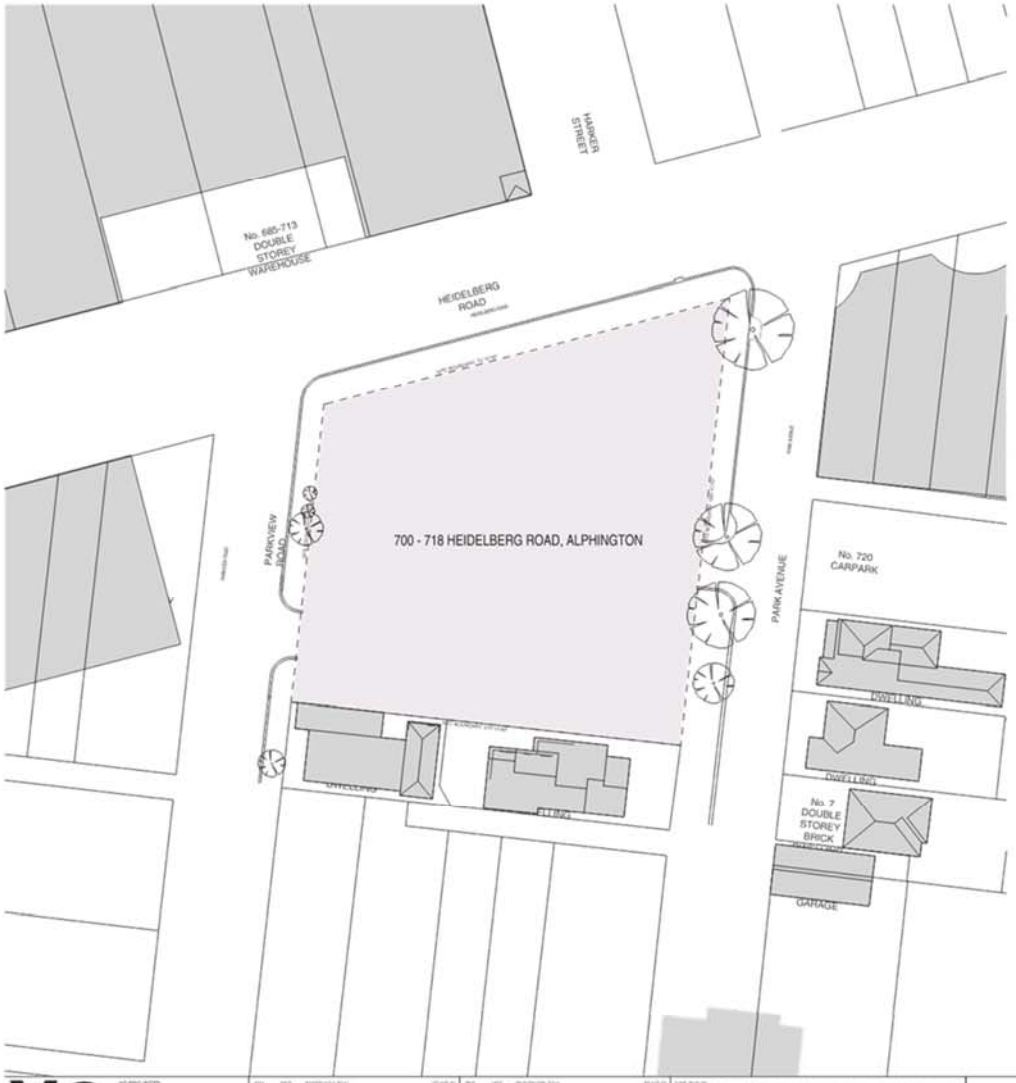
Attachment 1 - Decision Plans



700-718 HEIDELBERG ROAD ALPHINGTON

TOWN PLANNING ISSUE FOR CONSULTATIVE CONFERENCE

DRAWING LIST

A0001 - LOCATION PLAN & DRAWING LIST
A0002 - EXISTING CONDITIONS SURVEY
A0003 - DEMOLITION PLAN
A0004 - PROPOSED SITE PLAN

A0098 - BASEMENT 2 FLOOR PLAN
A0099 - BASEMENT 1 FLOOR PLAN
A0100 - GROUND FLOOR PLAN
A0101 - LEVEL 01 FLOOR PLAN
A0102 - LEVEL 02 FLOOR PLAN
A0103 - LEVEL 03 FLOOR PLAN
A0104 - LEVEL 04 FLOOR PLAN
A0105 - LEVEL 05 FLOOR PLAN
A0106 - LEVEL 06 FLOOR PLAN
A0107 - LEVEL 07 FLOOR PLAN
A0108 - ROOF FLOOR PLAN
A0109 - ROOF TOP FLOOR PLAN

A0200 - TYPICAL ONE BEDROOM APARTMENT LAYOUT (TYPE A)
A0201 - TYPICAL ONE BEDROOM APARTMENT LAYOUT (TYPE B)
A0202 - TYPICAL TWO BEDROOM APARTMENT LAYOUT (TYPE A)
A0203 - TYPICAL TWO BEDROOM APARTMENT LAYOUT (TYPE B)
A0204 - TYPICAL THREE BEDROOM APARTMENT LAYOUT (TYPE A)
A0205 - TYPICAL THREE BEDROOM APARTMENT LAYOUT (TYPE B)

A0900 - NORTH ELEVATION
A0901 - EAST ELEVATION
A0902 - WEST ELEVATION
A0903 - SOUTH ELEVATION

A0950 - SECTION AA
A0951 - SECTION BB
A0952 - SECTION CC
A0953 - SECTION DD

A1100 - ELEMENTAL DETAILS
A1101 - ELEMENTAL DETAILS
A1102 - ELEMENTAL DETAILS
A1103 - ELEMENTAL DETAILS

XO

SCALE@A1 1:300
SCALE@A3 1:600
PRELIMINARY
NOT FOR CONSTRUCTION

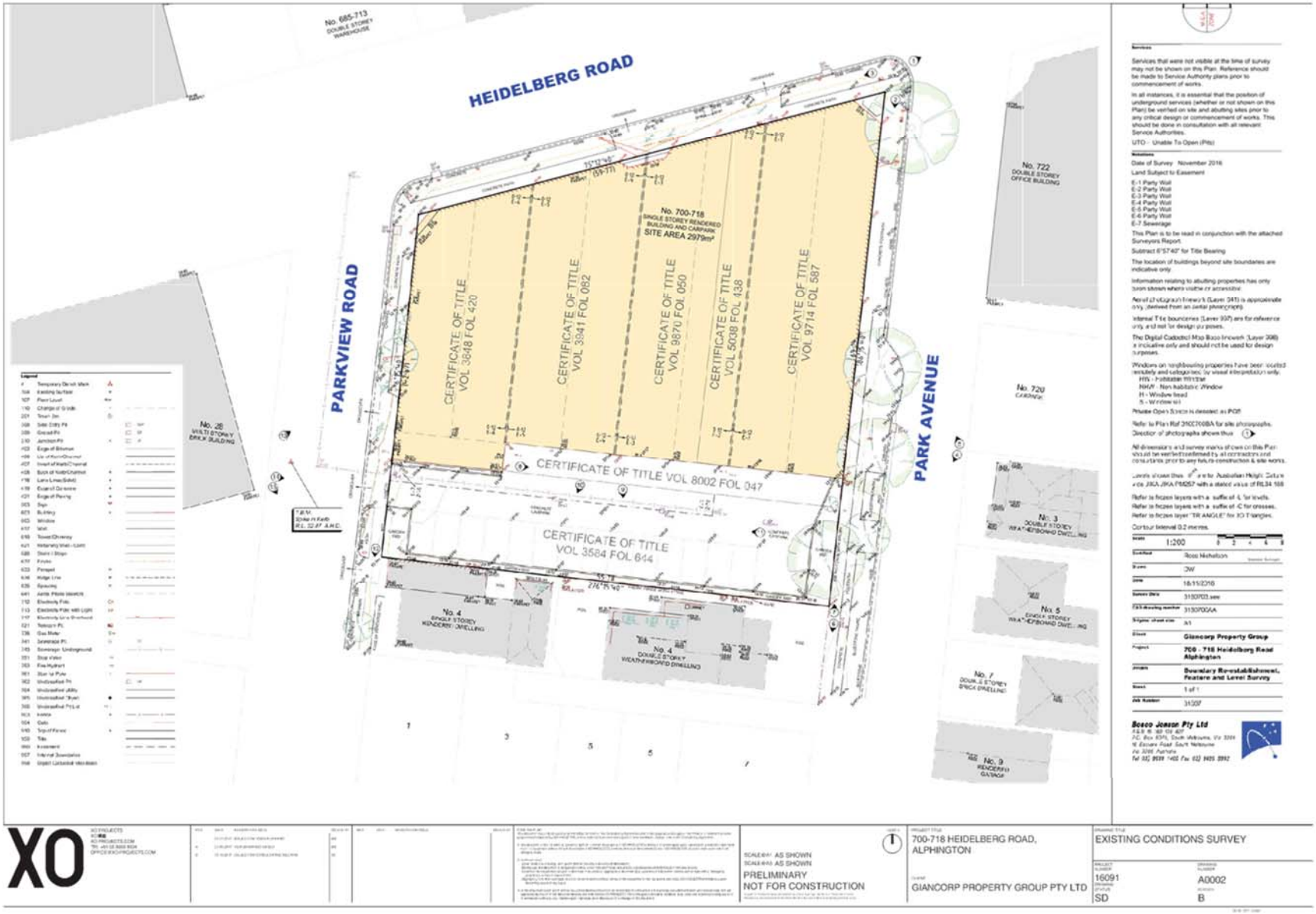
700-718 HEIDELBERG ROAD, ALPHINGTON

GIANCORP PROPERTY GROUP PTY LTD

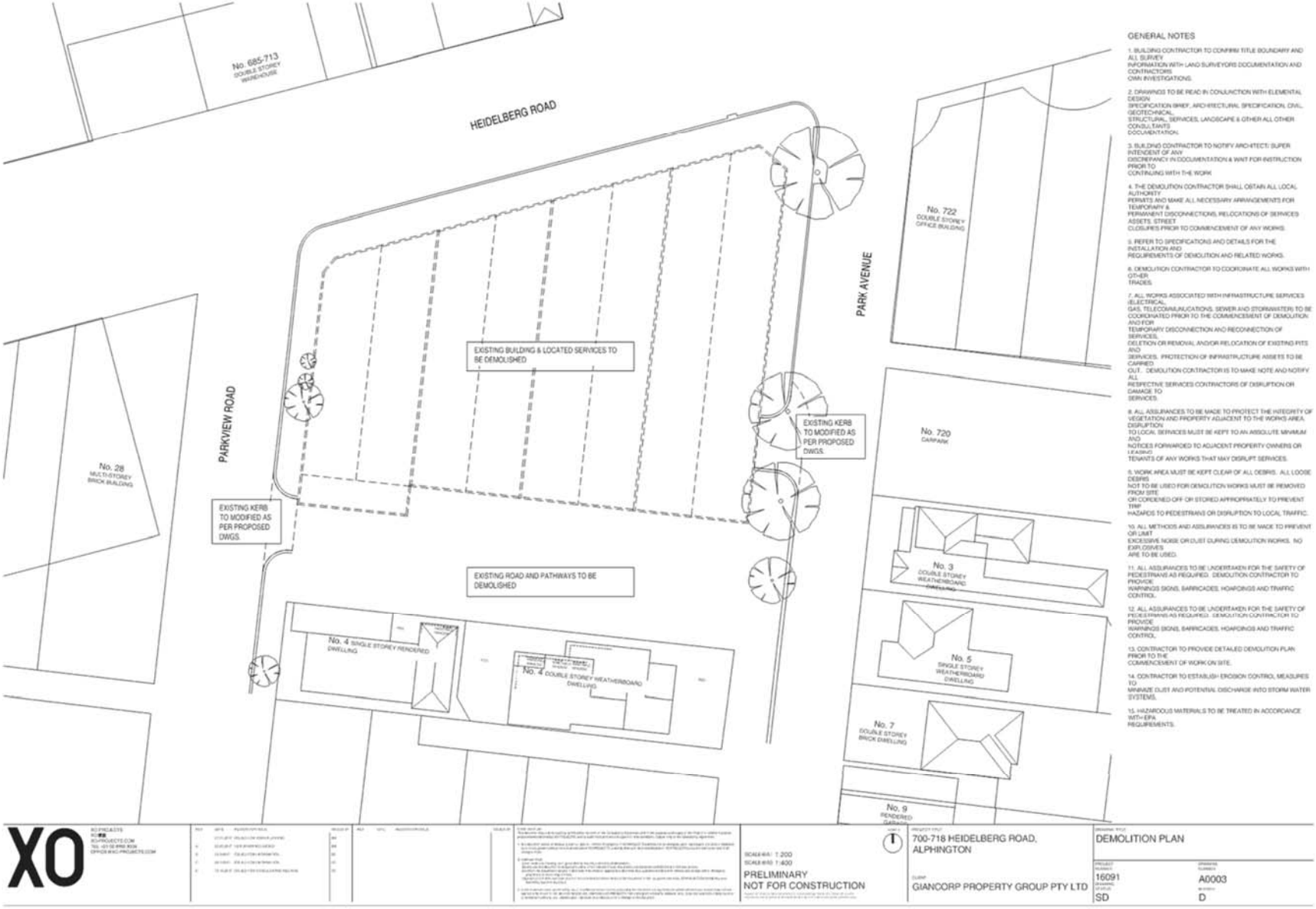
LOCATION PLAN & DRAWING LIST

16091
SD
A0001
B

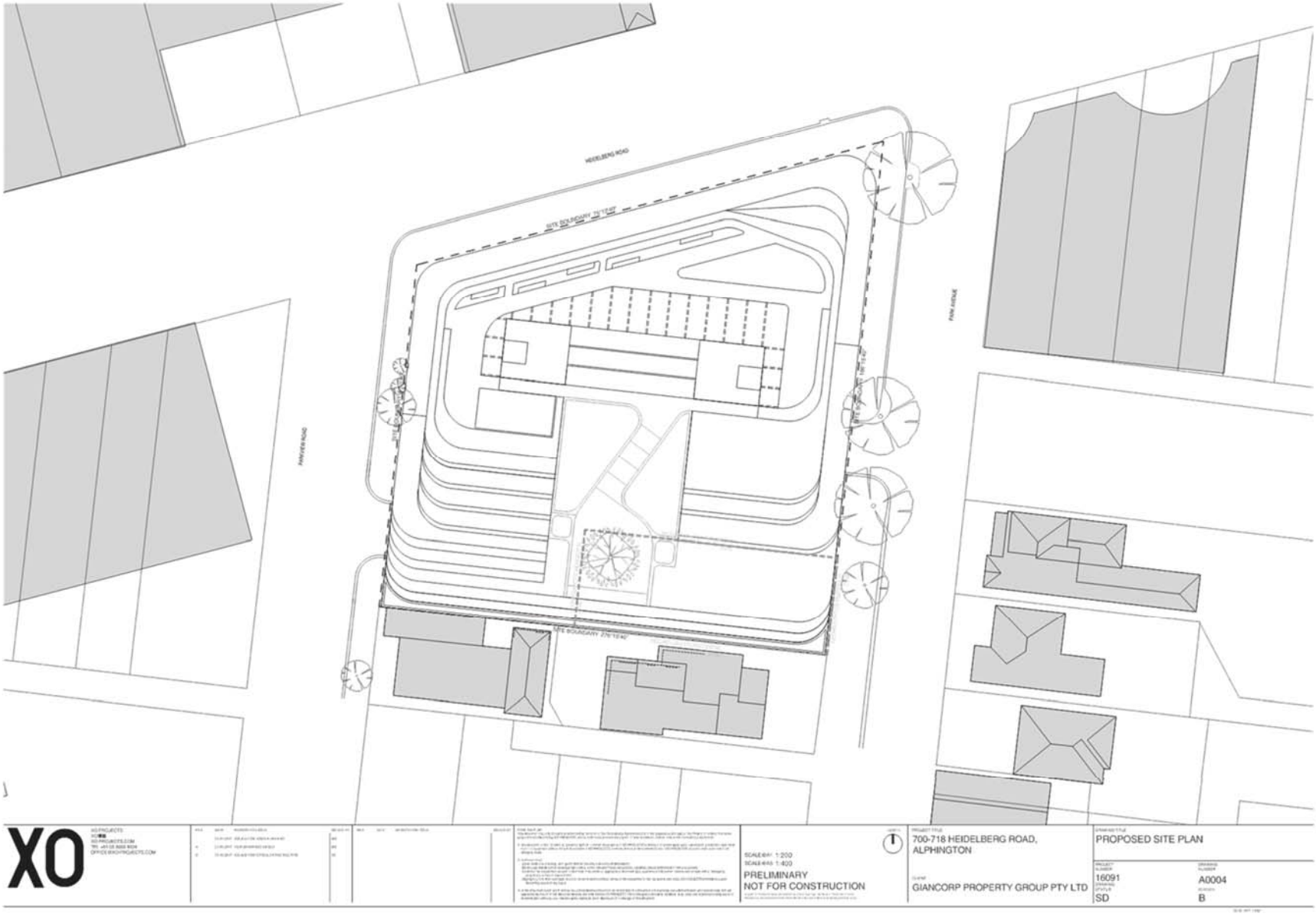
Attachment 1 - Decision Plans



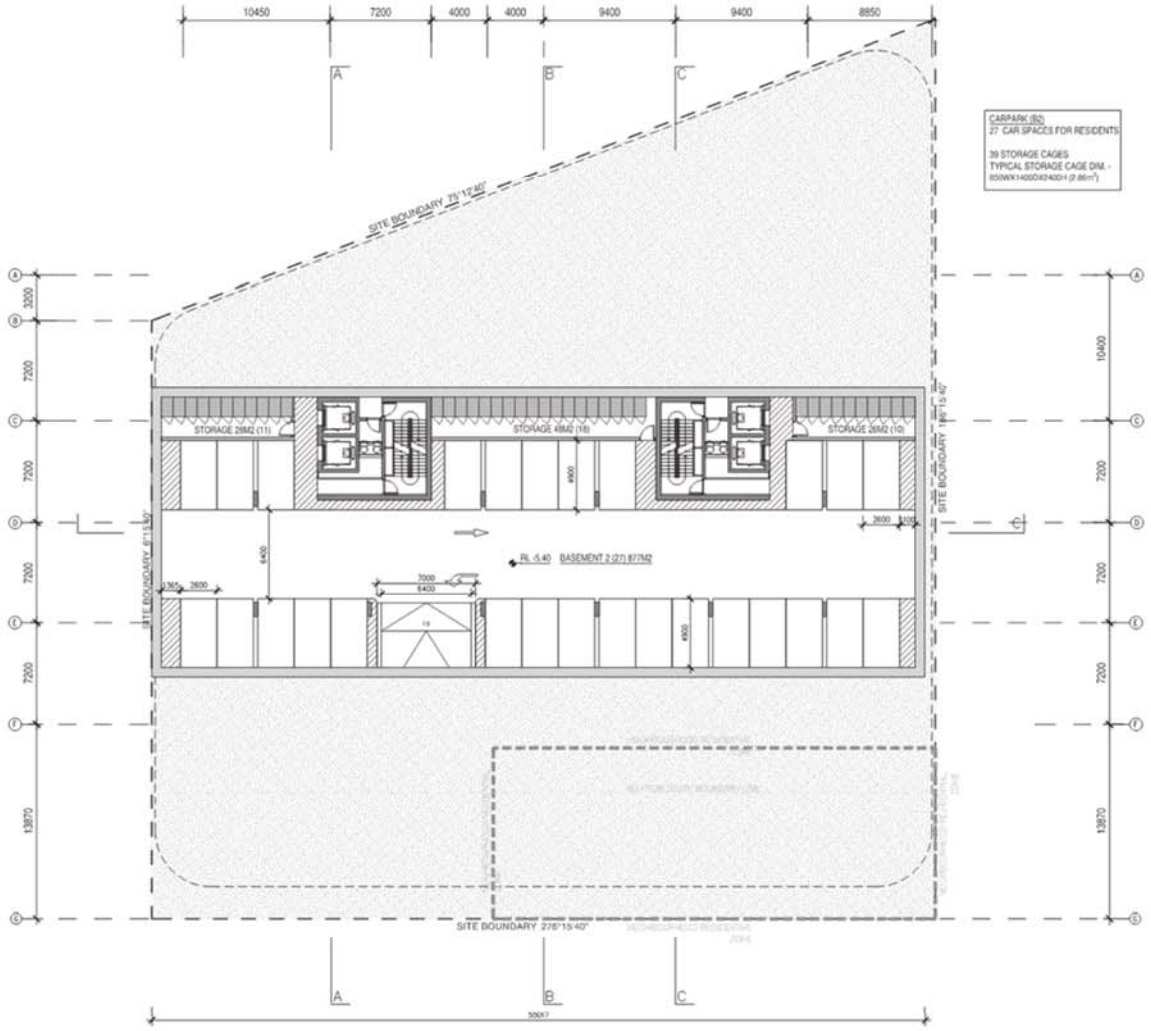
Attachment 1 - Decision Plans



Attachment 1 - Decision Plans



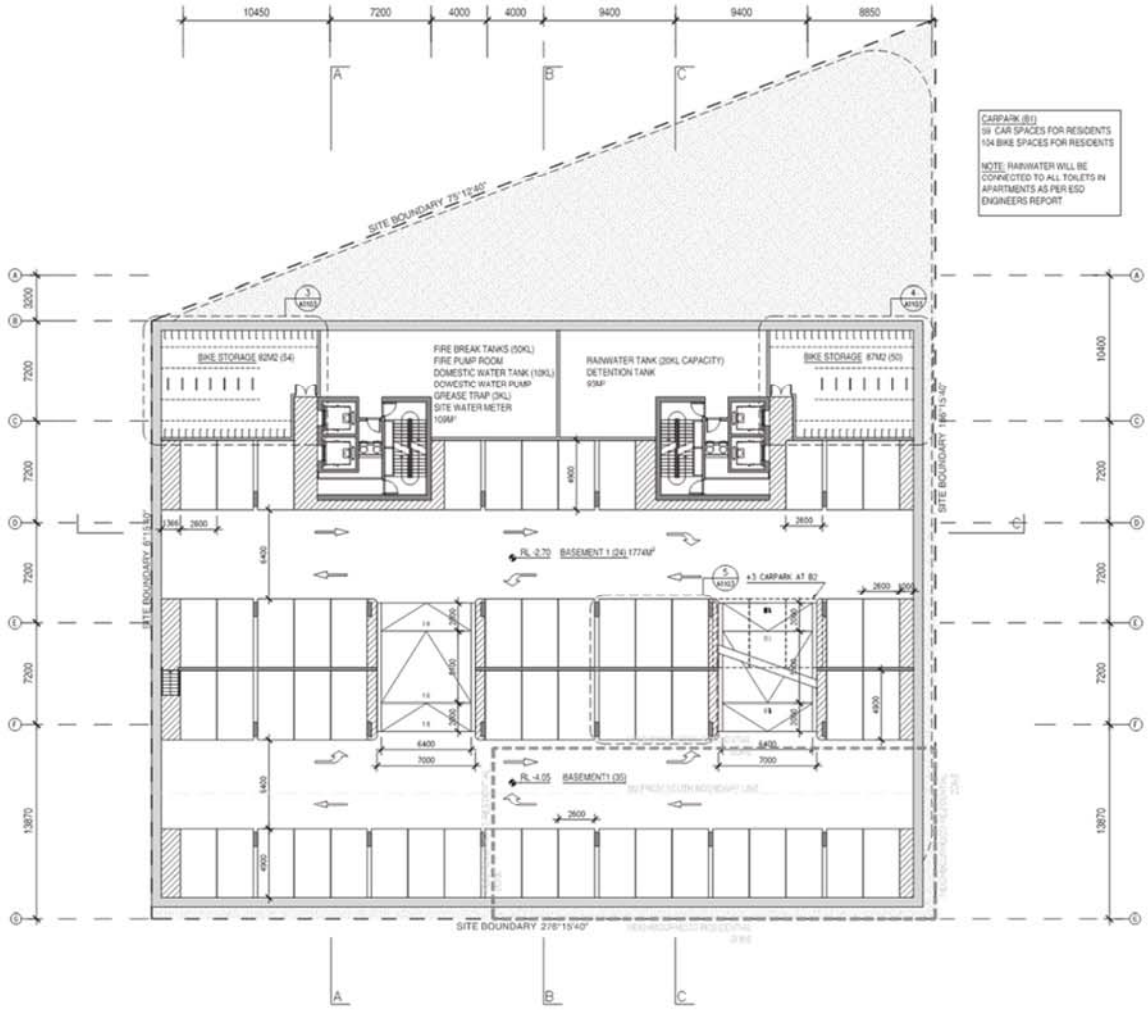
Attachment 1 - Decision Plans



XO

SCALE@A1 1:150 SCALE@A3 1:300 PRELIMINARY NOT FOR CONSTRUCTION	700-718 HEIDELBERG ROAD, ALPHINGTON GIANCORP PROPERTY GROUP PTY LTD
BASEMENT 2 FLOOR PLAN	
16091	A0098
SD	E

