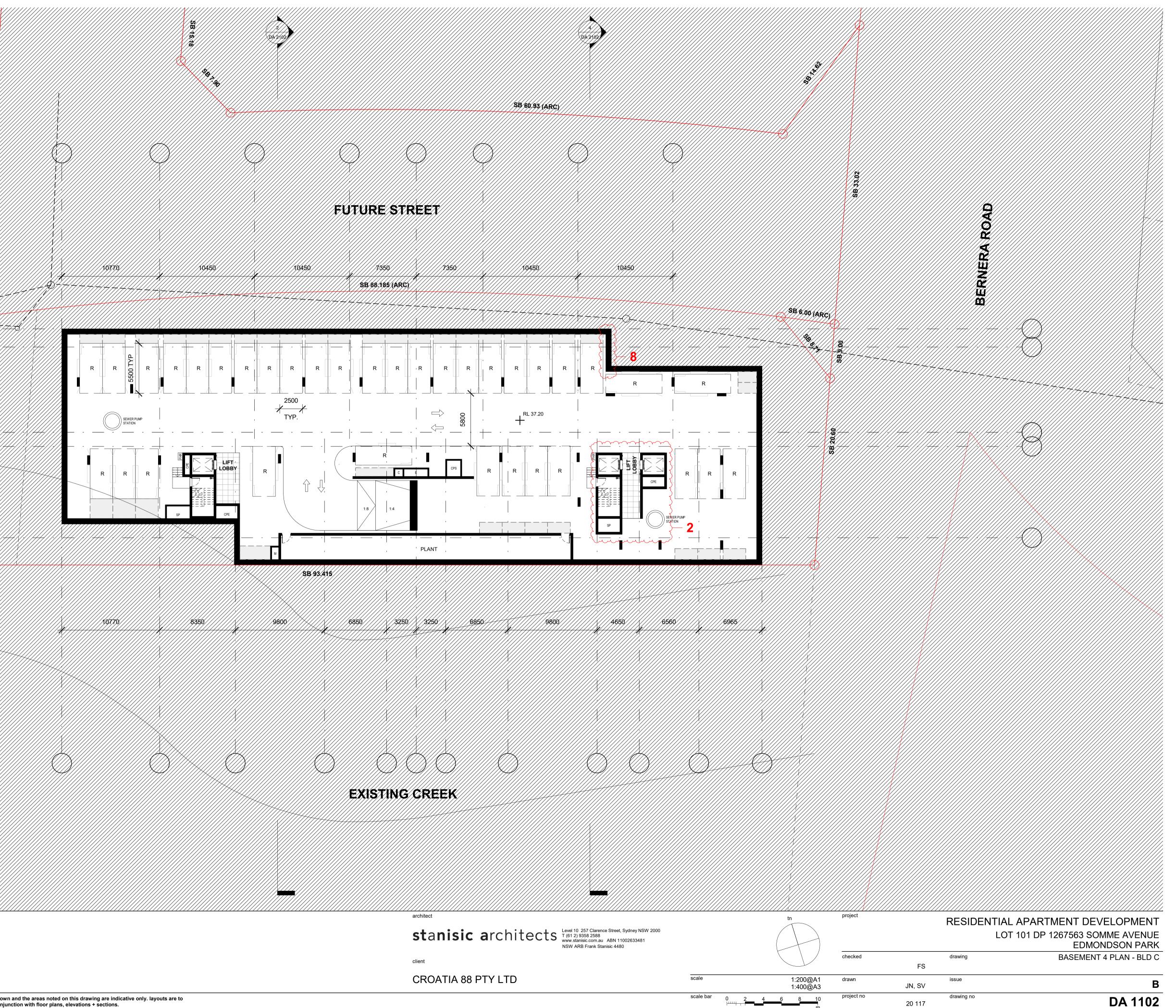
be read in conjunction with floor plans, elevations + sections.





# PROPOSED AMENDMENTS

- BUILT FORM ADDED. NEW LIFT ADDED. FLOOR LEVEL LOWERED TO ACCOMMODATE LARGER TRANSFER SLA
- FLOOR LEVEL LOWERED TO ACCOMMODATE LARGER TRANSFER SLAD. SERVICE ROOMS AMENDED + WASTE ROOM INCREASED IN SIZE.// ENTRY LOBBY INCREASED IN SIZE AND WASTE BINS RELOCATED. WALL RELOCATED 600MM TO ACCOMMODATE NEW LIFT.// APARTMENT MIX ALTERED TO ACCOMMODATE NEW EGRESS PATHWAY SHORING WALL SIMPLIFIED. WASTE ROOM INCREASED IN SIZE
- ENTRY LOBBY AMENDED. APARTMENT MIX AMENDED TO ACCOMMODATE NEW LIFT.
- APARTMENT ENTRIES RECONFIGURED TO ACHIEVE 16M MÁX TRÁVI DISTANCE TO FIRE STAIR. CORES AND APARTMENTS RECONFIGURED.
- ROOF TERRACE RAISED 1 STOREY.



BSA Reference: 17145 November 2021 Building Sustainability Assessments Ph: (02) 4962 3439 enquiries@buildingsustainability.net.au www.buildingsustainability.net.au Important Note The following specification was used to achieve the thermal performance values indicated on the Assessor Certificate and takes precedence over any other specification. If different construction elements are applied then the Assessor Certificate is no longer valid. Thermal Performance Specifications (does not apply to garage) External Wall Construction Added Insulation 80mm Concrete + Plasterboard 35mm AAC Veneer Internal Wall Construction Added Insulation Plasterboard on studs None Plasterboard + studs + 35mm AAC block + studs + Plasterboard (party walls) None Ceiling Construction Plasterboard Added Insulation R3.5 to ceilings adjacent to roof space and decks above Roof Construction Colour Added Insulation Concrete Any None Floor Construction Covering Added Insulation R1.0 to floors adjacent to carpark to units: Concrete As drawn A107, B001, B002, B003, B101, C107, C110, C111 & C112 only 
 Windows
 Glass and frame type
 U Value
 SHGC Range
 Area sq m

 Performance glazing Type A
 4.50
 0.45 - 0.55
 To units:
 Performance glazing Type A 4.50 0.45 - 0.55 
 Bool, B101, C110, C111, C114, C211, C214, C311, C314, C411, C414, C604, C605 & C606

 Performance glazing Type B
 4.50
 0.55 - 0.67
 To units:

 B001, B101, C110, C111, C114, C211, C214, C311, C314, C411, C414, C604, C605 & C606
 ALM-001-01 A
 4.80
 0.46 - 0.56
 to all other UNO
 4.80 0.46 - 0.56 to all other UNO 4.80 0.53 - 0.65 to all other UNO ALM-002-01 A Type A windows are awning windows, bifolds, casements, tilt 'n 'turn' windows, entry doors, french doors Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvres 
 Skylights
 Glass and frame type
 U Value
 SHGC
 Area sq m
 Single clear in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower and the SHGC is within the range specified External Window Shading (eaves, verandahs, pergolas, awnings etc) All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc) No adjustment has been made for losses to insulation arising from ceiling penetrations. Ceiling Fans used in the Modelling and to be installed in the following areas Living areas = None, Bedrooms = None issue amendment date ISSUE FOR DEVELOPMENT APPLICATION 03.11.21 Α ISSUE FOR AMENDING DEVELOPMENT APPLICATION 29.02.24

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