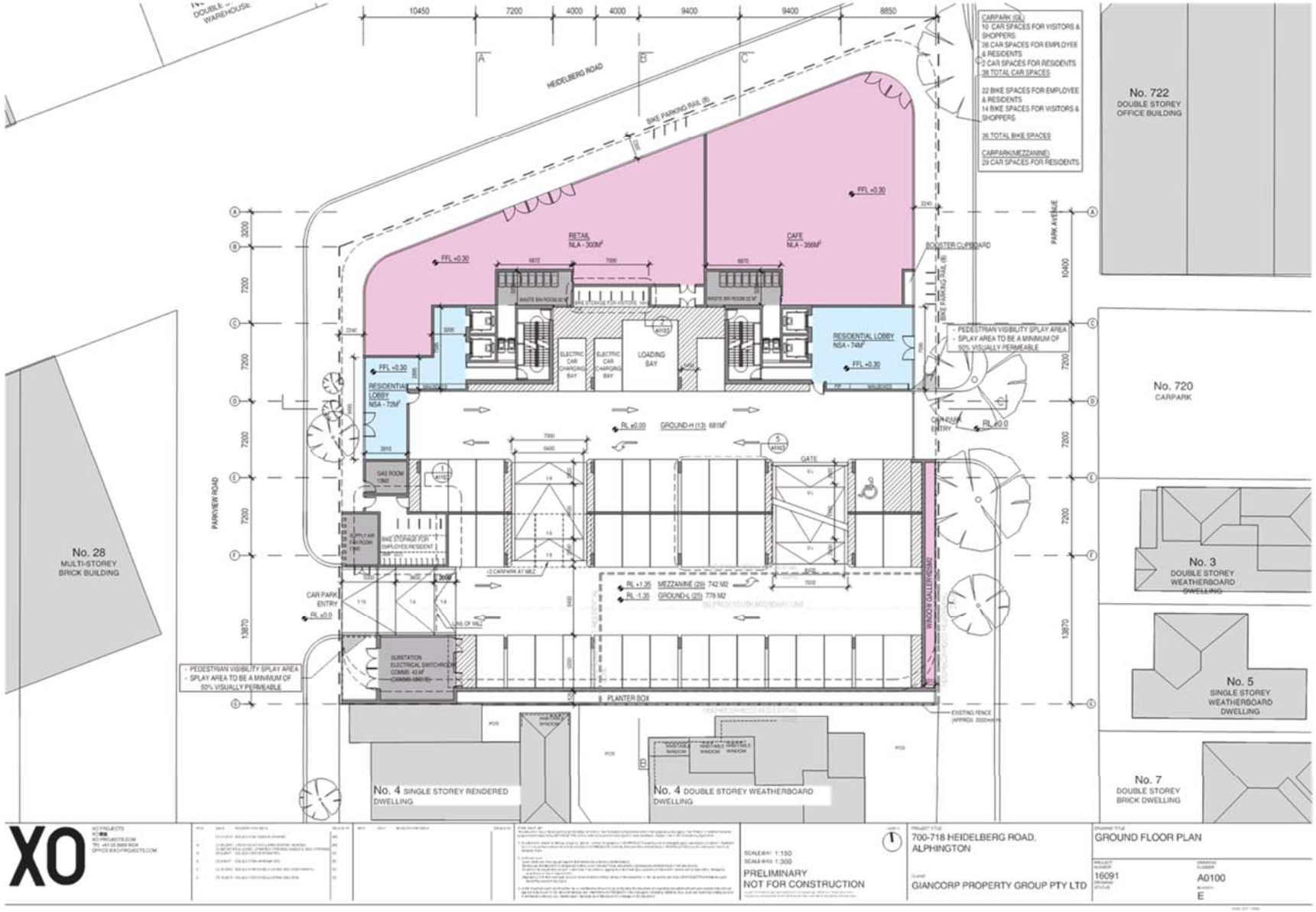
Attachment 1 - Decision Plans



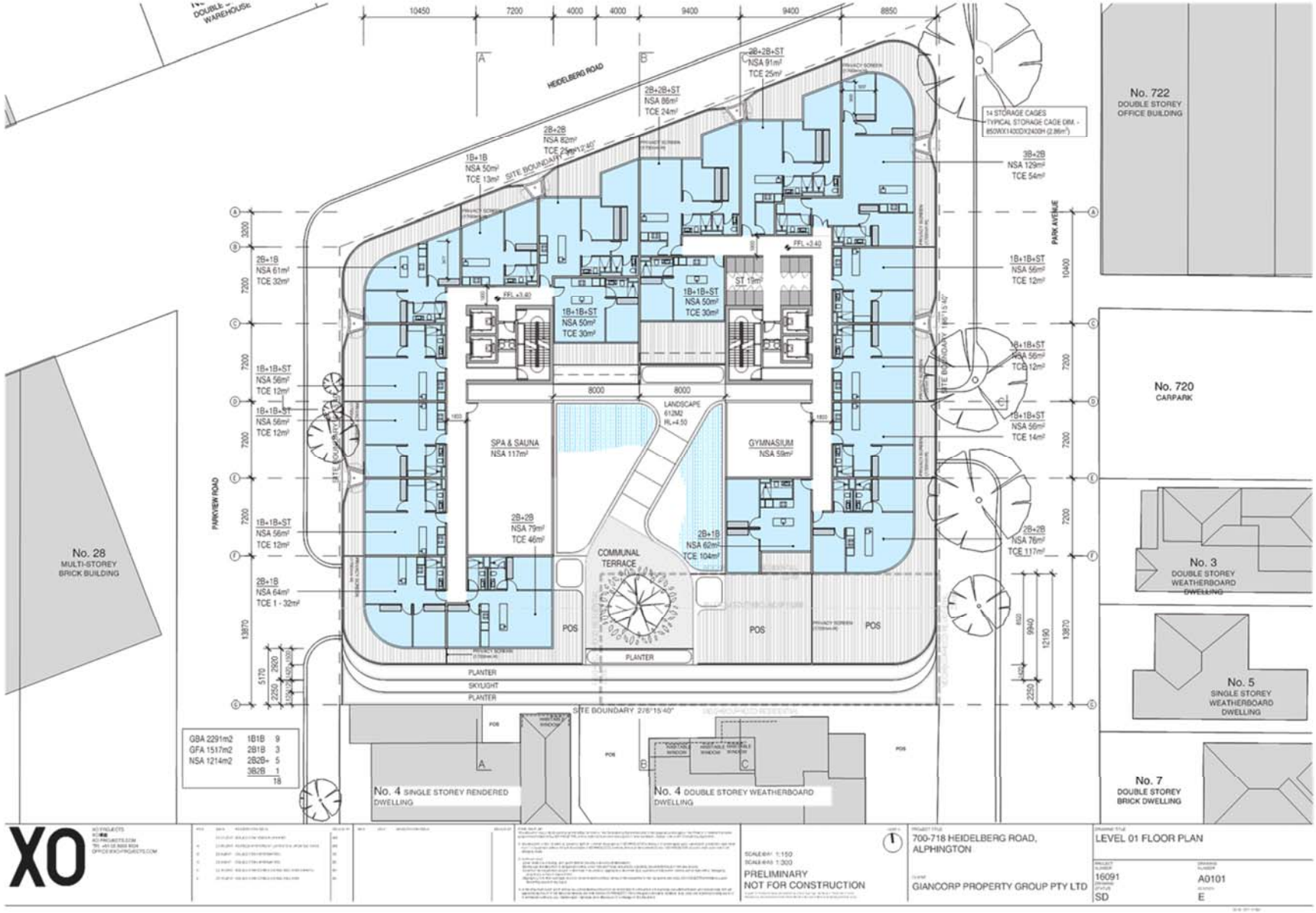
XO

SCALE@A1 1:150 SCALE@A3 1:300	PRELIMINARY NOT FOR CONSTRUCTION
PROJECT TITLE	700-718 HEIDELBERG ROAD, ALPHINGTON
CLIENT	GIANCORP PROPERTY GROUP PTY LTD
DRAWING TITLE	BASEMENT 1 FLOOR PLAN
PROJECT NUMBER	16091
DRAWING NUMBER	A0099
STATUS	SD
REVISION	E

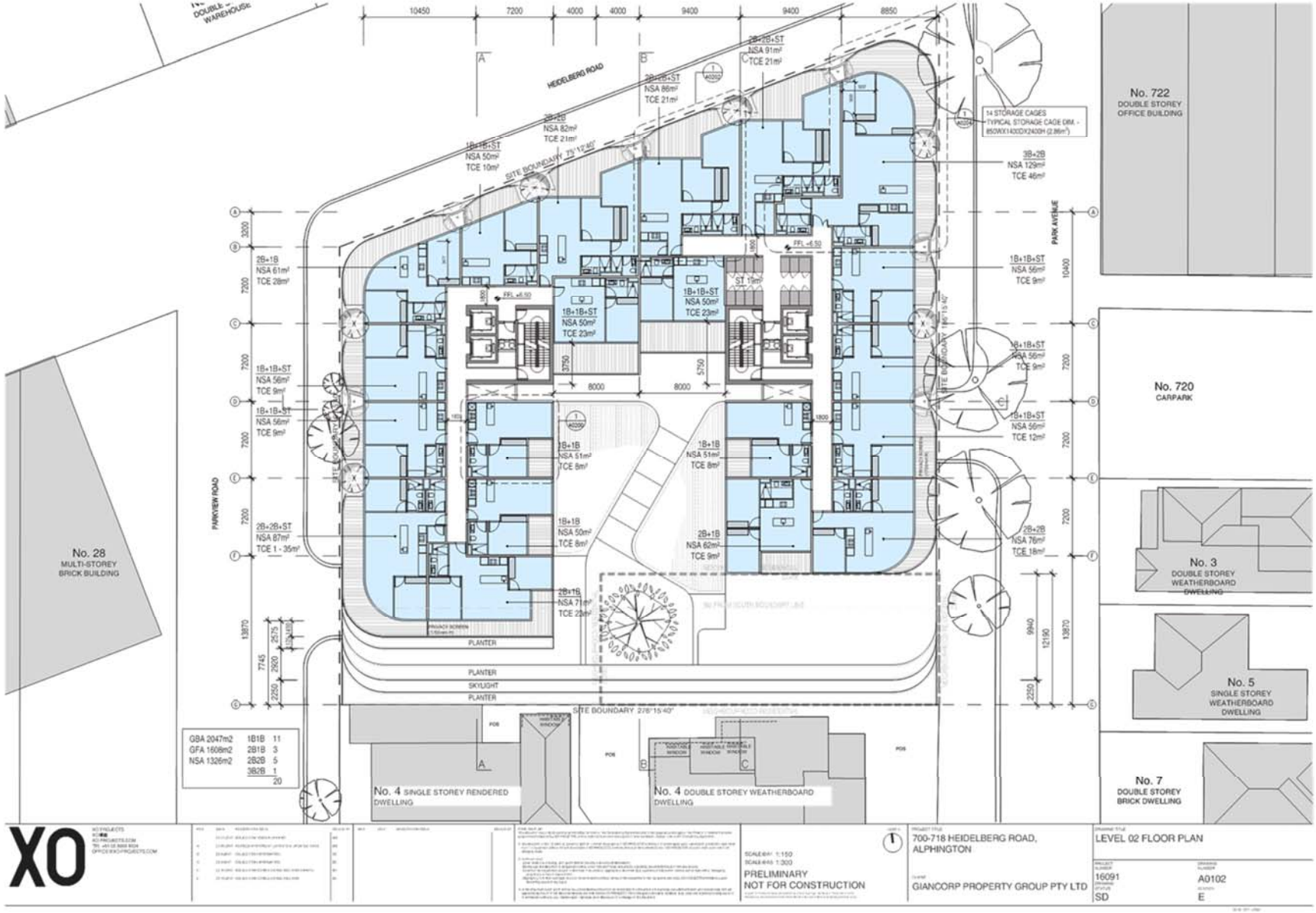
Attachment 1 - Decision Plans



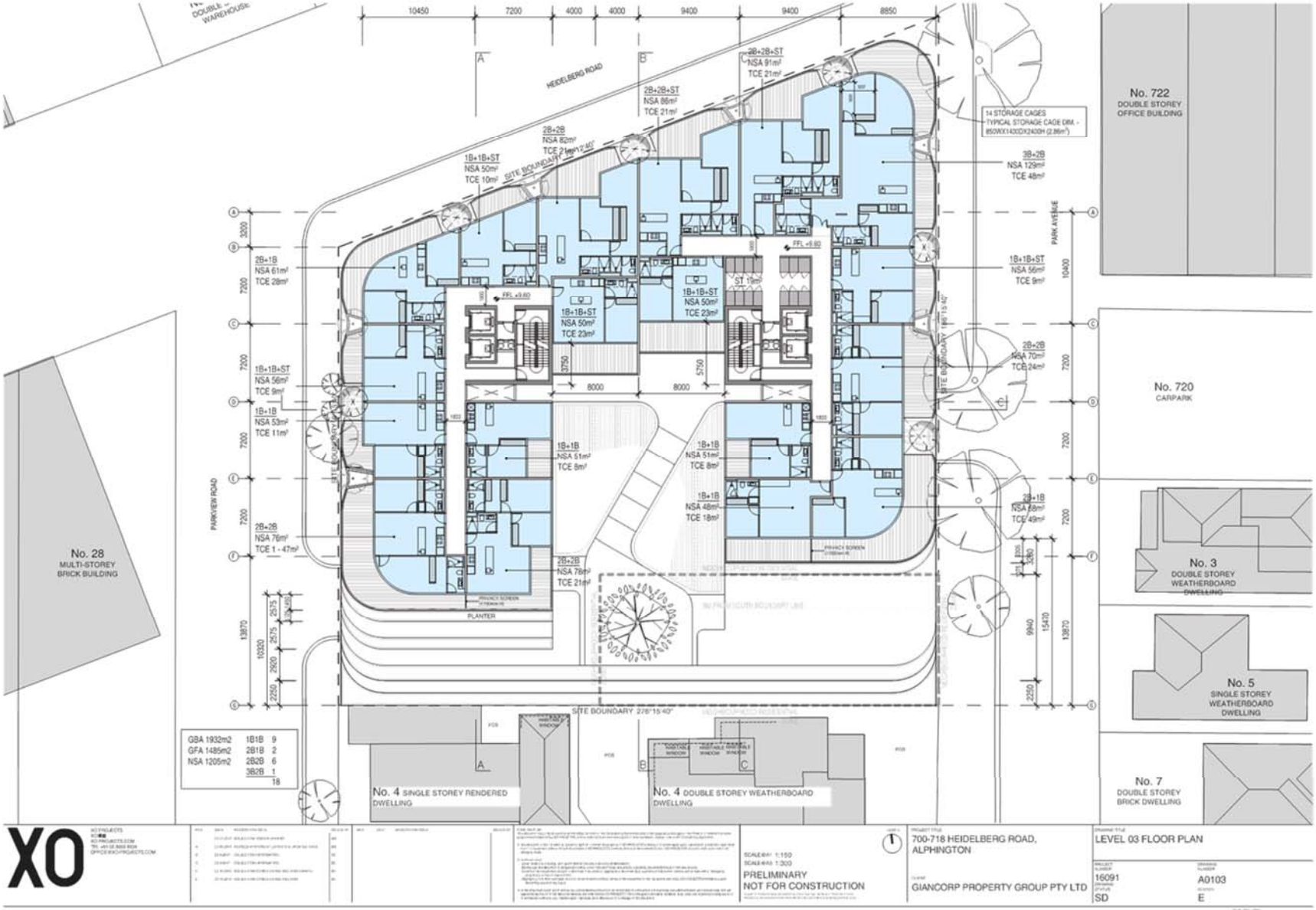
Attachment 1 - Decision Plans



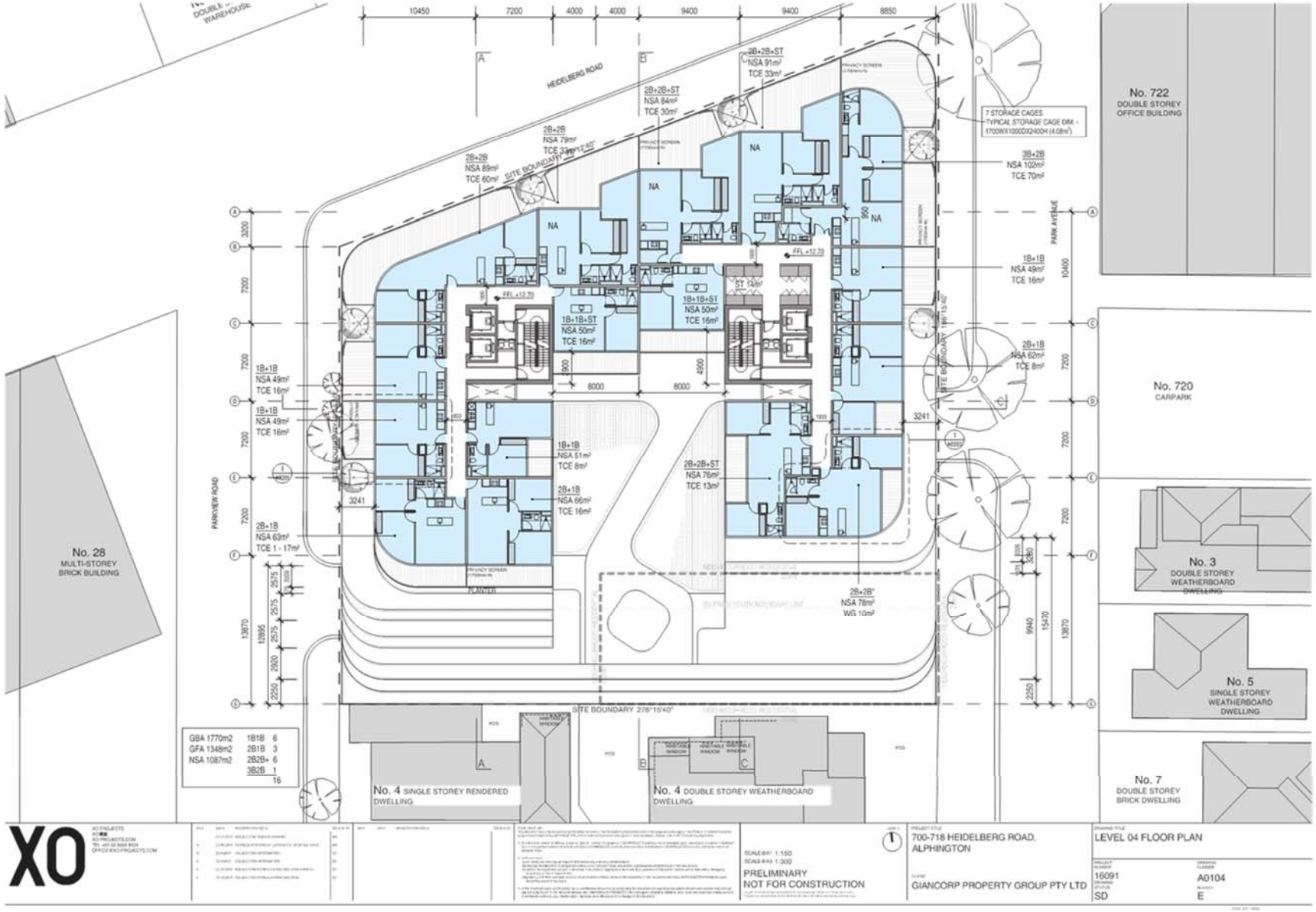
Attachment 1 - Decision Plans



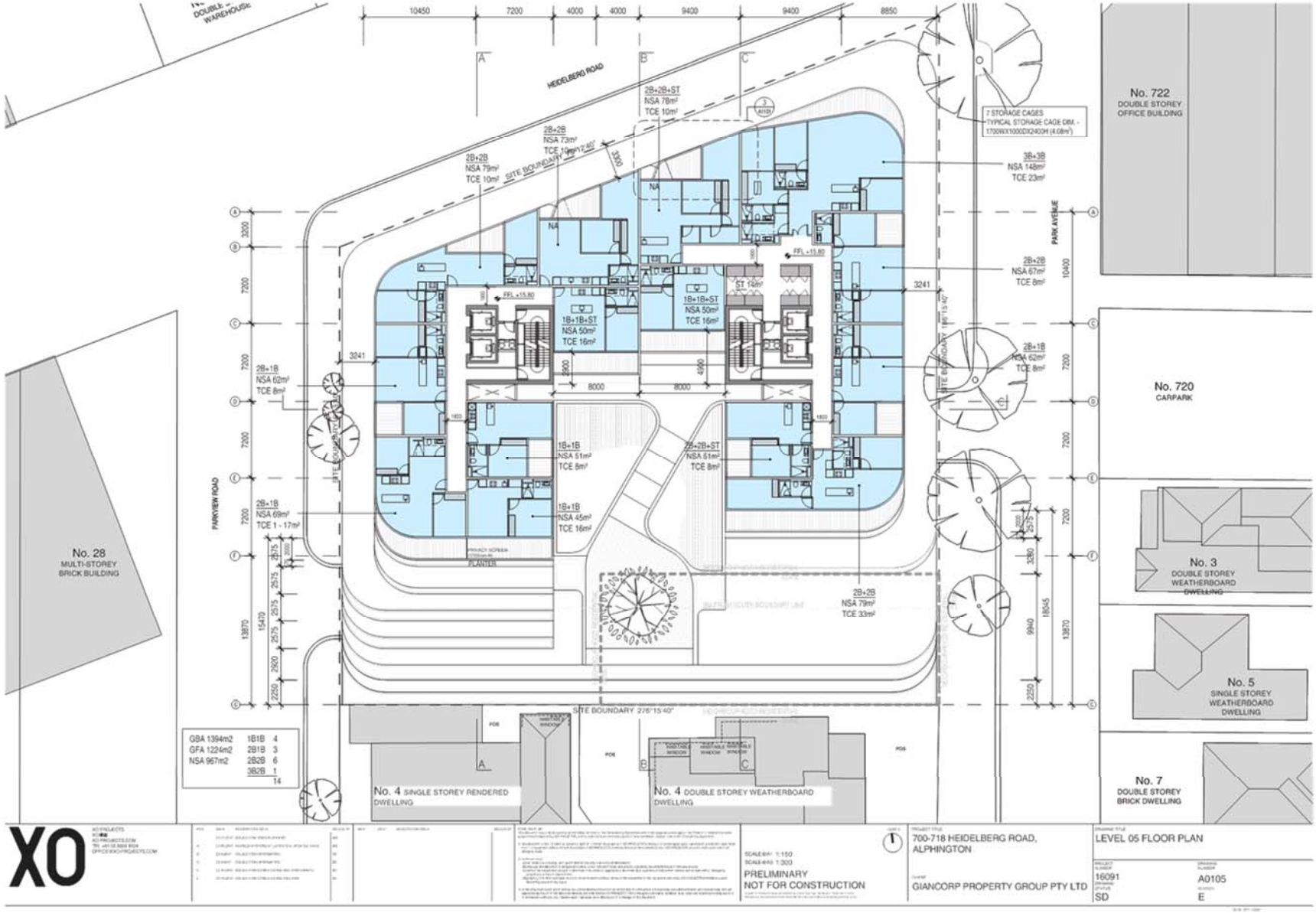
Attachment 1 - Decision Plans



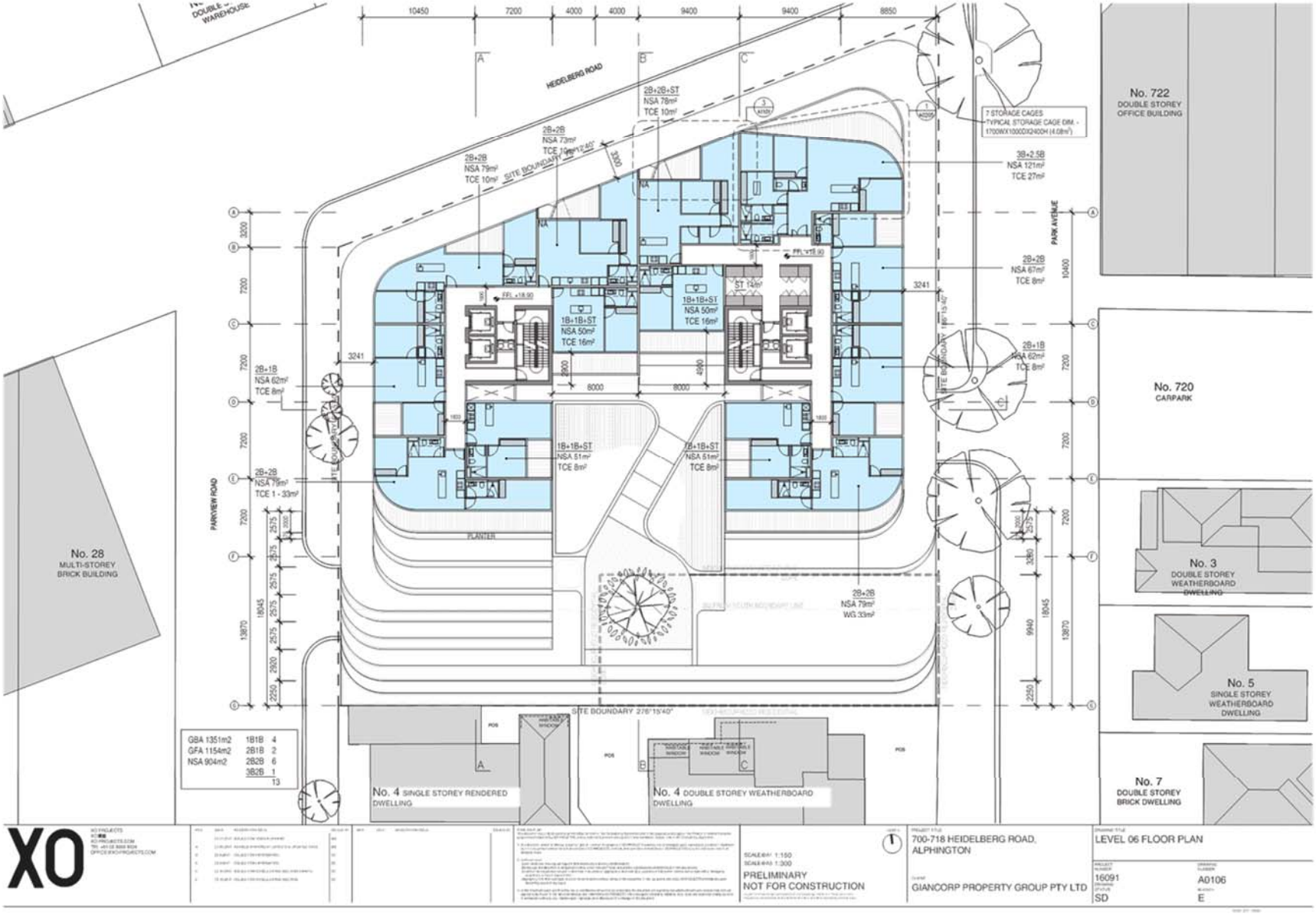
Attachment 1 - Decision Plans



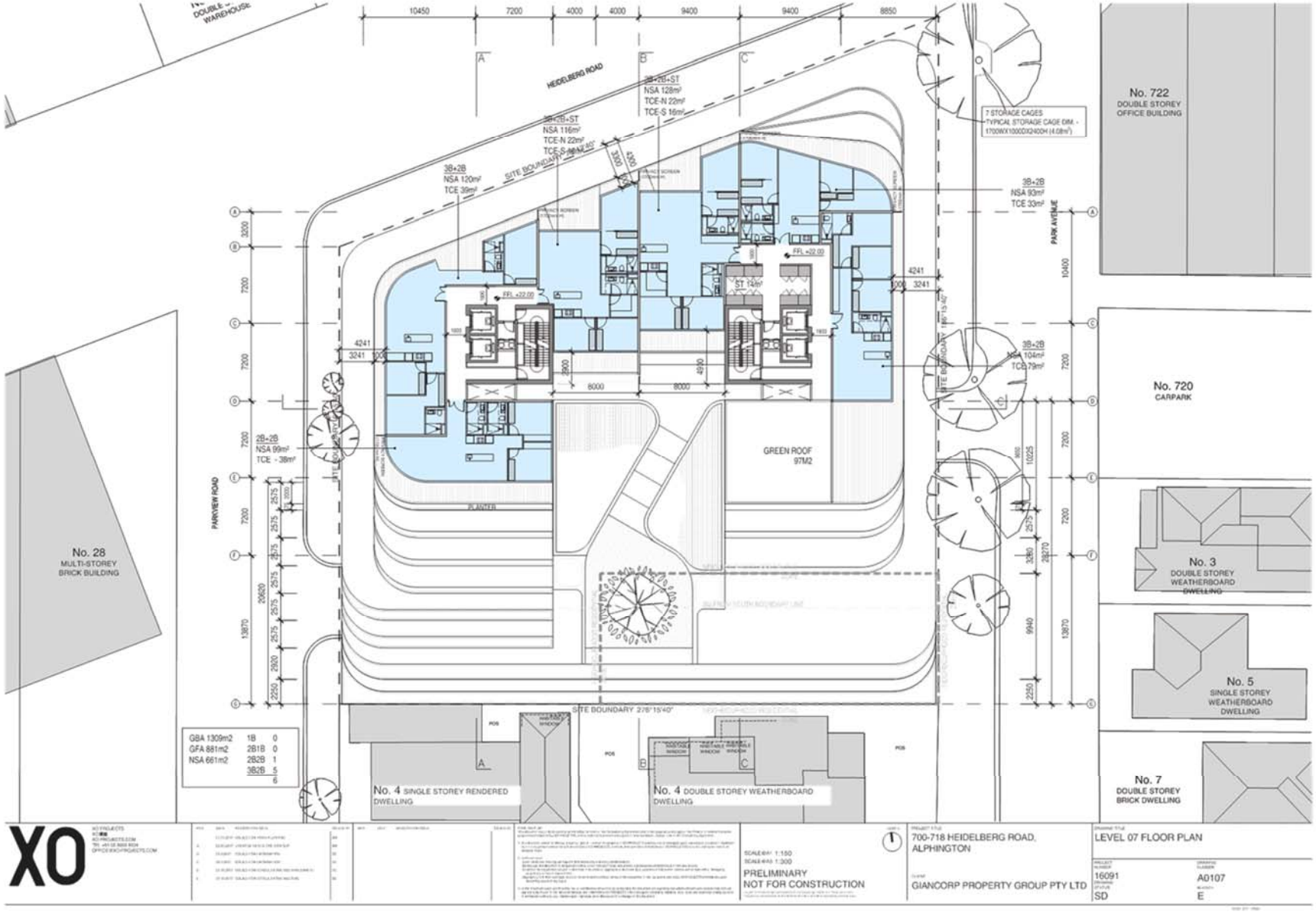
Attachment 1 - Decision Plans



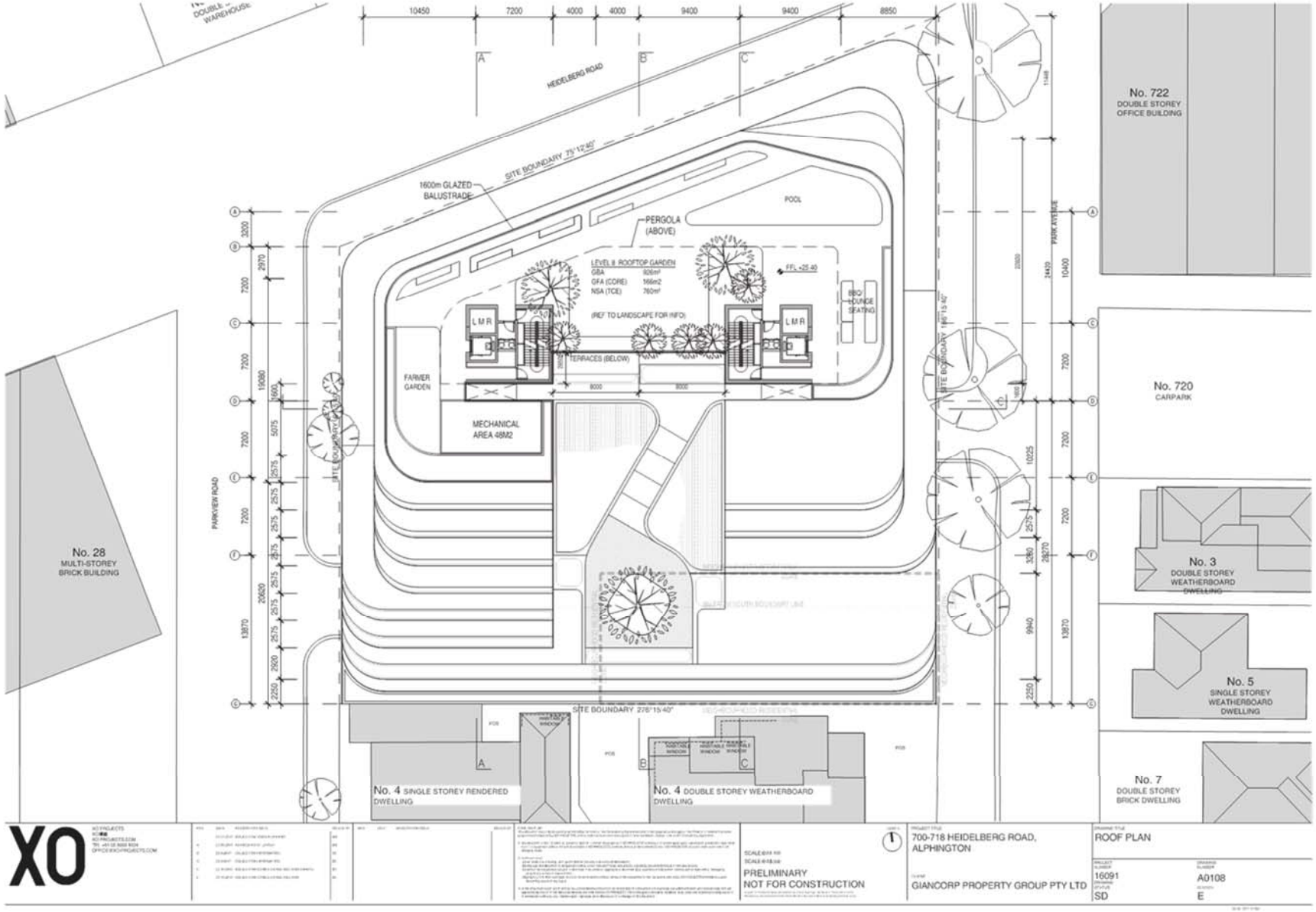
Attachment 1 - Decision Plans



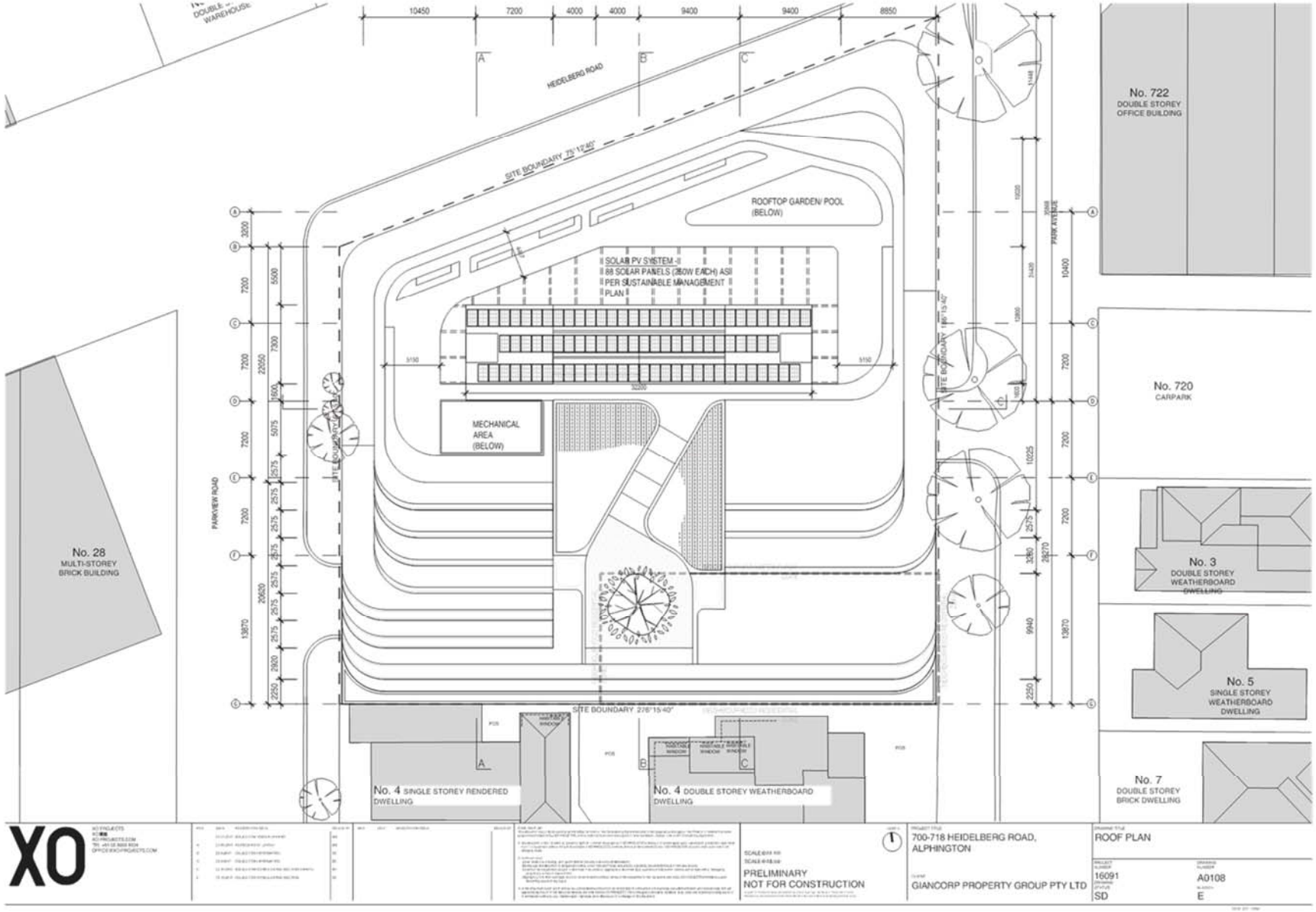
Attachment 1 - Decision Plans



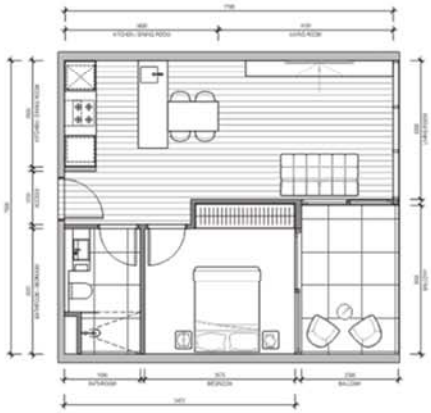
Attachment 1 - Decision Plans



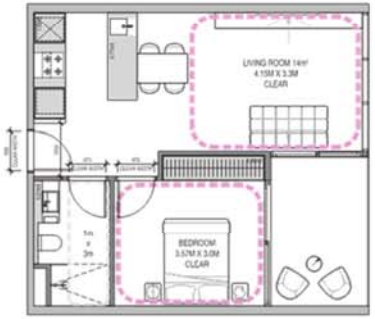
Attachment 1 - Decision Plans



Attachment 1 - Decision Plans



TYPICAL ONE BEDROOM APARTMENT (1B+1B)
NET SALEABLE AREA = 51m²
BALCONY AREA = 8m²



TYPICAL ONE BEDROOM APARTMENT (1B+1B)
DWELLING AMENITY

STORAGE VOLUME WITHIN THE APARTMENT =
6.0m³

XO

PRELIMINARY
NOT FOR CONSTRUCTION

700-718 HEIDELBERG ROAD,
ALPHINGTON

GIANCORP PROPERTY GROUP PTY LTD

TYPICAL BEDROOM APARTMENT LAYOUTS
ONE BEDROOM TYPE-A

16091

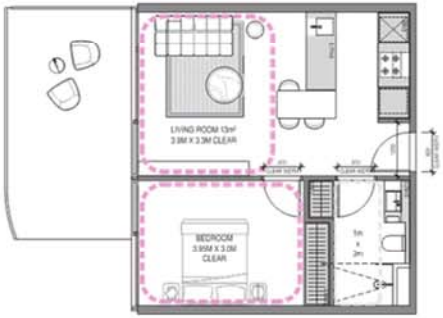
A0200

SD

B

Attachment 1 - Decision Plans

TYPICAL ONE BEDROOM APARTMENT (1B+1B)
NET SALEABLE AREA = 49m²
BALCONY AREA = 16m²



TYPICAL ONE BEDROOM APARTMENT (1B+1B)
DWELLING AMENITY
STORAGE VOLUME WITHIN THE APARTMENT =
6.76m²

XO

PRELIMINARY
NOT FOR CONSTRUCTION

700-718 HEIDELBERG ROAD,
ALPHINGTON

GIANCORP PROPERTY GROUP PTY LTD

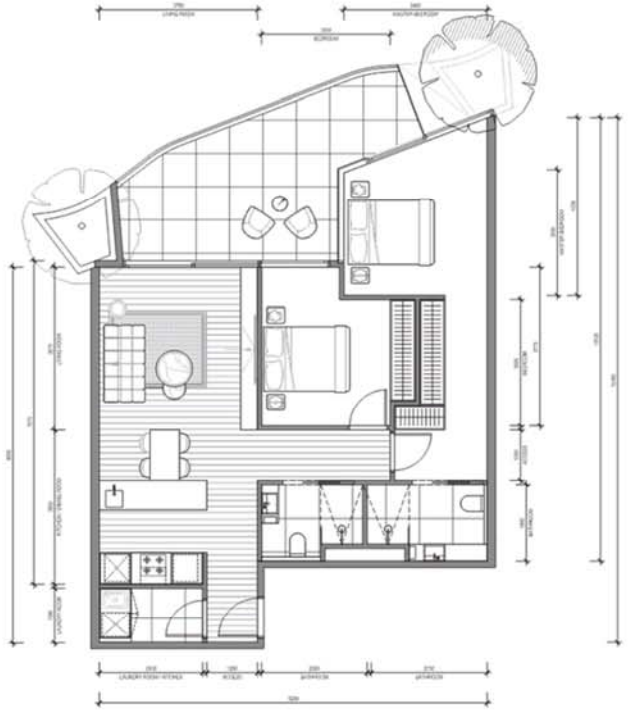
TYPICAL BEDROOM APARTMENT LAYOUTS
ONE BEDROOM TYPE-B

16091

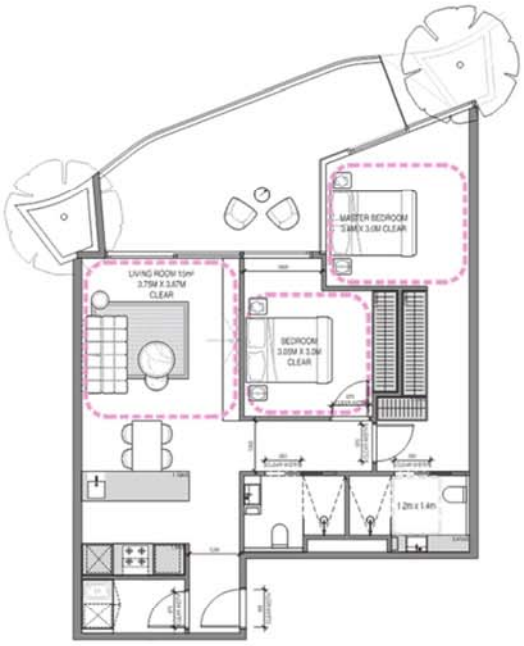
A0201

SD

Attachment 1 - Decision Plans



TYPICAL TWO BEDROOM APARTMENT (2B+2B)
NET SALEABLE AREA = 86m²
BALCONY AREA = 21m²



TYPICAL TWO BEDROOM APARTMENT (2B+2B)
DWELLING AMENITY

STORAGE VOLUME WITHIN THE APARTMENT =

XO

PRELIMINARY
NOT FOR CONSTRUCTION

700-718 HEIDELBERG ROAD,
ALPHINGTON

GIANCORP PROPERTY GROUP PTY LTD

TYPICAL BEDROOM APARTMENT LAYOUTS
TWO BEDROOM TYPE-A

16091

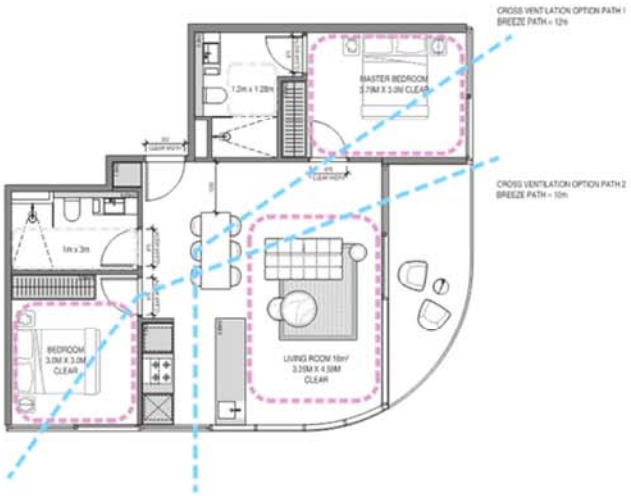
A0202

SD

B

Attachment 1 - Decision Plans

TYPICAL TWO BEDROOM APARTMENT (2B+2B)
NET SALEABLE AREA = 76m²
BALCONY AREA = 10m²



TYPICAL TWO BEDROOM APARTMENT (2B+2B)
DWELLING AMENITY

STORAGE VOLUME WITHIN THE APARTMENT =
9.42m³

XO

PRELIMINARY
NOT FOR CONSTRUCTION

700-718 HEIDELBERG ROAD,
ALPHINGTON

GIANCORP PROPERTY GROUP PTY LTD

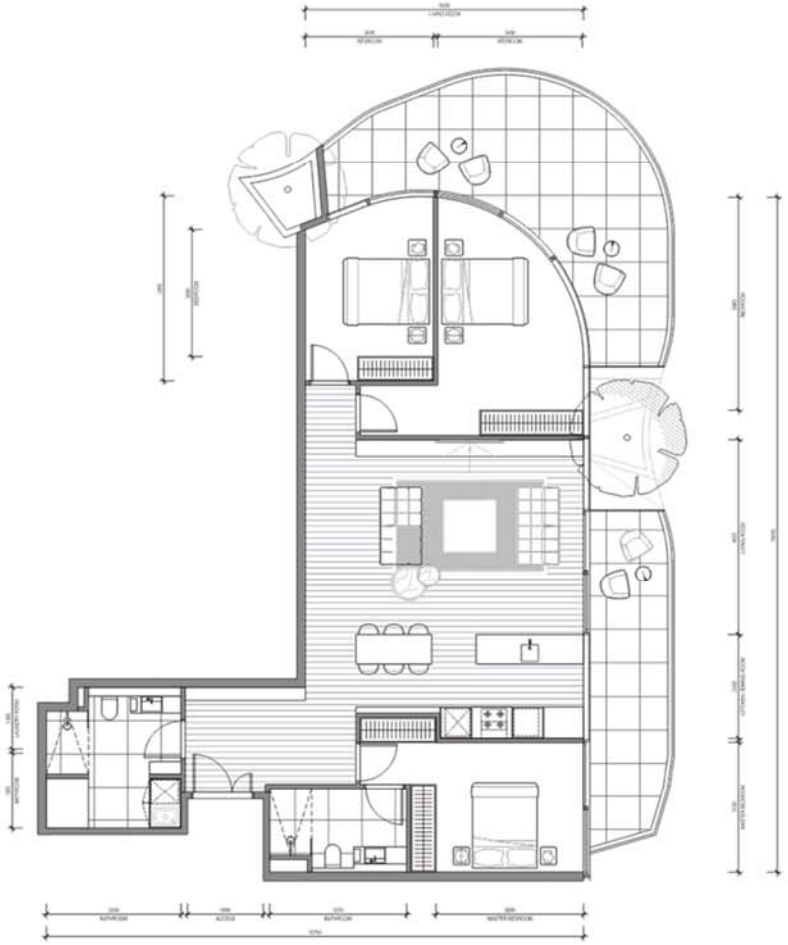
TYPICAL BEDROOM APARTMENT LAYOUTS
TWO BEDROOM TYPE-B

16091

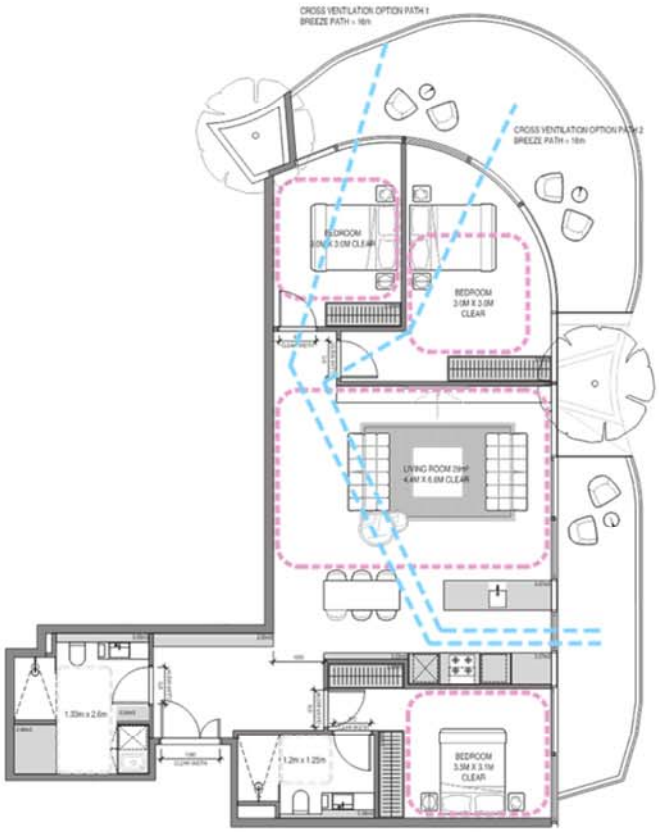
A0203

SD

Attachment 1 - Decision Plans



TYPICAL THREE BEDROOM APARTMENT (3B+2B)
NET SALEABLE AREA = 129m²
BALCONY AREA = 46m²



TYPICAL THREE BEDROOM APARTMENT (3B+2B)
DWELLING AMENITY

STORAGE VOLUME WITHIN THE APARTMENT =
20.55m³

XO

PRELIMINARY
NOT FOR CONSTRUCTION

700-718 HEIDELBERG ROAD,
ALPHINGTON

GIANCORP PROPERTY GROUP PTY LTD

TYPICAL BEDROOM APARTMENT LAYOUTS
THREE BEDROOM TYPE-A

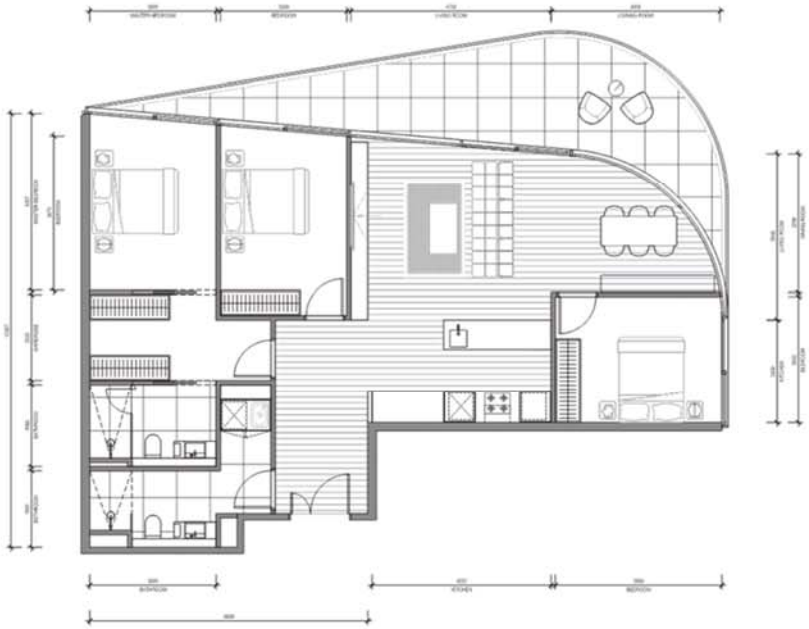
16091

A0204

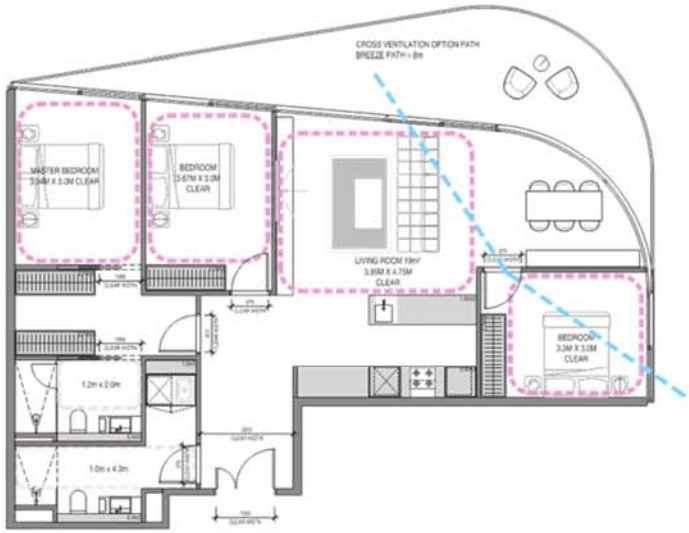
SD

B

Attachment 1 - Decision Plans



TYPICAL THREE BEDROOM APARTMENT (3B+2B)
NET SALEABLE AREA = 121m²
BALCONY AREA = 27m²



TYPICAL THREE BEDROOM APARTMENT (3B+2B)
DWELLING AMENITY

STORAGE VOLUME WITHIN THE APARTMENT =
16.97M³

XO

PRELIMINARY
NOT FOR CONSTRUCTION

700-718 HEIDELBERG ROAD,
ALPHINGTON

GIANCORP PROPERTY GROUP PTY LTD

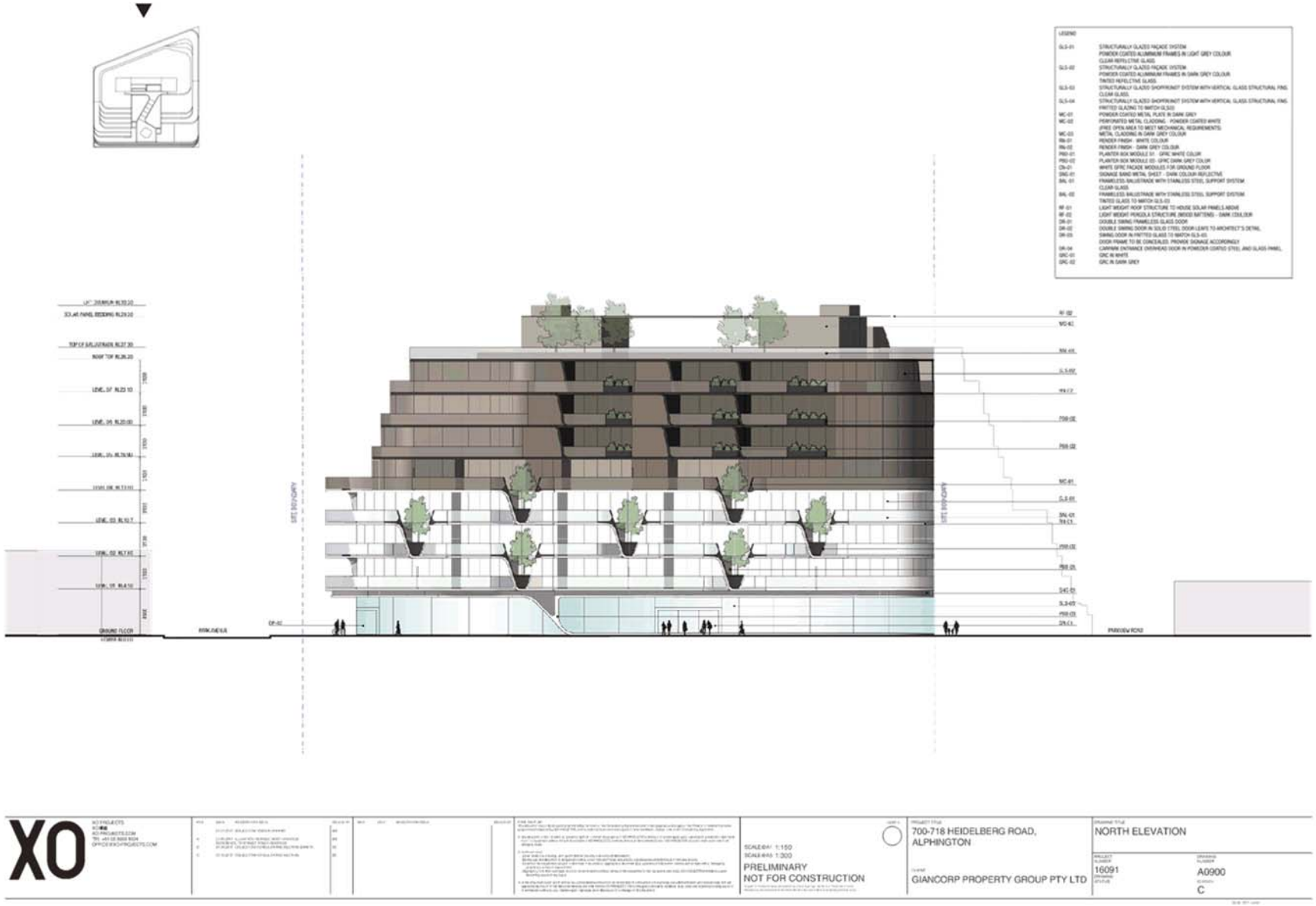
TYPICAL BEDROOM APARTMENT LAYOUTS
THREE BEDROOM TYPE-B

16091

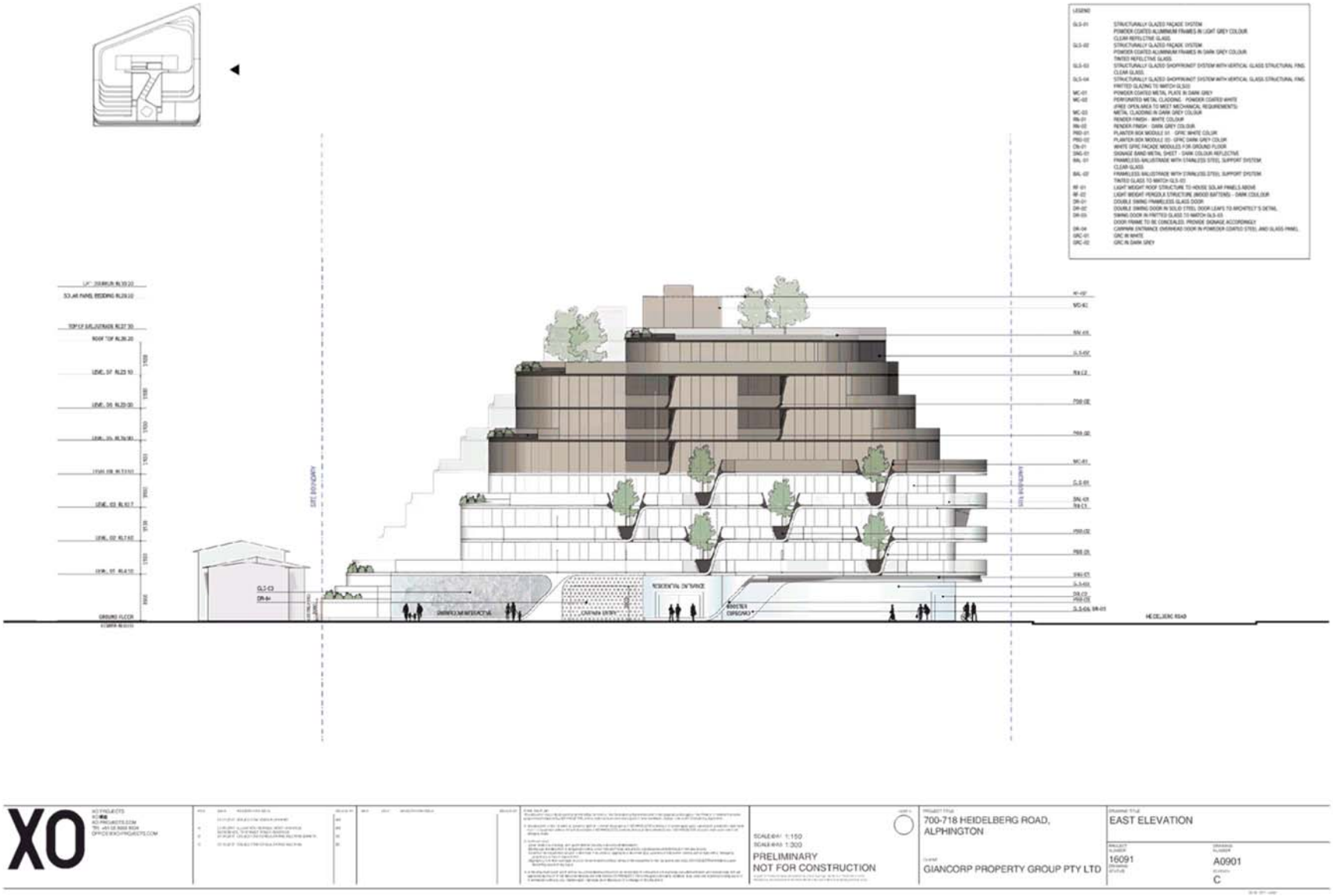
A0205

SD

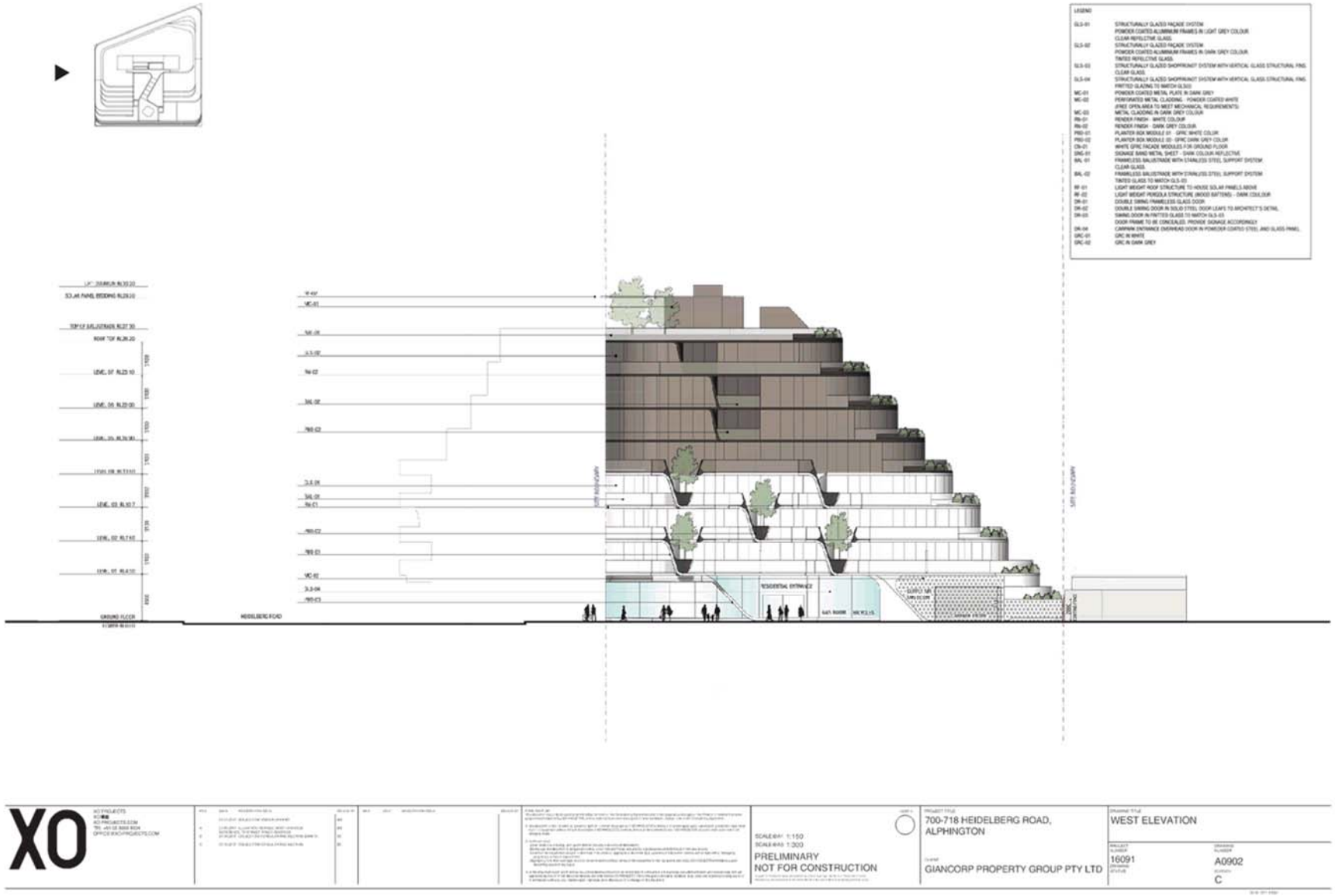
Attachment 1 - Decision Plans



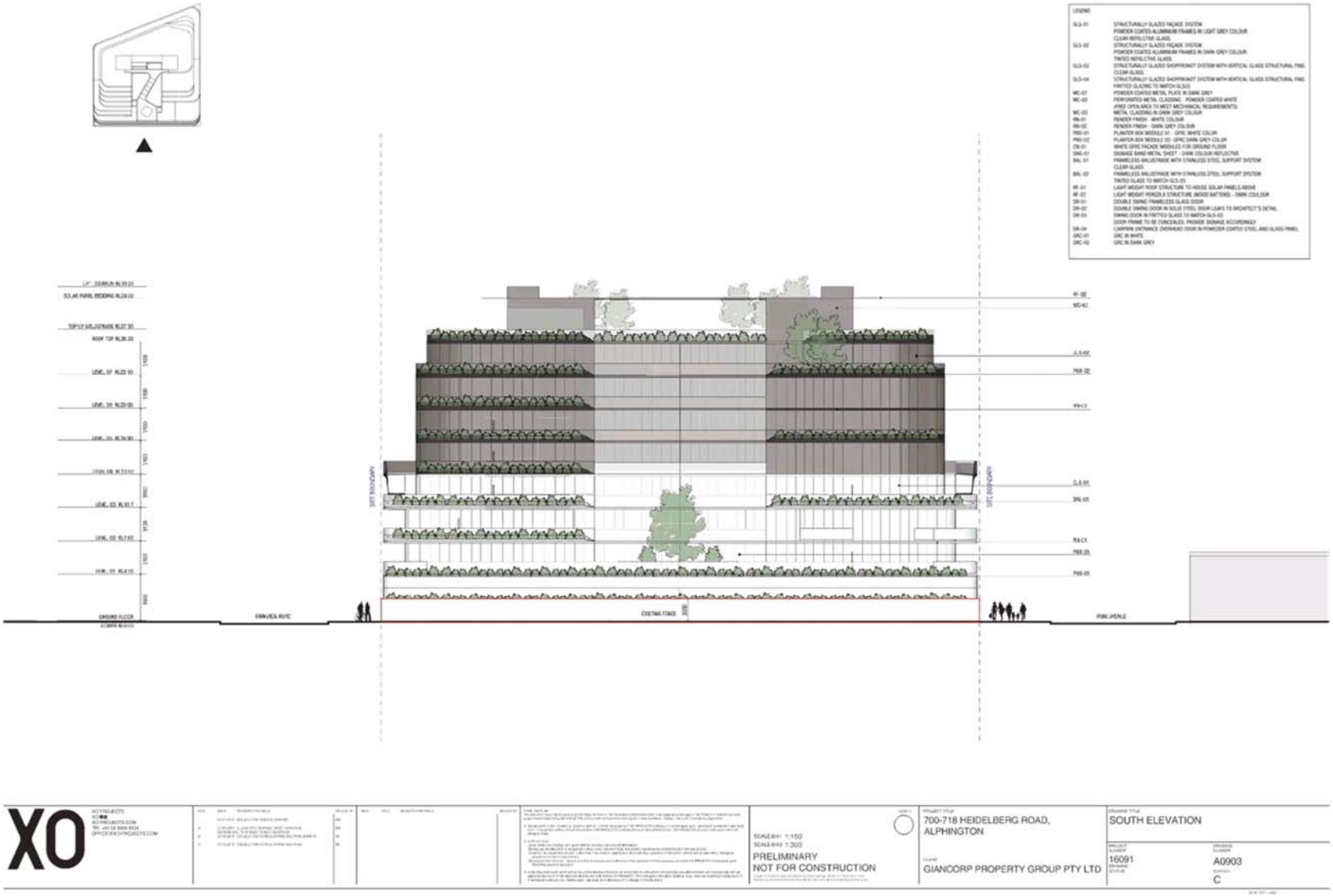
Attachment 1 - Decision Plans



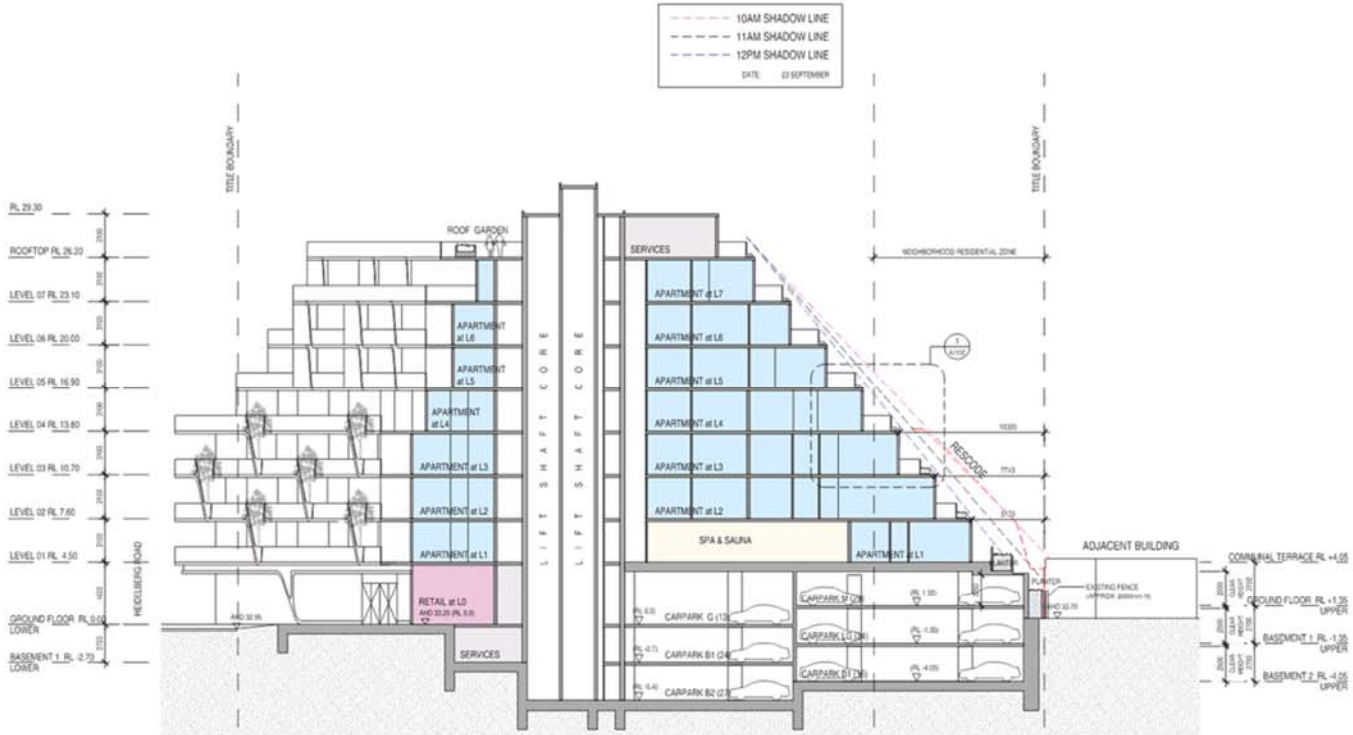
Attachment 1 - Decision Plans



Attachment 1 - Decision Plans



Attachment 1 - Decision Plans



XO

SCALE@A1: 1:150
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PRELIMINARY
NOT FOR CONSTRUCTION

700-718 HEIDELBERG ROAD, ALPHINGTON

GIANCORP PROPERTY GROUP PTY LTD

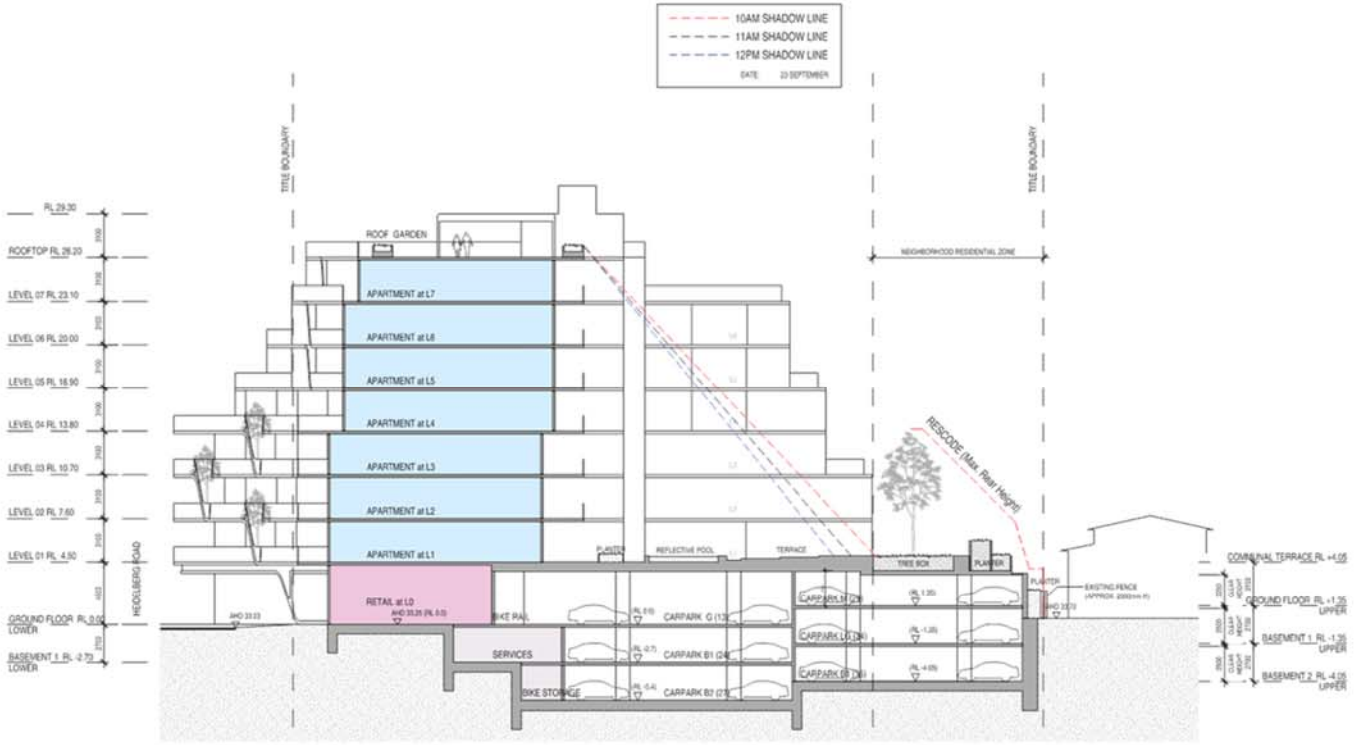
SECTION AA

16091

A0950

E

Attachment 1 - Decision Plans



XO

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PRELIMINARY
NOT FOR CONSTRUCTION

700-718 HEIDELBERG ROAD, ALPHINGTON

GIANCORP PROPERTY GROUP PTY LTD

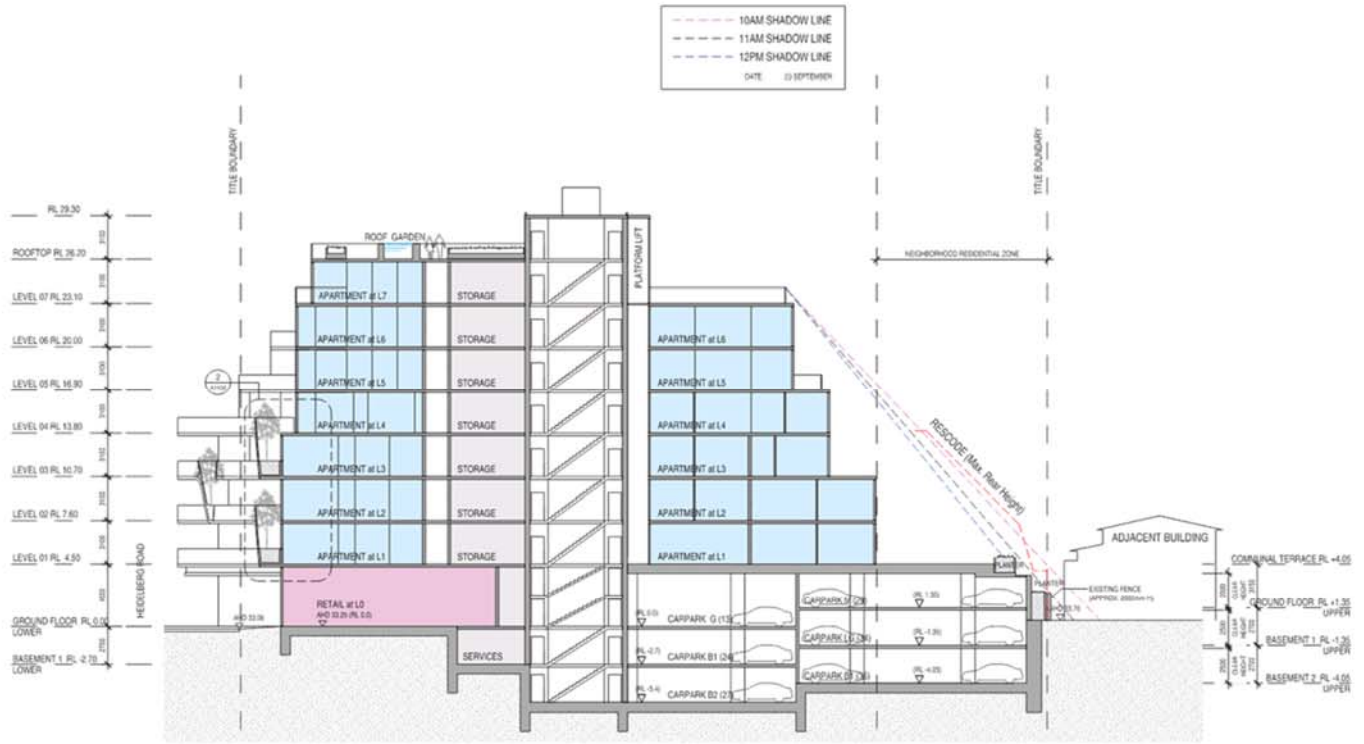
SECTION BB

16091

A0951

E

Attachment 1 - Decision Plans



XO

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PRELIMINARY
NOT FOR CONSTRUCTION

700-718 HEIDELBERG ROAD,
ALPHINGTON

GIANCORP PROPERTY GROUP PTY LTD

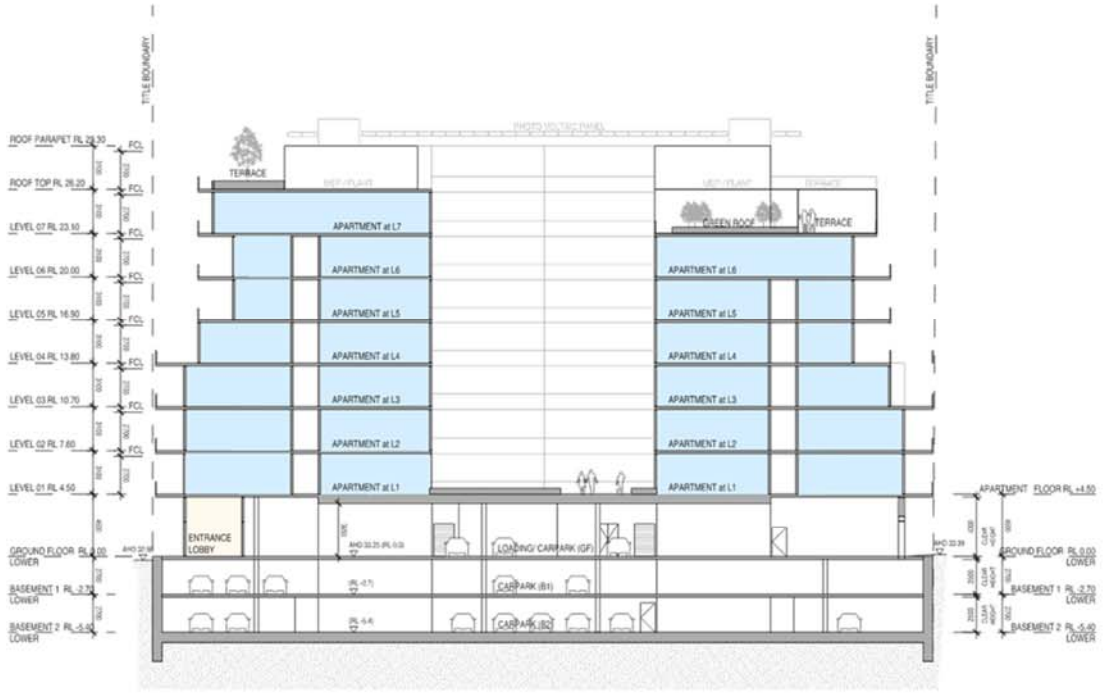
SECTION CC

16091

A0952

E

Attachment 1 - Decision Plans



XO

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PRELIMINARY
NOT FOR CONSTRUCTION

700-718 HEIDELBERG ROAD,
ALPHINGTON

GIANCORP PROPERTY GROUP PTY LTD

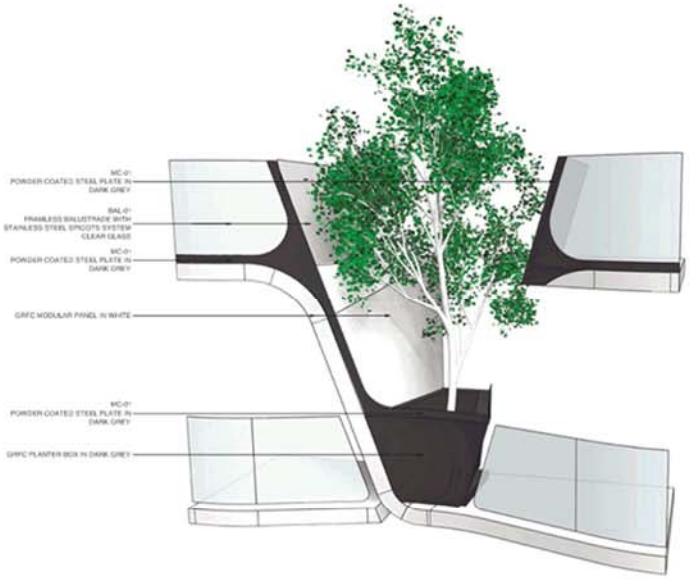
SECTION DD

16091

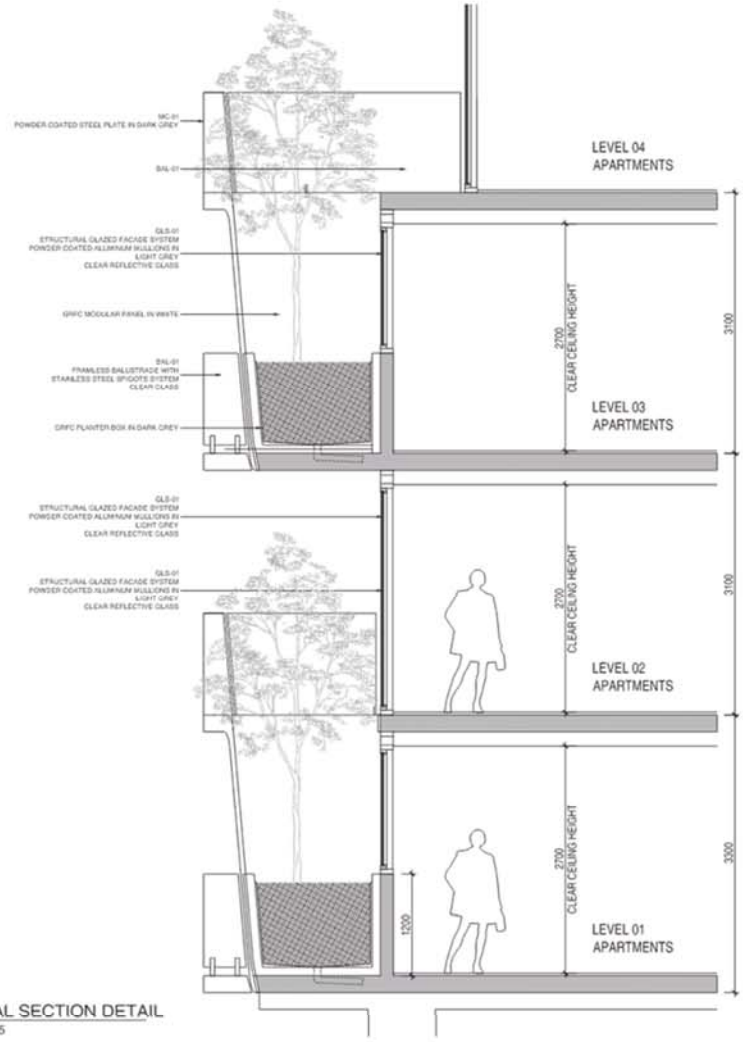
A0953

E

Attachment 1 - Decision Plans



1 – 3D VIEW OF ELEMENTAL DETAIL
FOR DESIGN INTENT ONLY NOT TO SCALE



2 – TYPICAL SECTION DETAIL
SCALE 1:25

XO

PRELIMINARY
NOT FOR CONSTRUCTION

700-718 HEIDELBERG ROAD,
ALPHINGTON

GIANCORP PROPERTY GROUP PTY LTD

ELEMENTAL DETAILS
TYPICAL PLANTER (L) DETAIL

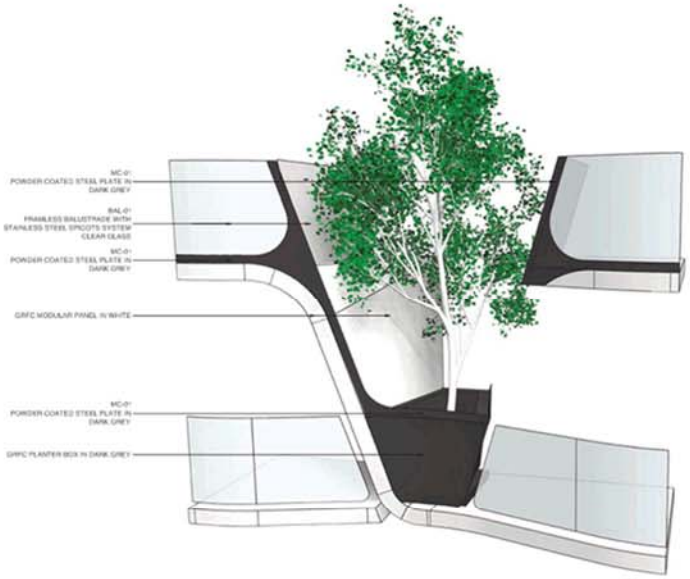
16091

A1100

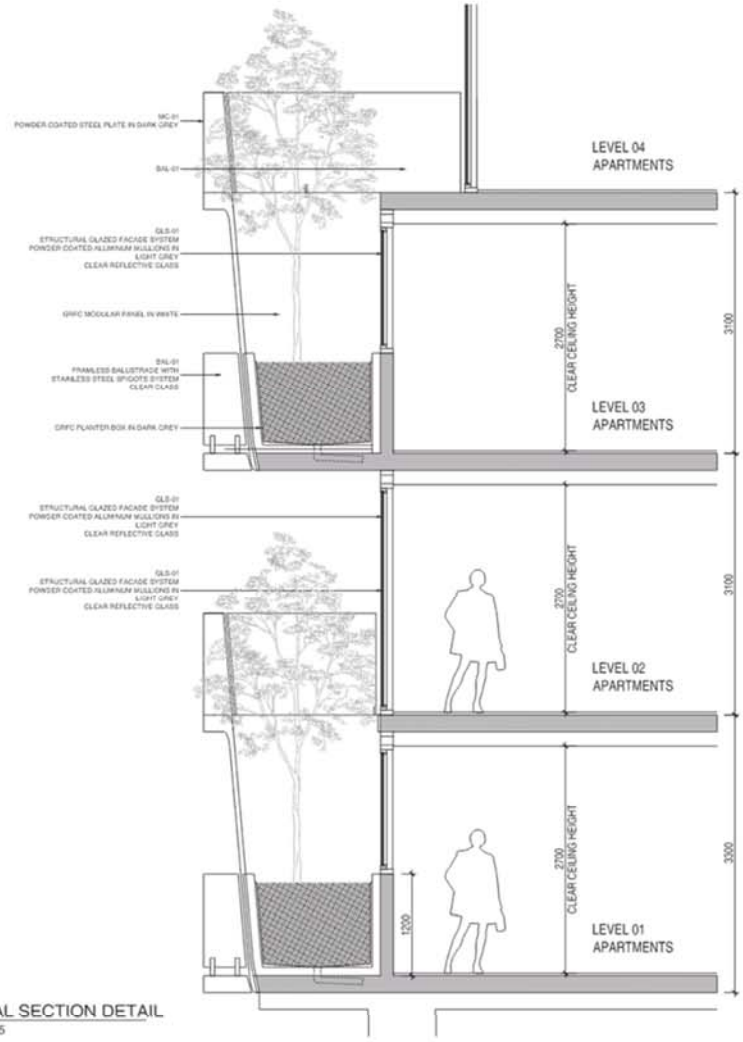
SD

B

Attachment 1 - Decision Plans



1 – 3D VIEW OF ELEMENTAL DETAIL
FOR DESIGN INTENT ONLY NOT TO SCALE



2 – TYPICAL SECTION DETAIL
SCALE 1:25

XO

700-718 HEIDELBERG ROAD, ALPHINGTON

PRELIMINARY
NOT FOR CONSTRUCTION

GIANCORP PROPERTY GROUP PTY LTD

ELEMENTAL DETAILS
TYPICAL PLANTER (L) DETAIL

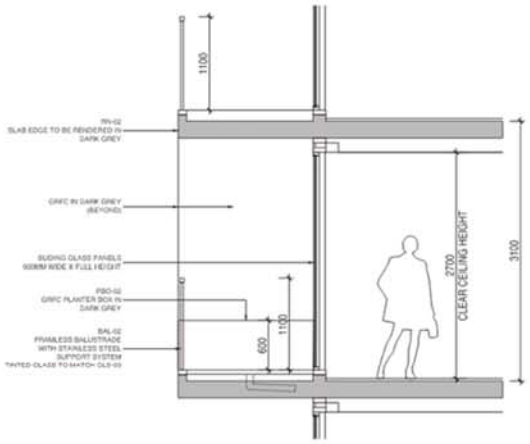
16091

A1100

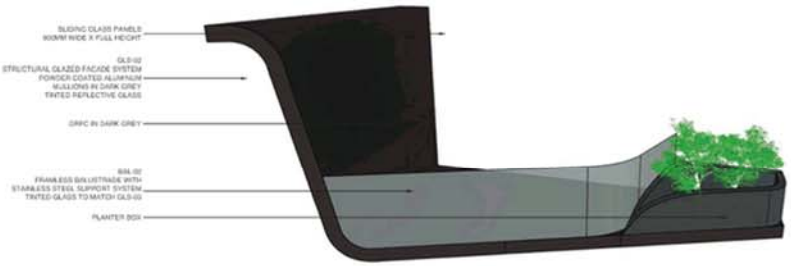
SD

B

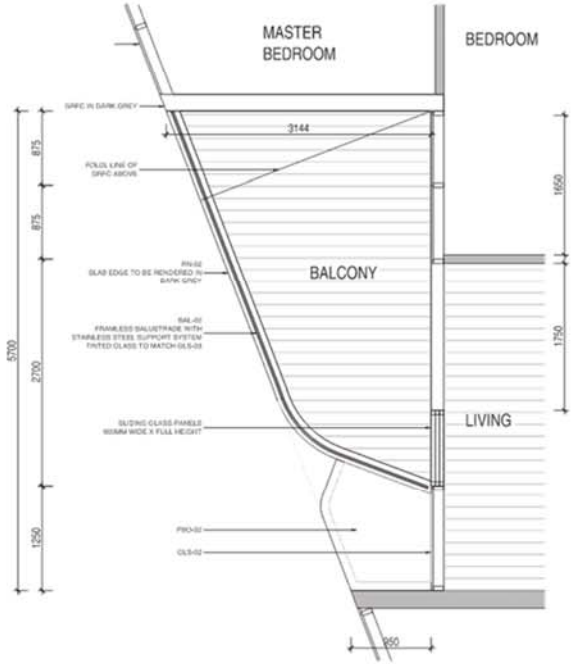
Attachment 1 - Decision Plans



1 – BALUSTRADE SECTION DETAIL
SCALE 1:25 SECTION DETAIL



2 – 3D VIEW OF SCREEN DETAIL
FOR DESIGN INTENT ONLY. NOT TO SCALE.



3 – BALCONY PLAN DETAIL
SCALE 1:25

XO

700-718 HEIDELBERG ROAD, ALPHINGTON

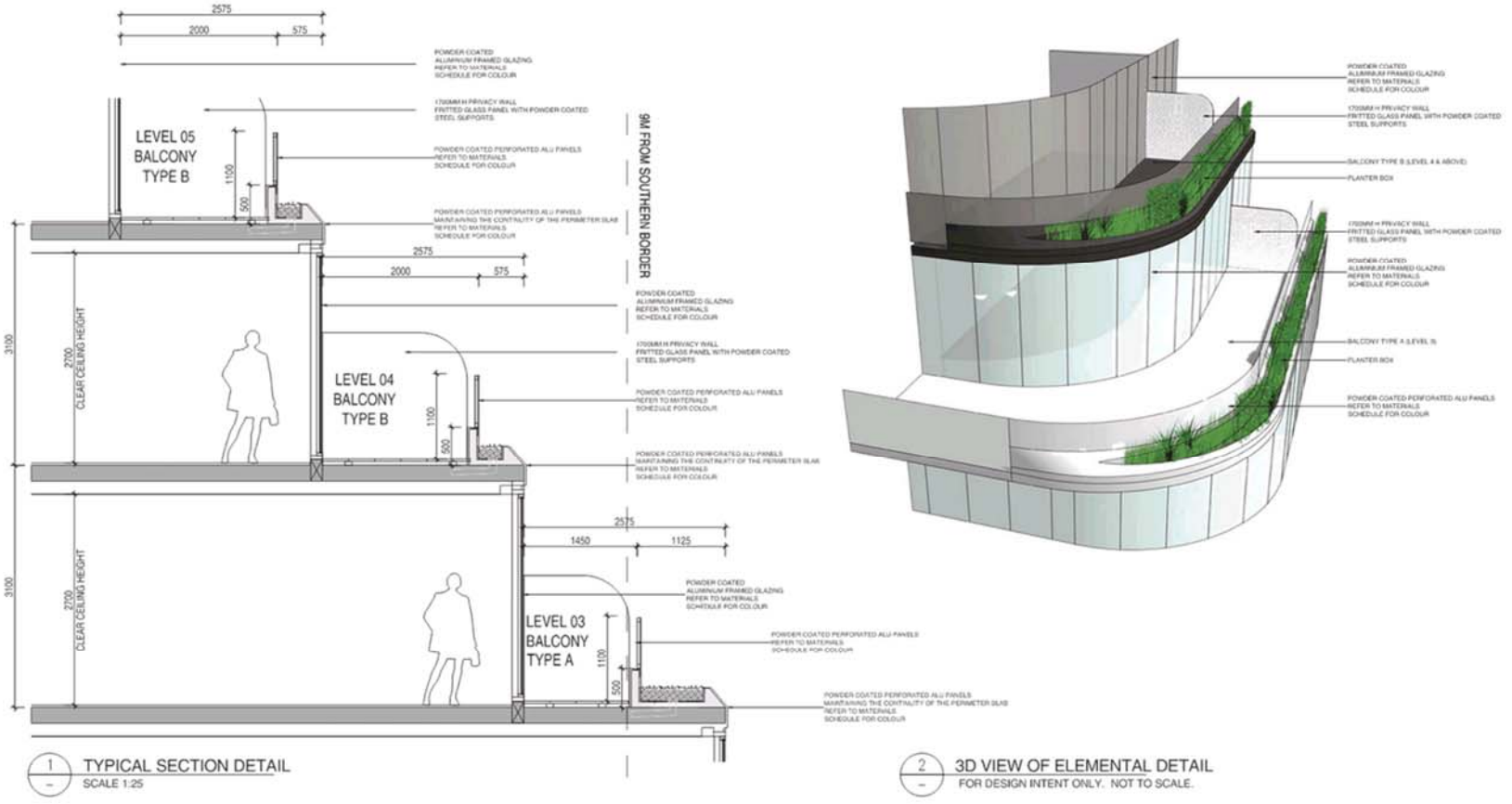
PRELIMINARY
NOT FOR CONSTRUCTION

GIANCORP PROPERTY GROUP PTY LTD

ELEMENTAL DETAILS
TYPICAL BALCONY WITH PLANTER(S) DETAIL

16091
A1101
SD
A

Attachment 1 - Decision Plans



XO

700-718 HEIDELBERG ROAD,
ALPHINGTON

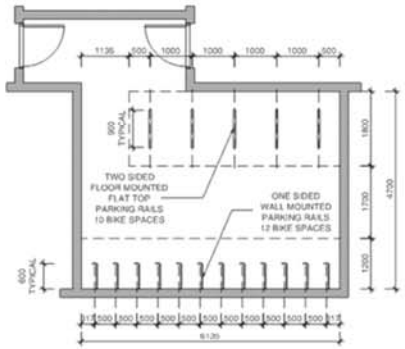
PRELIMINARY
NOT FOR CONSTRUCTION

GIANCORP PROPERTY GROUP PTY LTD

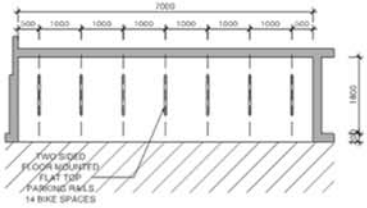
ELEMENTAL DETAILS
TYPICAL SOUTH FACING BALCONY

16091
SD
A1102

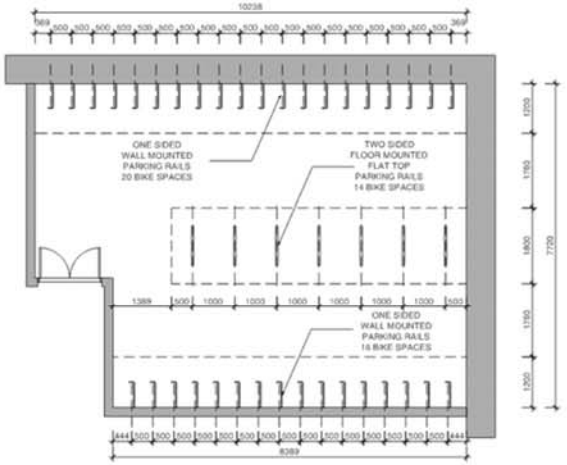
Attachment 1 - Decision Plans



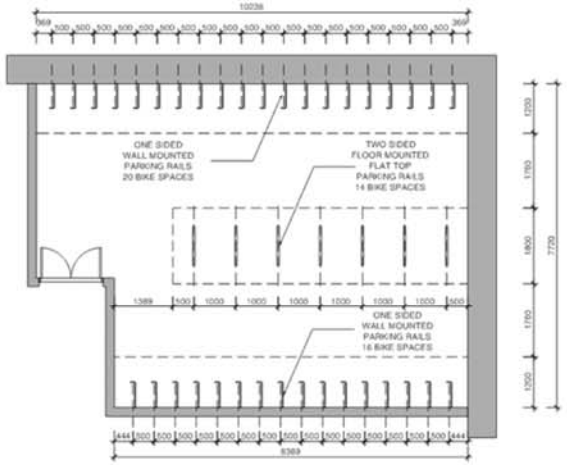
1 BIKE STORAGE DETAIL PLAN
GROUND FLOOR SCALE 1:50
SIZES & SPACES AS PER 'AS 2890.3-2015'



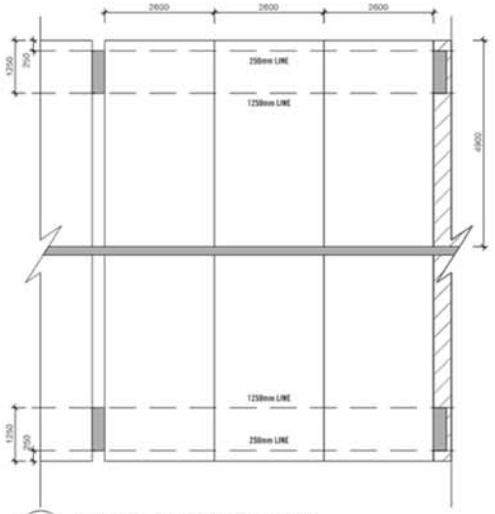
2 BIKE STORAGE DETAIL PLAN
GROUND FLOOR SCALE 1:50
SIZES & SPACES AS PER 'AS 2890.3-2015'



3 BIKE STORAGE TYPICAL DETAIL PLAN
B2 BASEMENT SCALE 1:50
SIZES & SPACES AS PER 'AS 2890.3-2015'



4 BIKE STORAGE TYPICAL DETAIL PLAN
B2 BASEMENT SCALE 1:50
SIZES & SPACES AS PER 'AS 2890.3-2015'



5 TYPICAL CAR PARKING BAY
SCALE 1:50
CAR PARKING PROVISIONS AS PER TRAFFIC ENGINEERS REPORT.

XO

700-718 HEIDELBERG ROAD, ALPHINGTON

PRELIMINARY
NOT FOR CONSTRUCTION

GIANCORP PROPERTY GROUP PTY LTD

CAR & BIKE PARKING SPACES PLAN DETAIL

16091 | A1103
SD | A

Attachment 1 - Decision Plans

XO

16091 700-718 Heidelberg Road, Alphington, VICTORIA
DATE 17/01/2018
STAGE TP
REV B

DEVELOPMENT SUMMARY_700-718 Heidelberg Road, Alphington, VICTORIA

BUILDING DATA

PROGRAM	Residential, Commercial, Retail, Carpark
SITE AREA	2,979m2
LEVELS	8 Storey
BCR	1.0
FSR	4.6
BUILDING HEIGHT	Podium: / Tower:

Notes and Disclaimer:
1. This scheme has been produced without planning advice or preliminary meetings with the responsible authorities and as such may not comply with building or other statutory regulations. It represents a possible development that may be achieved with full consultation and liaison with state government and other relevant authorities, however no warranty is given that the yield or layouts will be acceptable to the authorities or other interested parties. Hence XO Projects presents this information as a possible solution only, subject to council approval.
2. This scheme and schedule have been prepared for preliminary feasibility purposes only. The information herein is based on the limited information available at the time of preparation and is believed to be correct at the time of preparation however is not guaranteed.
3. The layouts contained herein were prepared without structural or services advice hence no allowance has been made at this stage.
4. Changes to the layouts and associated figures will be made during the development of the project hence recipients must rely on their own enquiries to satisfy themselves in all aspects.
5. Apartment areas have been measured to the centreline of party and/or bounding walls. Areas do not allow for services, risers, or structure.

LEVELS	RESIDENTIAL														RETAIL / COMMERCIAL				CARPARK		BICYCLE STORAGE		TOTAL	
	TYPES	1B1B	2B1B	2B2B	3B2B	NR.	NSA	GFA	GBA	EFFICIENCY	SERVICE: AMENITY	SERVICE: CORE / CORRIDOR	SERVICE: STORAGE	TCE OUTDOOR	NLA	GFA	EFFICIENCY	SERVICE / AMENITY	NR.	GFA	NR.	GFA	NSA	GFA (excl. Carpark & Bicycle Parking)
	NSA	50	70	75	115																			
	TCE (MIN)	8	8	8	12																			
	CARPARK	1	1	1	2																			
	NSA+TCE	58	78	83	127																			
ROOF								166	926			166		760									-	166
L7		0	0	1	5	6	661	881	1,309	75%		196	24	428									661	881
L6		4	2	6	1	13	904	1,154	1,351	78%		226	24	197									904	1,154
L5		4	3	6	1	14	967	1,224	1,394	79%		233	24	170									967	1,224
L4		6	3	6	1	16	1,086	1,348	1,770	81%		238	24	422									1,086	1,348
L3		9	2	6	1	18	1,205	1,485	1,932	81%		250	30	447									1,205	1,485
L2		11	3	5	1	20	1,326	1,608	2,047	82%		252	30	439									1,326	1,608
L1		9	3	5	1	18	1,214	1,517	2,903	80%	175	273	30	1,386									1,214	1,517
M																			29	757			-	-
L0/ GROUND								383	383		153	230	-		708	708			38	1,448	36	52	708	1,091
B1								520	520		-	337	183						59	1,803	104	182	-	520
B2								250	250		-	129	121						27	884			-	250
TOTAL		43	16	35	11	105	7,363	10,536	14,785	80%	328	2,530	490	4,249	708	708		-	153	4,892	140	234	8,071	11,572
	BALANCE	41%	15%	33%	10%																		(*incl. Carpark & Bicycle Parking)	16,464
	41%		49%		10%																			

328 amenity
3.1 sqm/units

109 total number of external storage
346 total m3 of external storage (required = 332m3)
(calculation based on 2.7m H storage)

-1,702 -1,825
-17% -19%

Attachment 2 - Rendered Images

1.6 FACADE ARTICULATION AND DESIGN

RENDER SUBMITTED FOR RFI TO COUNCIL ON 18.05.2017

GLS-01	STRUCTURAL GLAZED FAÇADE SYSTEM. POWDER COATED ALUMINIUM FRAMES IN LIGHT GREY COLOUR. CLEAR REFELCTIVE GLASS.
GLS-02	STRUCTURAL GLAZED FAÇADE SYSTEM. POWDER COATED ALUMINIUM FRAMES IN DARK GREY COLOUR. TINTED REFELCTIVE GLASS.
GLS-03	STRUCTURAL GLAZED SHOPFRONOT SYSTEM WITH VERTICAL GLASS STRUCTURAL FINS. CLEAR GLASS.
GLS-04	STRUCTURAL GLAZED SHOPFRONOT SYSTEM WITH VERTICAL GLASS STRUCTURAL FINS. FRITTED GLAZING TO MATCH GLS03
MC-01	POWDER COATED METAL PLATE IN DARK GREY
MC-02	PERFORATED METAL CLADDING - POWDER COATED WHITE (FREE OPEN AREA TO MEET MECHANICAL REQUIREMENTS)
MC-03	METAL CLADDING IN DARK GREY COLOUR
RN-01	RENDER FINISH - WHITE COLOUR
RN-02	RENDER FINISH - DARK GREY COLOUR
PBO-01	PLANTER BOX MODULE 01 - GFRC WHITE COLOR
PBO-02	PLANTER BOX MODULE 02- GFRC DARK GREY COLOR
CN-01	WHITE GFRC FACADE MODULES FOR GROUND FLOOR
SNG-01	SIGNAGE BAND IN ANODIZED FINISH
BAL-01	FRAMELESS BALUSTRADE WITH STAINLESS STEEL SUPPORT SYSTEM. CLEAR GLASS
BAL-02	FRAMELESS BALUSTRADE WITH STAINLESS STEEL SUPPORT SYSTEM. TINTED GLASS TO MATCH GLS-03
RF-01	LIGHT WEIGHT ROOF STRUCTURE TO HOUSE SOLAR PANELS ABOVE
RF-02	LIGHT WEIGHT PERGOLA STRUCTURE (WOOD BATTENS)
DR-01	DOUBLE SWING FRAMELESS GLASS DOOR
DR-02	DOUBLE SWING DOOR IN SOLID STEEL DOOR LEAFS TO ARCHITECT'S DETAIL.
DR-03	SWING DOOR IN FRITTED GLASS TO MATCH GLS-03. DOOR FRAME TO BE CONCEALED. PROVIDE SIGNAGE ACCORDINGLY.
DR-04	CARPARK ENTRANCE OVERHEAD DOOR IN POWEDER COATED STEEL AND GLASS PANEL.
GRC-01	GRC IN WHITE FINISH
GRC-02	GRC IN DARK GREY FINISH

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Attachment 2 - Rendered Images

Attachment 2 - Rendered Images

View 05 towards Park Avenue

Attachment 2 - Rendered Images

700-718 HEIDELBERG ROAD_RESPONSE TO REFERRAL

View 06 from Park Avenue

37

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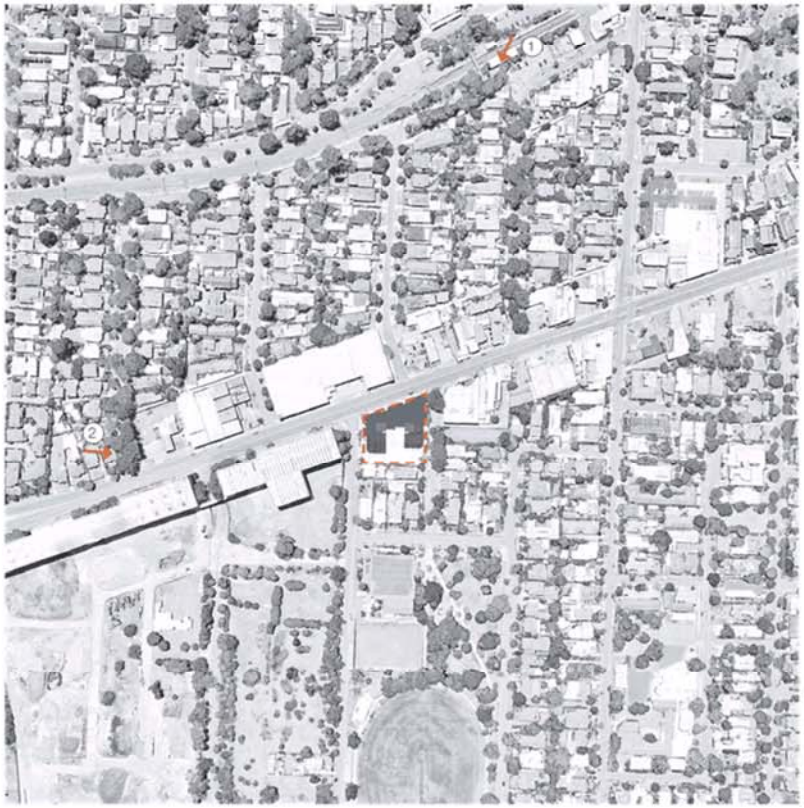
Attachment 2 - Rendered Images

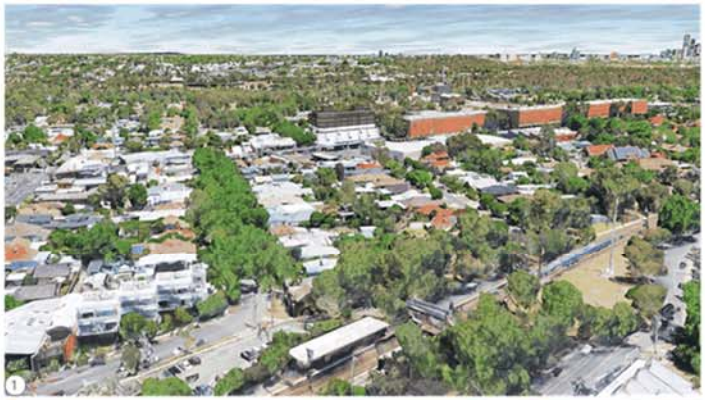
View 07 towards Parkview Road

Attachment 2 - Rendered Images

Attachment 2 - Rendered Images

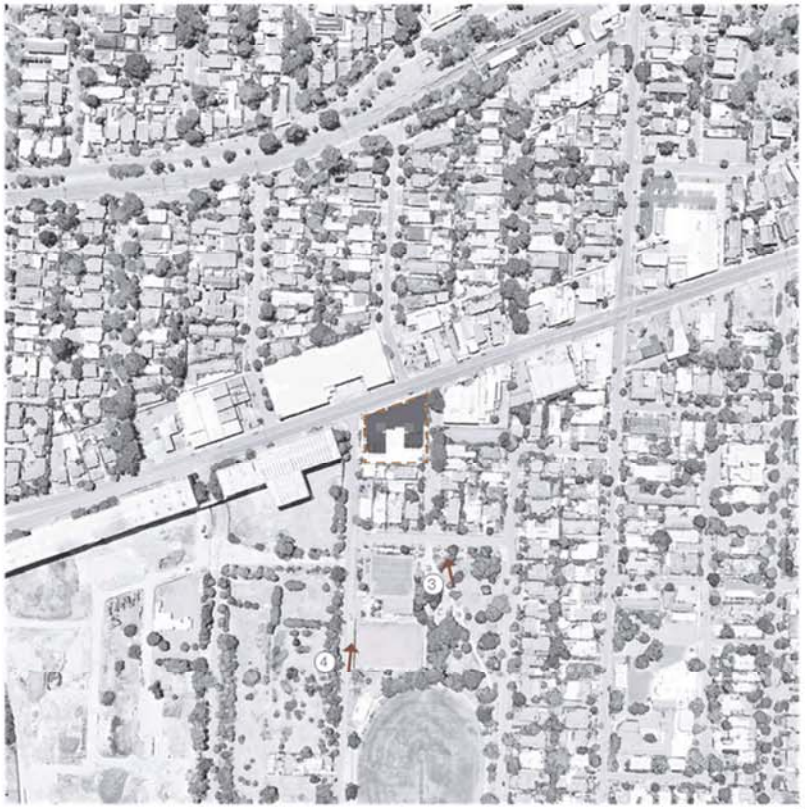
1.6
VANTAGE POINTS
SIMPLIFIED STREET VIEWS





Attachment 2 - Rendered Images

700-718 HEIDELBERG ROAD_RESPONSE TO REFERRAL



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Attachment 3 - Shadow Analysis

1.3 OFFSITE OVERSHADOWING

(COMPARISON)

09:00 AM

SUBMITTED PROPOSAL (dated 18.05.17)

AMENDED PROPOSAL

Shadowline from existing fence

POS

Shadowline from the proposed building

Overshadowing area by the porposed building

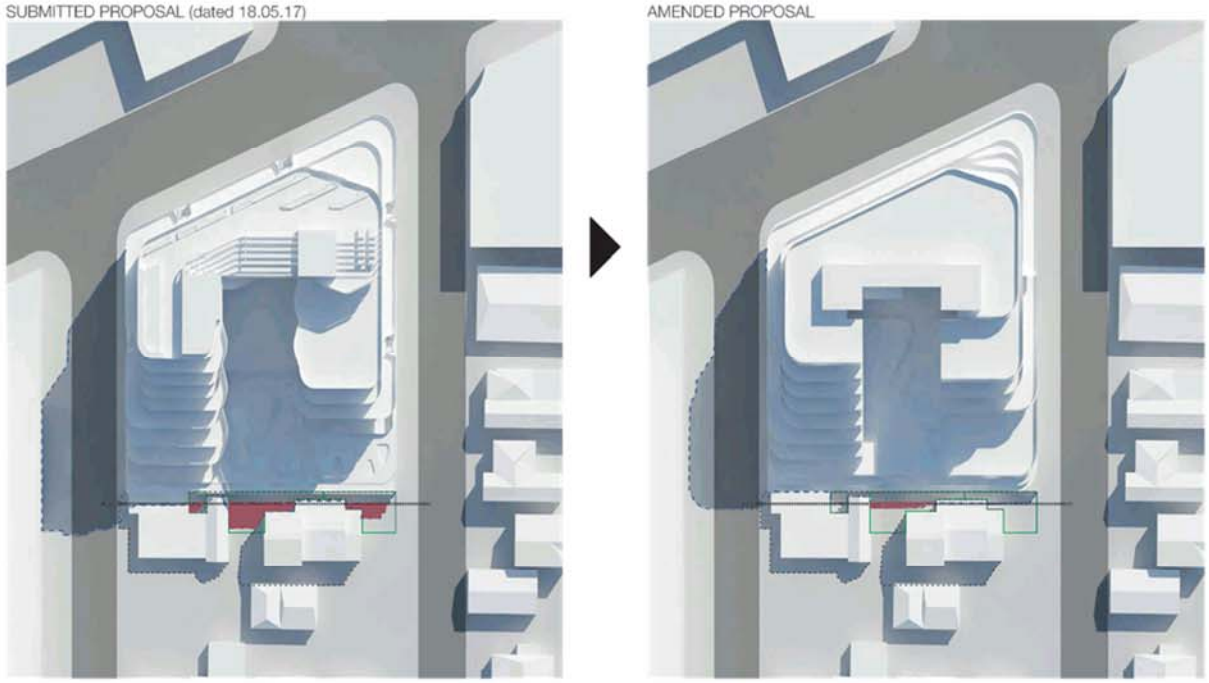
	POS 1	POS 2	POS 3
	12% (1.5M2)	13% (13M2)	12% (12M2)

	POS 1	POS 2	POS 3
	12% (1.5M2)	0%	0%
		-13%	-12%

Attachment 3 - Shadow Analysis

700-718 HEIDELBERG ROAD_RESPONSE TO REFERRAL

10:00 AM



Shadowline from existing fence

POS

Shadowline from the proposed building

Overshadowing area by the porposed building

	POS 1	POS 2	POS 3
	12% (1.5M2)	21% (21M2)	17% (17M2)
	0%	4% (4M2)	0%
	-12%	-16%	-17%

13

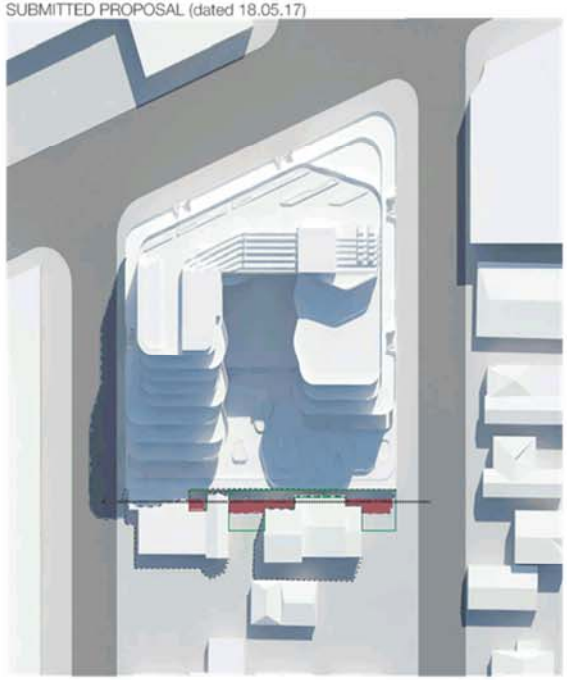
Attachment 3 - Shadow Analysis

1.3 OFFSITE OVERSHADOWING

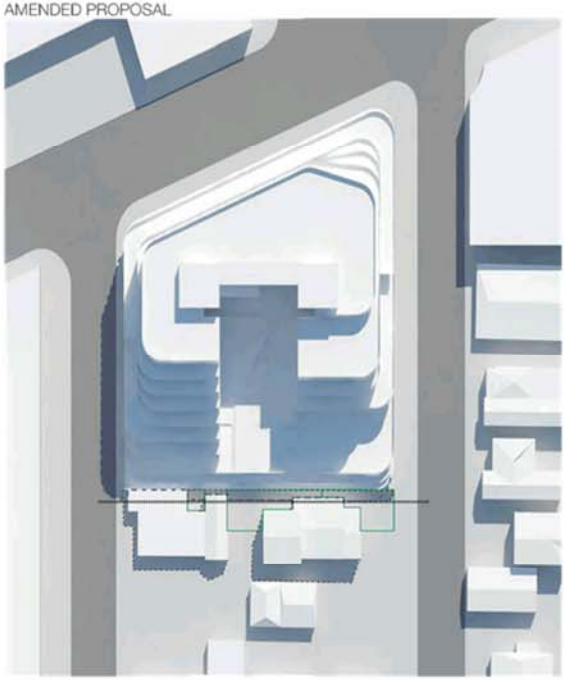
(COMPARISON)

11:00 AM

SUBMITTED PROPOSAL (dated 18.05.17)



AMENDED PROPOSAL



Shadowline from existing fence

POS

Shadowline from the proposed building

Overshadowing area by the porposed building

	POS 1	POS 2	POS 3
	31% (4M2)	10% (10M2)	10% (10M2)

	POS 1	POS 2	POS 3
	0% 0	0%	0%
	-31%	-10%	-10%

Attachment 3 - Shadow Analysis

700-718 HEIDELBERG ROAD_RESPONSE TO REFERRAL

12:00 PM

Shadowline from existing fence

POS

Shadowline from the proposed building

Overshadowing area by the porposed building

POS 1	POS 2	POS 3
46% (6M2)	11% (11M2)	11% (11M2)

POS 1	POS 2	POS 3
0%	0%	0%
-46%	-11%	-11%

15

Attachment 3 - Shadow Analysis

1.3 OFFSITE OVERSHADOWING

(COMPARISON)

1:00 PM

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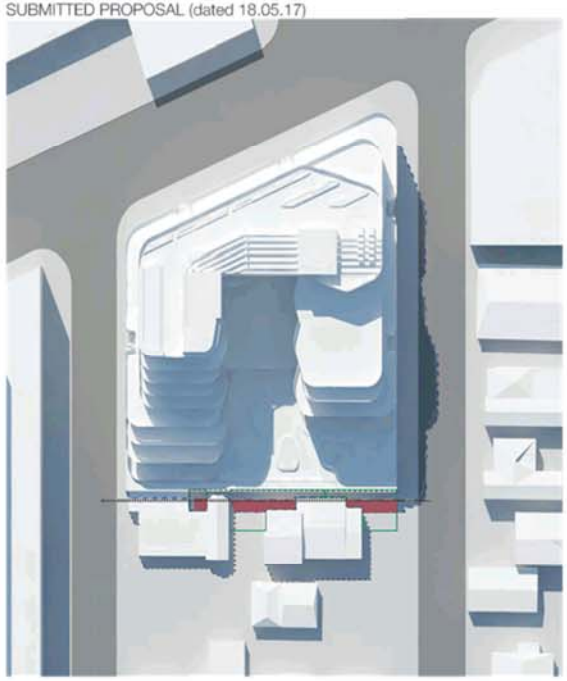
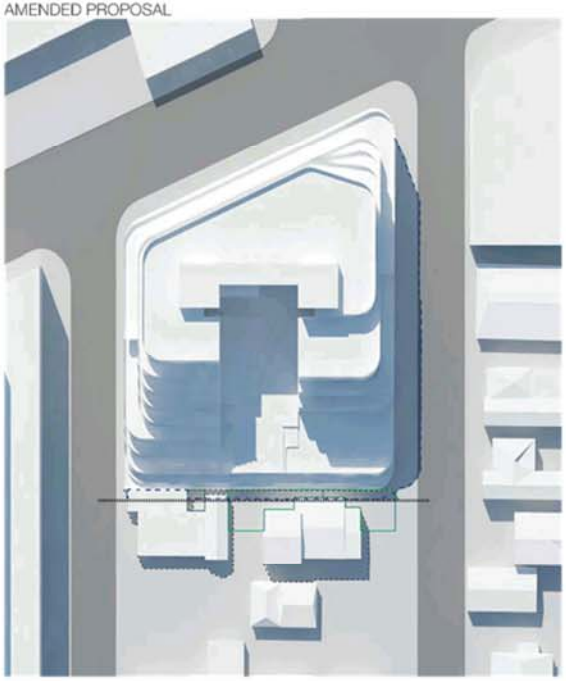


AMENDED PROPOSAL



Shadowline from existing fence

POS

Shadowline from the proposed building

Overshadowing area by the porposed building

	POS 1	POS 2	POS 3
SUBMITTED PROPOSAL (dated 18.05.17)	31% (4M2)	10% (10M2)	10% (10M2)
AMENDED PROPOSAL	0% 0	0%	0%
	-31%	-10%	-10%

Attachment 3 - Shadow Analysis

700-718 HEIDELBERG ROAD_RESPONSE TO REFERRAL

2:00 PM

Shadowline from existing fence

POS

Shadowline from the proposed building

Overshadowing area by the porposed building

	POS 1	POS 2	POS 3
	8% (1M2)	8% (8M2)	7% (7M2)

POS 1	POS 2	POS 3
0%	0%	0%
-8%	-8%	-7%

17

Attachment 3 - Shadow Analysis

1.3 OFFSITE OVERSHADOWING

(COMPARISON)

3:00 PM

SUBMITTED PROPOSAL (dated 18.05.17)

AMENDED PROPOSAL

Shadowline from existing fence

POS

Shadowline from the proposed building

Overshadowing area by the porposed building

	POS 1	POS 2	POS 3
	0%	5%	4%
		(5M2)	(4M2)

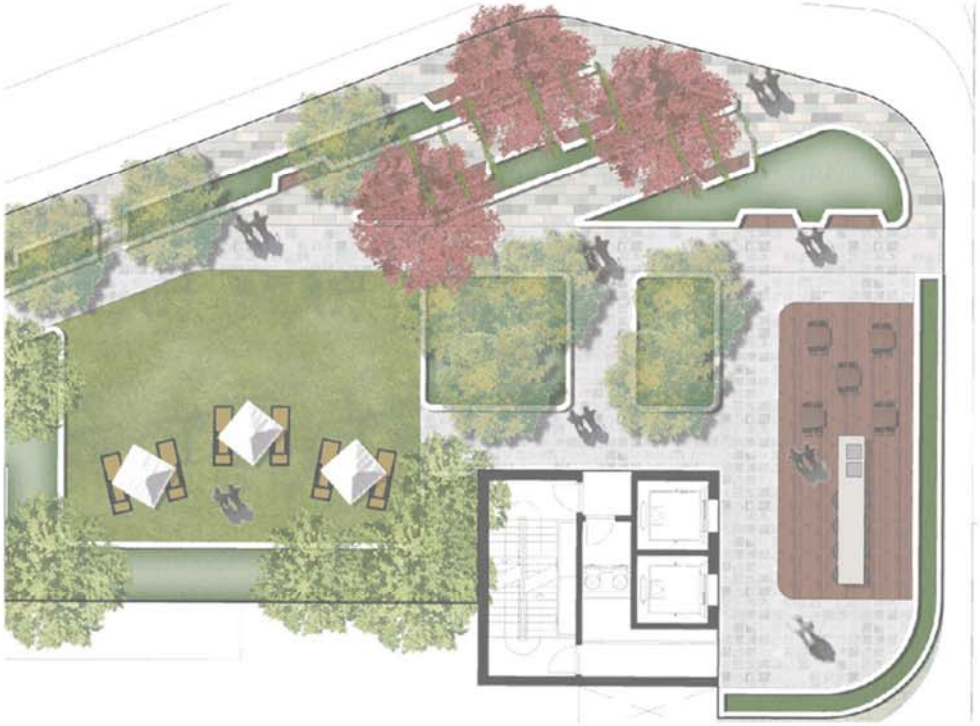
	POS 1	POS 2	POS 3
	0%	0%	0%
	0		
		-5%	-4%

Attachment 4 - Landscape Plans

Attachment 4 - Landscape Plans

Attachment 4 - Landscape Plans

CONTENTS



Attachment 4 - Landscape Plans

LANDSCAPE DESIGN STATEMENT

INTRODUCTION

This landscape architectural report presents the landscape design philosophy for the proposed development at 700-718 Heidelberg Road, Alphington.

The scope of the landscape design intervention for this project involves the creation of a number of landscaped spaces; comprising a streetscape landscape response and communal gardens on both the rooftop and level 1 which offer BBQ facilities, gardens for resident-use, spas and a sun deck. To complete the landscape offering balcony planter boxes line the southern edge of each level giving the site a 'greening effect'.

SITE CONTEXT

The site is located in Alphington on Heidelburg Road which is busy and predominantly exhibits retail and industrial frontages. Low density residential housing is located immediately to the south. Alphington Park and Oval which connects to the Yarra Bend Park city trail is only a 6 minute walk from site. Alphington Train Station is only a 4 minute walk from site.

LANDSCAPE PROPOSAL & APPROACH

The main design approach for the landscaped spaces within the development is evolved from the nearby Yarra River edge landscape, with dense vegetation that is centred upon the creation of vibrant, inviting spaces which evoke a forest inhabiting a river bank environment; with plants thriving in the valleys and inclines of river's path. The design's diverse landscaped spaces foster the discovery of moments of intrigue and surprise for residents and their visitors.

From the lobbies on Parkview Road and Park Avenue frontages, to the sculptural planters with advanced trees in balconies at levels one to four, to the terrace viewing garden and roof level garden which evoke vegetated rock outcrop within a rainforest, the development conjures nature at every turn. The proposed unique spa lounge and a 'park' lounge on roof level garden, add a level of sophistication in a structured 'natural' settings.

The open spa lounge features five large spas, three located for maximum solar exposure, and two which utilises shade for a cooler environment. Adjacent to these spas, raised planters provide a lush and refreshing backdrop with shrubs and small cascading plants providing visual relief from hard-surfaces, whilst the timber decking surface treatment to the lounge allows maximum flexibility of spatial arrangement.

The 'park' lounge provides a dynamic and flexible outdoor area, providing a large barbecue area for entertaining, a garden for residents, and even a possible fire-pit for outdoor living in the colder months. A large amount of vegetation has been provided to this area, with small trees and lush shrubs and ground covers ensuring the podium presents a place of escape and shelter from the busy world below.

The high quality materials and finishes throughout the development tie in with the overall XO's architectural vision, and will assist in positioning the proposal as relevant to both the existing and future character of the surrounding urban context.

Attachment 4 - Landscape Plans

GROUND FLOOR LANDSCAPE CONCEPT

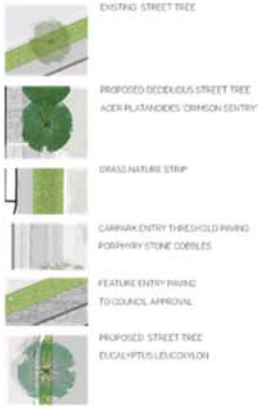
Design for the ground level of the development is concerned chiefly with the provision of an inviting and cohesive entry experience for the site, whether as a visitor or a resident.

Elegant bluestone or black granite feature paving is proposed as a paving type for entries on the street frontage of the development, to give a clean and sophisticated character, that will aid in tying the landscape to the colours and tones of the broader Architectural offering. In addition, these cool and classic materials will contrast to the vibrant and rich greens of the proposed planting pallete.

At the interface between Heidelberg Road, and the development, outdoor dining opportunities may be utilised by the provision of space and paving for cafe seating, bringing life and activation to street-level.

Fronting the existing Parkview Road streetscape, new feature entrance paving will be installed as part of this development (subject to Council approval), and 4 new advanced native street trees in the form of *Eucalyptus leucoxylon* (Euky Dwarf) are proposed to be planted, tying in with the future planting of Eucalyptus further along Parkview Road. The existing smaller tree and shrubs will be replaced as the development does not allow for their retention. New advanced deciduous Acer platanoides 'Crimson Centry' (Crimson Centry Maple) trees are proposed on Park Avenue to speak to the deciduous theme of the street.

LEGEND



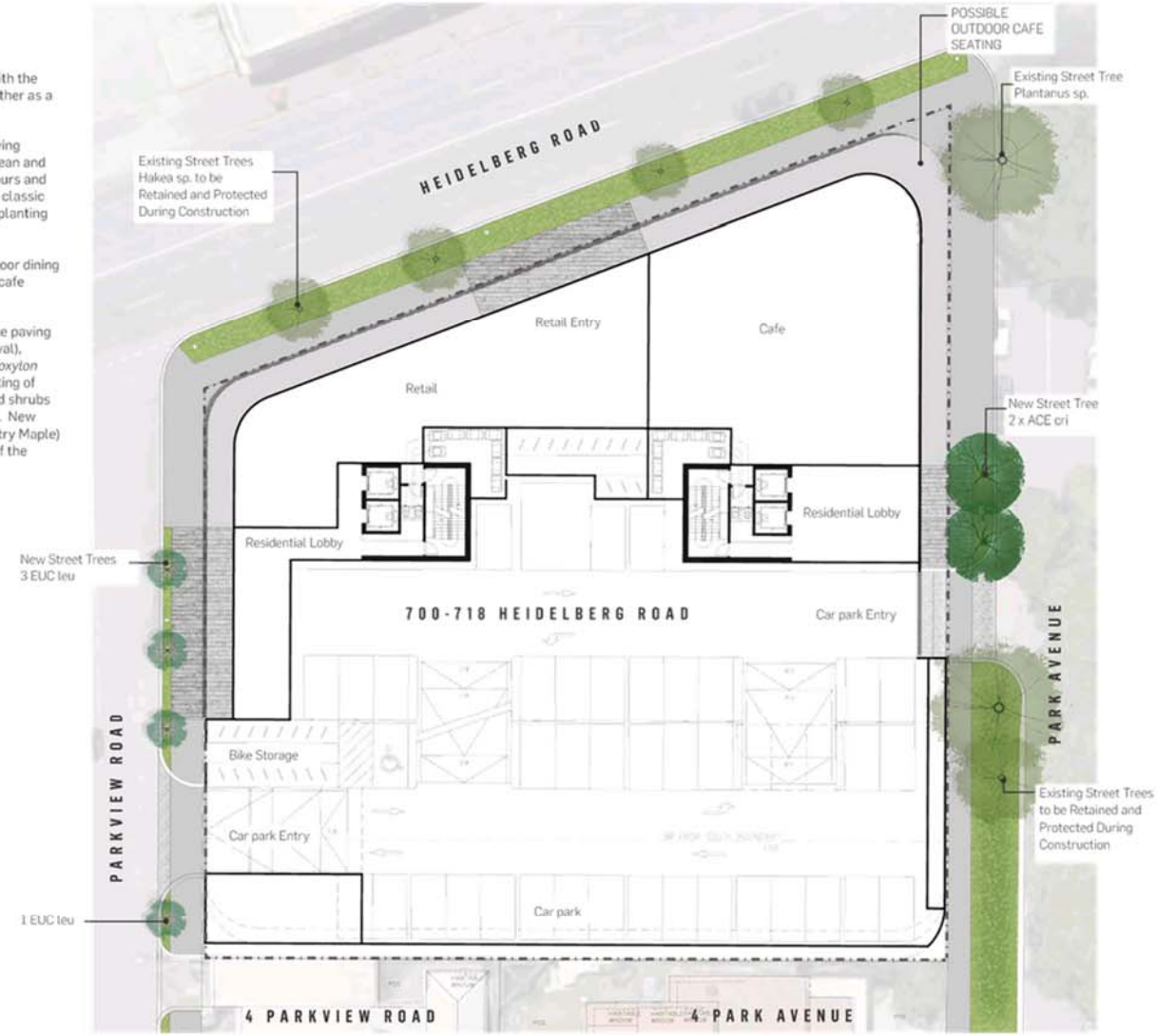


Figure 1 Streetscape Landscape Concept Plan

Attachment 4 - Landscape Plans

LEVEL 1 LANDSCAPE CONCEPT

The level 1 landscape proposal comprises spaces that foster social interaction, enjoyable for inhabitants of apartments on level 1 and above, as well as an extensive and lush green façade running along the length of the rear interface.

The communal garden uses the magic of a shallow water feature to reflect sunlight into the space. The raised 'social deck' space to the south exhibits different seating opportunities for residents to socialise and interact. Specially located curved inbuilt seats are integrated within the central planter giving a 'pause' opportunity to admire the landscape.

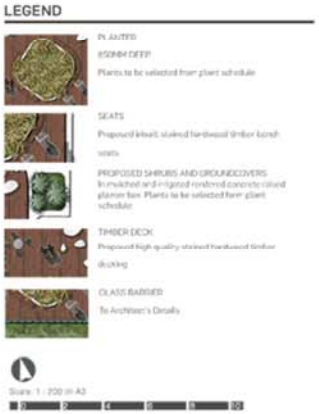


Figure 2 Landscape Concept Plan - Level 1 Communal Terrace

Attachment 4 - Landscape Plans

ROOFTOP LANDSCAPE CONCEPT

Three contrasting multi purpose activated spaces have been created on level 8 (Roof Garden) of the development, with a large vegetated garden binds these two spaces.

The first of these is the spa lounge. This dynamic terrace area is anchored by a relaxation and entertainment space, with all round views out to the open air terrace area, and the city context beyond. On the terrace itself, a number of activities have been designed for, allowing residents and visitors to make the most of the space year-round.

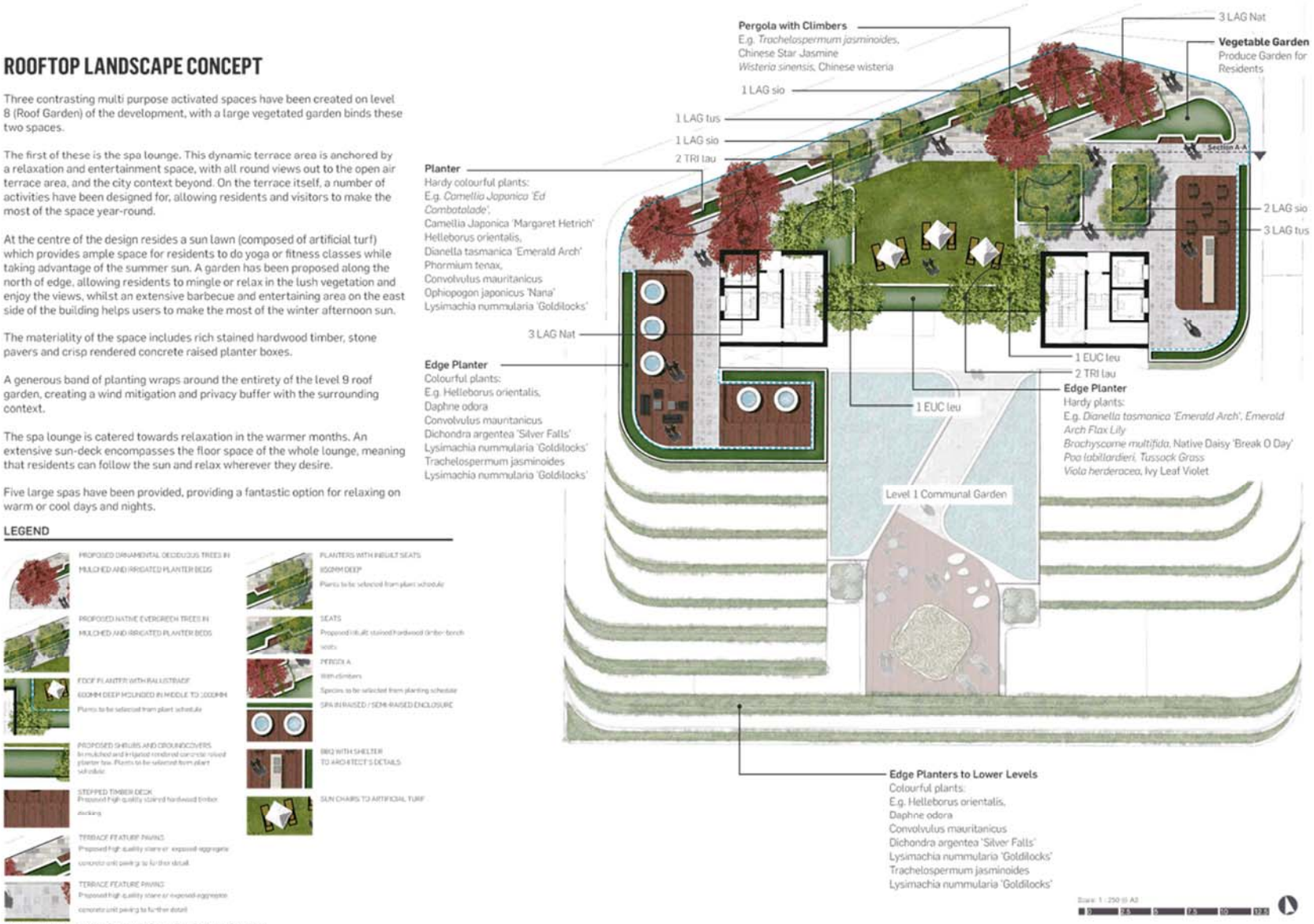
At the centre of the design resides a sun lawn (composed of artificial turf) which provides ample space for residents to do yoga or fitness classes while taking advantage of the summer sun. A garden has been proposed along the north of edge, allowing residents to mingle or relax in the lush vegetation and enjoy the views, whilst an extensive barbecue and entertaining area on the east side of the building helps users to make the most of the winter afternoon sun.

The materiality of the space includes rich stained hardwood timber, stone pavers and crisp rendered concrete raised planter boxes.

A generous band of planting wraps around the entirety of the level 9 roof garden, creating a wind mitigation and privacy buffer with the surrounding context.

The spa lounge is catered towards relaxation in the warmer months. An extensive sun-deck encompasses the floor space of the whole lounge, meaning that residents can follow the sun and relax wherever they desire.

Five large spas have been provided, providing a fantastic option for relaxing on warm or cool days and nights.



LEGEND

Figure 3 Landscape Concept Plan Roof Level Garden

Attachment 4 - Landscape Plans

ROOFTOP LANDSCAPE SECTION

Figure 4 Rooftop Section A-A
Scale 1 : 75 @ A3

Attachment 4 - Landscape Plans

TYPICAL BALCONY PLANTER DETAILS

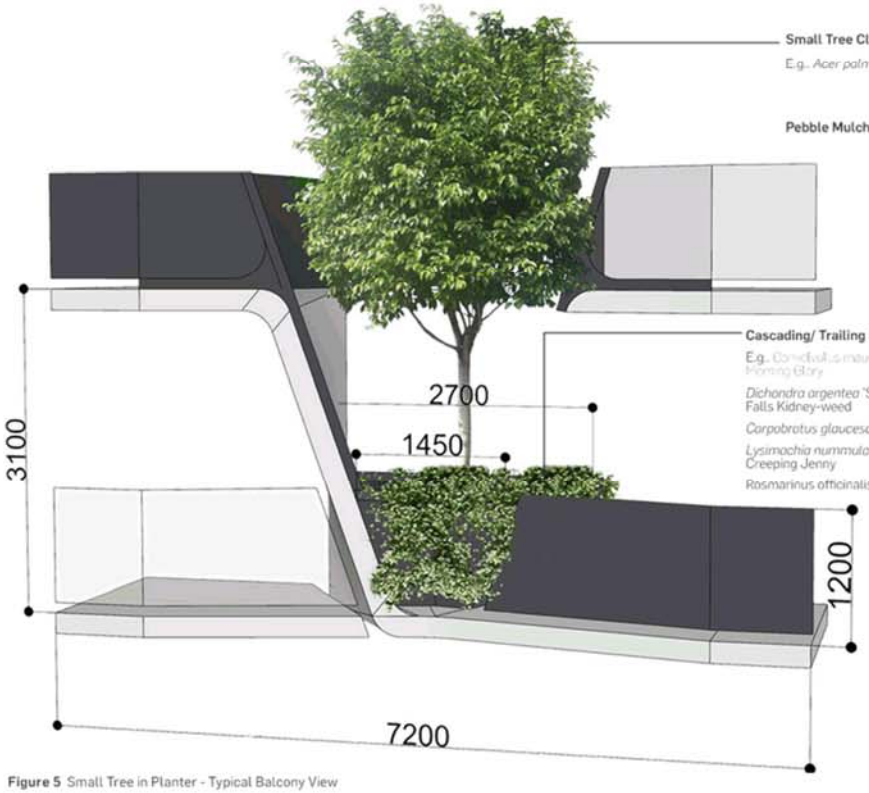


Figure 5 Small Tree in Planter - Typical Balcony View

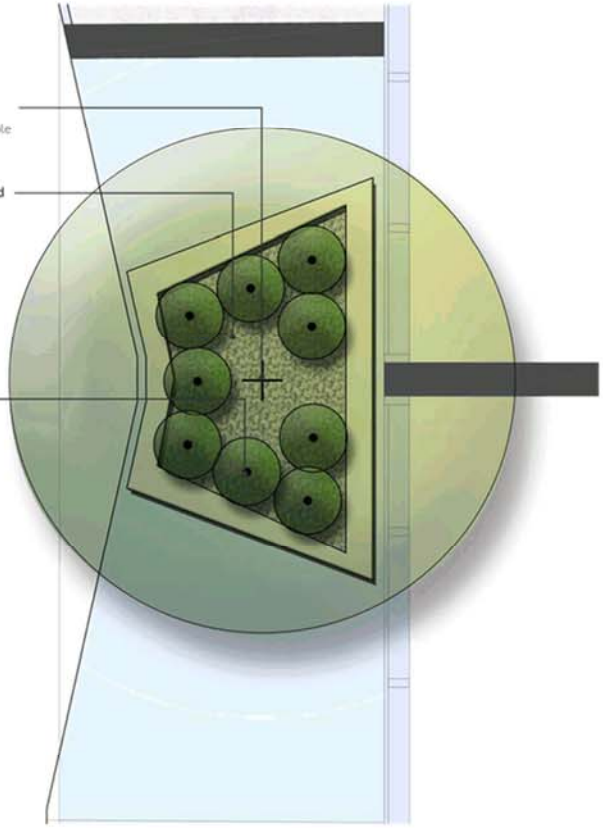


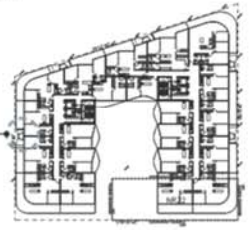
Figure 6 Small Tree in Planter - Typical Balcony - Plan

LANDSCAPE CONCEPT

Lush cascading plants in unique planters are provided in the balconies from levels 1 to 4. These staggered sculptured planters will have advanced trees, which will provide unique character for the façades fronting the streets. The landscape proposal for levels 1 to 4 of the development is geared towards maximising and continuing the overall theme of the development in hard-surface dominated areas where conventional roof-garden type areas are not feasible.

NOTE:

Planting could consist of the following species or similar approved and agreed with the responsible authority at the permit stage



Attachment 4 - Landscape Plans

PLANTING STRATEGY

The aim of the planting strategy for the development is to create a vegetated landscape that is lush and evocative with deep and strong foliage colour and textures.

This ties into the 'bush-like' and 'rain forest' concepts of the overall development, bringing lush and vibrant vegetation to the various areas of the site.

A balance has been considered between utilising unique and striking plant species, whilst considering sustainability and maintenance factors to achieve a high quality and maintainable outcome.

Texture, form and colour have all been championed within the proposed plant palette. From the bright flowering character of the Azaleas and camellias, to the curvaceous moss-like character of the Zoysia, the project is filled with contrasting plant species which together help to form a landscape with moments of surprise and delight as one explores the different spaces throughout the development.

PLANTING SCHEDULE

Code	Botanical Name	Common name	Pot size	Size at maturity (HxW)	Density (per m²)
TREES					
ACE cri	*Acer platanoides 'Crimson Sentry'*	Crimson Sentry Maple	Advanced, 400 Lt	7m x 4m	as shown
COR cit	*Corymbia citriodora 'Scentuous' syn. 'Dwarf Pink'*	Dwarf Pink Corymbia	Advanced, 100 Lt	7m x 3m	as shown
EUC leu	*Eucalyptus leucoxylon 'Euky Dwarf'*	Euky Dwarf Ecalyptus	Advanced, 100 Lt	6m x 5m	as shown
FIC ben	*Ficus benjamina*	Weeping Fig	Advanced, 100 Lt	6m x 4m	to be determined
LAG Nat	*Lagerstroemia indica x L. fauriei 'Natchez'*	Natchez Crepe Myrtle	Advanced, 45 Lt	6m x 4m	as shown
LAG Sio	*Lagerstroemia indica x L. fauriei 'Sioux'*	Sioux Crepe Myrtle	Advanced, 45 Lt	4m x 3m	as shown
LAG Tus	*Lagerstroemia indica x L. fauriei 'Tuscarora'*	Tuscarora Crepe Myrtle	Advanced, 100 Lt	6m x 4m	as shown
TRI lau	*Tristaniopsis laurina 'Luscious'*	Water Gum Luscious	Advanced, 100 Lt	6m x 4m	as shown
				SUBTOTAL	
SHRUBS & TUFTING PLANTS					
ACM smi	*Acmena smithii*	Lilly Pilly	200mm	1.5m x 0.8m	1.2
AZA Hon	*Azalea 'Honey Bunch'*	Honey Bunch Azalea	200mm	0.75m x 0.6m	1.8
AZA Sca	*Azalea 'Scarlet Gem'*	Scarlet Gem Azalea	200mm	0.75m x 0.6m	1.8
DAP odo	*Daphne odora*	Winter Daphne	200mm	0.75m x 0.75m	1.2
CAM Com	*Camellia Japonica 'Ed Combatalade'*	Ed Combatalade Camellia	200mm	0.8m x 0.8m	1.2
CAM Mar	*Camellia Japonica 'Margaret Helrich'*	Margaret Helrich Camellia	200mm	0.8m x 0.8m	1.2
CAU Cou	*Casuarina 'Cousin It'*	Cousin It Casuarina	200mm	0.8m x 0.8m	1.2
CLI min	*Clivia miniata*	Assorted Cultivars	150mm	0.7m x 0.7m	1.4
COR aus	*Dianella 'Cassa Blue'*	Cassa Blue Dianella	150mm	0.5m x 0.5m	2.4
DIA tas	*Dianella tasmanica 'Emerald Arch'*	Emerald Arch Flax Lily	200mm	0.5m x 0.5m	2.4
HEL ori	*Helleborus orientalis*	Winter Rose	200mm	0.6m x 0.6m	1.8
LIR gig	*Liriope gigantea*	Giant Evergreen Lily	200mm	0.6m x 0.6m	1.8
LIR mus	*Liriope muscari*	Lilyturf	200mm	0.6m x 0.6m	1.8
PHI Con	*Philodendron Congo*	Congo Philodendron	200mm	0.6m x 0.6m	1.8
PHI Xan	*Philodendron Xanadu*	Xanadu Philodendron	200mm	0.8m x 0.6m	1.8
PHO ten	*Phormium tenax*	New Zealand Flax	200mm	0.6m x 0.6m	1.8
POA lab	*Poa labillardieri*	Tussock Grass	200mm	0.6m x 0.6m	1.8
ZOY ten	*Zoysia tenuifolia*	Zoysia	Tubestock	0.5m spread	2.4
				SUBTOTAL	
GROUNDCOVERS & CLIMBERS					
BRA mul	*Brachyscome multifida*	Native Daisy 'Break O Day'	tubestock	0.2m x 0.7m	1.8
CON mau	*Convolvulus mauritanicus*	Ground Morning Glory	tubestock	spreading	3.2
DIC arg	*Dichondra argentea 'Silver Falls'*	Silver Falls Kidney-weed	tubestock	spreading	3.2
HAR vio	*Hardenbergia violeacea*	Sarsaparilla	tubestock	spreading	3.2
OPH jap	*Ophiopogon japonicus 'Nana'*	Nana Dwarf Mondo Grass	tubestock	0.3m x 0.3m	4.6
TRA jas	*Trachelospermum jasminoides*	Chinese Star Jasmine	tubestock	spreading/climbing	3.2
LYS num	*Lysimachia nummularia 'Goldilocks'*	Creeping Jenny	150mm	spreading	3.2
VIO hed	*Viola hederacea*	Ivy Leaf Violet	150mm	0.3m x 0.3m	3.2
				SUBTOTAL	
				GRAND TOTAL	

Advanced tree min 2.5 m. tall with 30 mm caliper

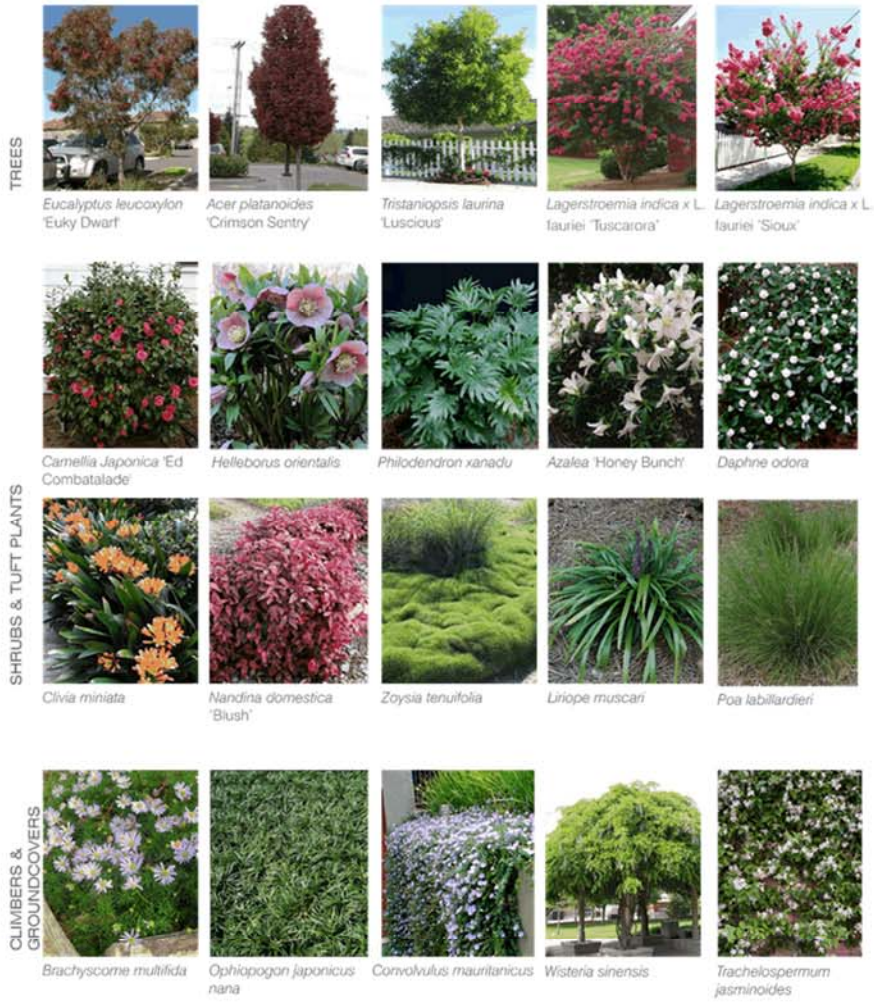


Figure 7 Design Intent - Planting Strategy

Attachment 4 - Landscape Plans

MATERIAL PALETTE

The proposed landscape treatments will feature high quality materials which complement the proposed architectural design to create vibrant and engaging spaces with which people can interact and relax.

FURNITURE / ELEMENTS

Concrete raised planter with contrasting textures, such as vegetation,decking and stone unit paving.

Curved concrete raised planter

Concrete planter box with inbuilt timber seating elements.

Example of step lighting for timber deck

FEATURE LIGHTING

Feature up-lighting of trees to illuminate foliage and create vibrant night-time landscape

PAVING / SURFACES

Diamond-sawn Bluestone paving - Barnstone (street interface)

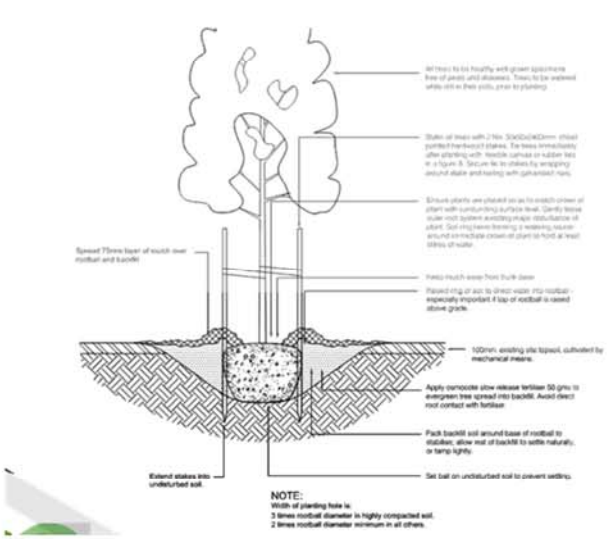
Porphyry stone rumble strip to driveway areas

Stained hardwood decking areas with stone paving

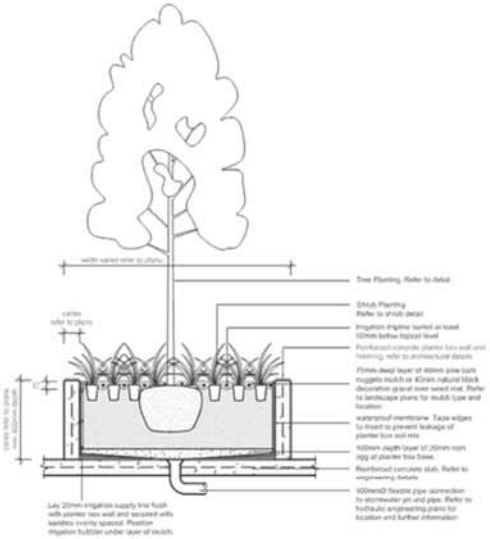
Feature stone paving

Attachment 4 - Landscape Plans

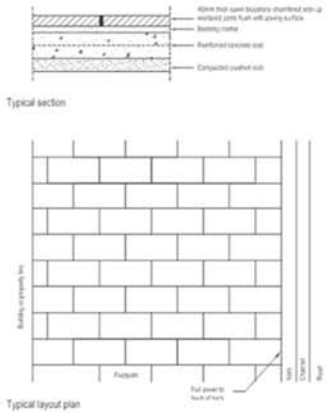
LANDSCAPE DETAILS



1 TYPICAL ADVANCED TREE PLANTING DETAIL
SECTION
SCALE 1:25



2 TYPICAL PLANTER ON STRUCTURE DETAIL
LA-001 SECTION
SCALE 1:20



3 TYPICAL ENTRANCE FEATURE PAVING DETAIL
NOT TO SCALE

Attachment 4 - Landscape Plans

LANDSCAPE MANAGEMENT PLAN

OWNERSHIP STATUS AND RESPONSIBILITIES

Responsibilities for the ongoing care, standard and maintenance of landscaped public spaces, balcony planters and podium & roof planting areas will fall in the first instance with the nominated construction contractor during the construction period and maintenance period of the project.

After this time, and once a certificate of Final Completion has been issued, responsibilities will fall with the building management group or Owners Corporation.

Elements for which the parties listed above are responsible includes (but is not limited to) the following:

- Ongoing operation and maintenance of any irrigation system;
- Re-staking and tying of trees whilst maturing;
- Pruning of plant species (both in garden beds and on wires);
- Replacement of dead plant specimens;
- Removal of rubbish
- Management of plant pests and diseases;
- Weed control;
- Re-spreading / topping up of surface mulch; and
- Management of any leaf build up;

IRRIGATION AND FERTILISATION

Irrigation of planter boxes for both planter beds and balcony planters will be conducted by way of automatic system controlled and fed by a lockable cabinet with required pipes, filters, control valves and associated infrastructure stored securely inside. Separate irrigation and control systems will need to be put in place for the ground level landscape, mezzanine level podium garden, staggered balcony planters and roof garden. Power and water (mains, recycled or mixture) will be provided to these irrigation cabinets, and from here the water is piped to the landscaped areas.

Regular maintenance access will be required to the cabinets. This will be allowed for in the design of the system and when choosing the location for the cabinet/s. Any irrigation control cabinets and associated infrastructure can be located in plant rooms near their associated landscape zones.

Fertilisation is to be conducted by maintenance staff, based on the needs of different plant species within the landscaped spaces. Fertiliser choice to be a high-nutrient natural all-purpose fertiliser such as Seasol or similar approved. Refer to maintenance regime table for frequency / timing information.

MAINTENANCE REGIME

Maintenance is key for any roof gardens and, for the proposed development, the landscape elements will be managed with an industry best-practice approach. This section of the management plan outlines and annunciates the proposed maintenance regime to be undertaken as part of the delivery and ongoing operation of landscaped spaces for this project.

Task	Frequency	Timing
Weeding (mechanical and herbicide)	7 x per year	Spring (x4) Summer (x1) Autumn (x2)
Re-spread / top up mulch	2 x per year	Spring Autumn
Check for and replace dead / dying or severely damaged plants (physical, diseased or insect attacked)	12 x per year	Monthly
Trim / remove any broken minor branches	6 x per year	Autumn (x3) Spring (x3)
Check for insect damage / spray	6 x per year	Spring (x4) Autumn (x2)
Refix any tree / shrub stakes	4 x per year	Autumn (x2) Spring (x2)
Check irrigation system	Weekly	All year-round (especially Spring – Summer)
Management of tree and shrub growth conflicting with access ways / public areas on podia	6 x per year	Spring (x3) Autumn (x3)
Management of any leaf build up	4 x per year	Autumn (x2) Summer (x2)
Fertilisation of landscaped areas	9 x per year	Autumn (x3) Spring (x3) Summer (x3)
Prune any climber tendrils to ensure adherence to design intent (i.e. any long strands not knitting onto wires)	9 x per Year	Autumn (x2) Winter (x1) Spring (x3) Summer (x3)

ACCESS PROVISIONS

The access to the various components of landscaped areas will depend on the location of these areas as detailed below.

GROUND LEVEL, STAGGERED BALCONY PLANTERS, LEVEL 1 AND ROOF GARDEN PLANTERS

GROUND LEVEL LANDSCAPE

All maintenance to ground level planting will be provided my the Owners Corporation.

LEVEL 1 / PODIUM LEVEL GARDEN

The level 1 garden is accessible from the main building with access control to be detailed with the client / project managers. The ownership of this area would be with Owners Corporation and access provisions would be detailed later. The trees and plant species for these areas will be selected according to the theme portrayed in the landscape plan and are to be planted in formed concrete planter boxes with irrigation and drainage provisions that are suitable for the locations.

STAGGERED BALCONY PLANTERS

The balcony planters will need to be accessed either from the residential apartments or externally from the roof via a cherry picker or platform decent system for maintenance. Since the balconies are private, the access provisions will need to be worked out with the clients / project managers or Owners Corporation. Access via rope and platform from the roof could be an option and will be detailed in the future.

The trees and other plant species are selected based on suitability and design principles. Trees and plants will be installed in concrete planter boxes with the adequate provision for irrigation and drainage.

LEVEL 8 ROOF GARDEN

Roof garden is accessible from the main building with access control to be detailed with the client. This roof top garden would be under Owners Corporation ownership and access provisions would be detailed later.

The trees and other plant species will be selected based on the appropriateness and design criteria. These plants are proposed to be installed in formed concrete planter boxes with the provision for irrigation and drainage as required by the plants.

Attachment 4 - Landscape Plans

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Attachment 5 - PTV Referral Comments

PUBLIC TRANSPORT VICTORIA

File: FOL/17/39801
Ref: DOPT2017/0274

PO Box 4724
Melbourne Victoria 3001
Australia

Telephone 1800 800 007
ptv.vic.gov.au

Amy Hodgen
Manager Statutory Planning
Yarra City Council
PO Box 168
Richmond VIC 3121

Dear Ms Hodgen

YARRA PLANNING SCHEME
PLANNING APPLICATION NO: PLN17/0040
PROPOSAL: APARTMENTS
ADDRESS: 718 HEIDELBERG ROAD ALPHINGTON

Thank you for your letter dated 9th June 2017 referring the above application to Public Transport Victoria pursuant to Section 55 of the *Planning and Environment Act 1987*.

Public Transport Victoria, pursuant to Section 56(1) of the *Planning and Environment Act 1987* **does not object** to the grant of a planning permit subject to the following conditions:

Conditions:

1. The permit holder must take all reasonable steps to ensure that disruption to bus operations along Heidelberg Road are kept to a minimum during the construction of the development. Foreseen disruptions to bus operations and mitigation measures must be communicated to Public Transport Victoria fourteen (14) days prior.

Should you require any further clarification, please feel free to contact James Noy on telephone 03 8392 7984.

Yours sincerely

Margaret Burge

MARGARET BURGE
Senior Lawyer
19 / 7 / 17

cc: Applicant:

Attachment 6 - Engineering Services Referral Comments

CITY OF YaRRA

MEMO

To: **Amy Hodgen**

From: **Mark Pisani**

Date: **3 July 2017**

Subject: **Application No:** **PLN17/0040**
Description: **Mixed Use Development**
Site Address: **700-718 Heidelberg Rd, Alphington**

I refer to the above Planning Application received on 13 June 2017 and the accompanying report prepared by GTA Consultants in relation to the proposed development at 700-718 Heidelberg Road, Alphington. Council's Engineering Services unit provides the following information:

CAR PARKING PROVISION

Proposed Development

Under the provisions of Clause 52.06-5 of the Yarra Planning Scheme, the development's parking requirements are as follows:

Proposed Use	Quantity/ Size	Statutory Parking Rate	No. of Spaces Required	No. of Spaces Allocated
One-bedroom dwelling	31	1 space per dwelling	31	131
Two-bedroom dwelling	56	1 space per dwelling	56	
Three-bedroom dwelling	22	2 spaces per dwelling	44	
Residential visitors	109 Dwellings	1 space per 5 dwellings	21	13
Retail	325 m^2	4 spaces per 100 m^2 of leasable floor area	13	13
Food and Drink	316 m^2	4 spaces per 100 m^2 of leasable floor area	12	
		Total	177 Spaces	157 Spaces

The development would have a parking shortfall of eight residential visitor spaces, and 12 commercial spaces.

To reduce the number of car parking spaces required under Clause 52.06-5 (including to reduce to zero spaces), the application for the car parking reduction must be accompanied by a Car Parking Demand Assessment.

Car Parking Demand Assessment

In reducing the number of parking spaces required for the proposed development, the Car Parking Demand Assessment would assess the following:

Attachment 6 - Engineering Services Referral Comments

- *Parking Demand for Residential Visitors*. Peak parking for residential visitors generally occurs on weekday evenings and at weekends. An empirical peak residential visitor parking rate of 0.12 spaces per dwelling has been often quoted in other traffic impact reports we have reviewed in the past. Applying this rate would result in a peak residential visitor parking demand of 13 spaces. During normal business hours (off-peak residential visitor times), the visitor parking rate would be much less than the 0.12 spaces per dwelling. Daytime visitor parking would be 0.07 spaces per dwelling, which would result in seven to eight spaces. The on-site residential visitor parking provision of 13 spaces is considered acceptable.
- *Parking Demand associated with the Retail and Food and Drink Uses*. Both the retail and food and drink premises uses have been allocated 13 on-site car parking spaces. Staff parking demand at these two uses would constitute around 25% of the parking demand. Customers would park account for the balance of the parking demand. Therefore, the uses would generate six staff spaces and 19 customer spaces. If six on-site spaces are allocated to employees, the remaining seven spaces would be allocated for customers.
- *Availability of Public Transport in the Locality of the Land*. The site is within walking distance of bus services operating along Heidelberg Road. Rail services can be accessed from Alphington railway station – a few hundred metres to the north.

Appropriateness of Providing Fewer Spaces than the Likely Parking Demand
Clause 52.06 lists a number of considerations for deciding whether the required number of spaces should be reduced. For the subject site, the following considerations are as follows:

- *Availability of Car Parking*. GTA Consultants had conducted an on-street parking occupancy survey of the surrounding area (with the exception of Parkview Street, which is to be redesigned as part of the AMCOR redevelopment) on Thursday 3 November 2016 between 9:00am and 8:00pm and on Saturday 5 November 2016 at 1:00pm and 8:00pm. The study encompassed an area roughly within 200 metres of the site. The times and extent of the survey are considered appropriate. An inventory of 178 on-street publicly available spaces was identified within the study area. The results of the survey indicated that the peak on-street parking occupancy was observed during the weekday daytime (time not specified), with a minimum of 71 spaces available. By comparison, on the weekend evening (8:00pm), some 102 spaces were vacant. The results clearly indicate that the area has an availability of on-street parking and could potentially accommodate any parking overflow from the site.
- *Relevant Local Policy or Incorporated Document*. The proposed development is considered to be in line with the objectives contained in Council's *Strategic Transport Statement*. The site is ideally located with regard to sustainable transport alternatives and the lack of on-site car parking would discourage private motor vehicle ownership and use.
- *Car Parking Deficiency associated with Existing Land Use*. The existing site contains a number of separate titles of commercial premises. According to GTA Consultants, the properties comprise of restricted retail with a combined area of around 2,100 square metres. Some 16 on-site spaces are contained within the site. The site would have a car parking deficiency of 47 spaces. These spaces would likely be customer parking spaces, and some of these would be parked on-street. The customer parking overflow of the proposed redevelopment of the site would be much less than the existing parking deficiency of the site.

Adequacy of Car Parking
From a traffic engineering perspective, the waiver of eight residential visitor spaces and 12 retail/café spaces is considered appropriate in the context of the development and the surrounding area. Any parking overflow from the site should not adversely impact on existing parking conditions within the local streets. The existing parking deficiency of the site is greater than the anticipated parking overflow from the site.

Engineering Services has no objection to the reduction in the car parking requirement for this development.

Attachment 6 - Engineering Services Referral Comments

TRAFFIC GENERATION

The traffic generation for the site adopted by GTA Consultants is as follows:

Proposed Use	Adopted Traffic Generation Rate	Daily Traffic	Peak Hour	
			AM	PM
Residential dwellings	Peak hour volume – 0.35 trips per dwelling* Peak hour volume is 10% of daily volume	380	38	38
Retail/Food and Drink	0.5 trips per retail space per peak hour (13 spaces)	13	7	7
	Total	393 trips	45 trips	45 trips

***** The rate of 0.35 trips per peak hour is based on the rate taken from the approved Development Plan for the AMCOR site.

GTA Consultants had conducted turning movement counts at the intersections of Heidelberg Road/Parkview Road and Heidelberg Road/Park Avenue during AM and PM peak periods. Data from these surveys were superimposed with peak hour traffic volumes generated from the site to determine post development traffic volumes.

GTA have assumed that all traffic exiting the development would use either Parkview Road or Park Avenue. It is possible that some motorists from the development may attempt to use Yarralea Street to access the arterial road network since it is signalised (particularly for motorists who wish to proceed east). It should be noted that the traffic distribution assumptions adopted by GTA Consultants are, in part, based on existing trip patterns in the local area. Other factors taken into account include the location of places of employment, education and retail centres relative to the site. Overall, the traffic distribution assumptions made by GTA Consultants are considered reasonable in the context of assessing the intersection performance of Heidelberg Road/Parkview Road and Heidelberg Road/Park Avenue.

The traffic impact of these two intersections was assessed using the SIDRA INTERSECTION program, which measures intersection performance. The results of the intersection modelling suggest that the intersections have capacity to accommodate peak hour development traffic. SIDRA modelling works well under free flowing traffic conditions and may have limitations, such as queuing of downstream traffic.

To determine the absorption of traffic onto Heidelberg Road from the development, GTA conducted a gap analysis. This analysis has been used to determine whether the critical movements at these intersections have adequate capacity once the development is operational. When entering major roads from minor roads (such the left and right turn movements from Parkview Road or Park Avenue into Heidelberg Road), motorists must wait for an acceptable time gap in the traffic stream to which they must give way before proceeding. The analysis undertaken by GTA Consultants confirms that the intersections have capacity to accommodate the critical movements.

GTA have indicated that the intersection of Heidelberg Road and Latrobe Street will be signalised as part of the AMCOR redevelopment. According to GTA, these signals would increase the number of gap opportunities for vehicles wishing to exit the peripheral streets and enter Heidelberg Road.

The SIDRA modelling and gap acceptance indicates that the development traffic should be able to enter and exit the Heidelberg Road traffic stream during peak hours.

Attachment 6 - Engineering Services Referral Comments

DEVELOPMENT LAYOUT DESIGN

Layout Design Assessment

Item	Assessment
Access Arrangements	
Development Entrances	The two entrances each have clear carriageway widths of at least 5.95 metres and satisfy *Design standard 1 – Accessways* of Clause 52.06-8.
Visibility	Each entrance has a pedestrian sight triangle located at the edge of the exit lanes and also satisfies *Design standard 1*.
Headroom Clearance	A minimum headroom clearance of 2.5 metres has been provided and satisfies the Australian/New Zealand Standard AS/NZS 2890.1:2004.
Vehicle Entry and Exit Movements	The swept path diagrams for the B99 design vehicle entering and exiting the two entrances are considered satisfactory. A B99 design vehicle can prop just in front of the security door and be entirely off the road carriageway (both entrances).
Internal Ramped Accessways – Widths	The 6.4 widths of the internal ramped accessways satisfy AS/NZS 2890.1:2004.
Internal Ramped Accessways – Vehicle Turning Movements	The swept path diagrams for a B99 design vehicle satisfactorily demonstrate vehicle turning movements as an oncoming vehicle waits.
Car Parking Modules	
Parking Spaces	The dimensions of the at-grade car parking spaces satisfy Design standard 2: Car parking spaces.
Accessible Parking Space	With the exception of the length (which satisfies *Design standard 2*), the accessible parking space and associated shared area satisfy the Australian/New Zealand Standard AS/NZS 2890.6:2009. A bollard must be inserted in the shared area as required by the Standard.
Aisles	The aisles within the car parking levels also satisfy *Design standard 2*.
Column Locations and Depths	Not dimensioned on the drawings. To be dimensioned.
Blind Aisle Extensions	Not dimensioned on the drawings. To be dimensioned.
Gradients	
Ramp Grade for First 5.0 metres inside Property (Parkview Road)	The ramp grade for the first 5.0 metres inside the building line is 1 in 10 and satisfies *Design standard 3: Gradients*.
Ramp Grades and Changes of Grade	The ramp grades and the changes of grade for the ramped accessway and the internal ramps satisfy *Design standard 3*.
Loading Arrangements	
Loading Bay – Dimensions	The Loading Bay on the Ground Floor measures 5.2 metres by 6.6 metres with an area of 34.32 m^2 and satisfies Clause 52.07.
Loading Bay – Access by Vehicles	The swept path diagrams for a mini waste collection vehicle (6.34 metre long Hino truck) are considered satisfactory.

Attachment 6 - Engineering Services Referral Comments

ENGINEERING CONDITIONS

Civil Works

- Upon the completion of all building works and connections for underground utility services, the footpaths immediately outside the property's Parkview Road, Heidelberg Road and Park Avenue road frontages must be reconstructed to Council's satisfaction and at the Permit Holder's expense.
- The footpath cross-fall must be no steeper than 1 in 40 for DDA access at the pedestrian entrance.
- The kerb and channel along the property's Parkview Road, Heidelberg Road and Park Avenue road frontages must be reconstructed to Council's satisfaction and at the Permit Holder's expense.
- Al redundant property drains in the road reserve must be removed to Council's satisfaction.
- All redundant vehicle crossings must be demolished and reinstated to Council's satisfaction and at the Permit Holder's cost.
- The road pavement of Parkview Road immediately outside the property frontage must be profiled and re-sheeted to Council's satisfaction and at the Permit Holder's cost. Any areas of failure must be reconstructed in full depth road pavement to Council's satisfaction.
- The two new vehicle crossings must be constructed in accordance with Council's Standard Drawings and *Infrastructure Road Materials Policy*.
- The proposed vehicle crossings must be dimensioned on the drawings. Distances to nearby trees and other fixed roadside objects to the edges of the new vehicle crossings must be shown on the drawings.

Corner Splays

- The corner splays at the intersections of Heidelberg Road/Parkview Road and Heidelberg Road/Park Avenue must not be reduced in size or encroached over by the new building.

Impact of Assets on Proposed Development

- Any services poles, structures or pits that interfere with the proposal must be adjusted, removed or relocated at the owner's expense after seeking approval from the relevant authority.
- Areas must be provided inside the property line and adjacent to the footpath to accommodate pits and meters. No private pits, valves or meters on Council property will be accepted.

Road Asset Protection

- Any damaged roads, footpaths and other road related infrastructure adjacent to the development site as a result of the construction works, including trenching and excavation for utility service connections, must be reconstructed to Council's satisfaction and at the developer's expense.

Construction Management Plan

- A Construction Management Plan must be prepared and submitted to Council. The Plan must be approved by Council prior to the commencement of works. A detailed dilapidation report should detail and document the existing and post construction conditions of surrounding road infrastructure and adjoining private properties.

Discharge of Water from Development

- Only roof runoff, surface water and clean groundwater seepage from above the water table can be discharged into Council drains.

Attachment 6 - Engineering Services Referral Comments

- Contaminated ground water seepage into basements from above the water table must be discharged to the sewer system through a trade waste agreement with the relevant authority or in accordance with EPA guidelines.
- Contaminated groundwater from below the water table must be discharged to the sewer system through a trade waste agreement from the relevant sewer authority.
- Council will not permit clean groundwater from below the groundwater table to be discharged into Council's drainage system. Basements that extend into the groundwater table must be waterproofed/tanked.

Removal, Adjustment, Changing or Relocation of Parking Restriction Signs

- No parking restriction signs or line-marked on-street parking bays are to be removed, adjusted, changed or relocated without approval or authorisation from Council's Parking Management unit and Construction Management branch.
- Any on-street parking reinstated as a result of development works must be approved by Council's Parking Management unit.

NON-PLANNING ADVICE FOR THE APPLICANT

Legal Point of Discharge

The applicant must apply for a Legal Point of Discharge under Regulation 610 – Stormwater Drainage of the *Building Regulations 2006* from Yarra Building Services unit. Any storm water drainage within the property must be provided and be connected to the nearest Council pit of adequate depth and capacity (legal point of discharge), or to Council's satisfaction under Section 200 of the *Local Government Act 1989* and Regulation 610.

Vehicle Crossings - Cross Sectional Drawings

The applicant must prepare and submit 1 in 20 scale cross sectional drawings of the development's two vehicular entrances, showing the actual reduced levels to three decimal places (not interpolated levels from the application drawings) of the Parkview Road and Park Avenue road profiles (from the centre line of the road to the property line). The required levels include the building line level, top of kerb level, invert level, lip level and road pavement levels. The existing road profiles the accessways inside the property (for the first 2.0 metres) must be accurately drawn. The applicant must demonstrate by way of a ground clearance check using the B99 design vehicle that vehicles can traverse the new vehicle crossings without scraping or bottoming out. The 1 in 20 scale cross sectional drawings must be submitted to Council's Construction Management branch for assessment and approval.

Preparation of Detailed Road Infrastructure Design Drawings

The developer must prepare and submit detailed design drawings of all road infrastructure works and drainage works associated with this development for assessment and approval.

Protection of Basement

The Permit Holder/developer is responsible for the management and protection of their building from groundwater.

The developer needs to ensure that the basement car park and any portions of the development at or below natural surface level have a level of protection to minimise the seepage of subterranean water (groundwater) or any rainfall run-off from penetrating the walls or floors of the site.

The excavation for the basement would be to a depth of in excess of 10.0 metres and it is possible that groundwater would be encountered.

In the event that any contaminated groundwater seeps through the walls of the basement, this water must not be discharged into Council's stormwater drainage system under any circumstances. Any contaminated groundwater that is present within the site must be treated and

Attachment 6 - Engineering Services Referral Comments

disposed of in accordance with a Trade Waste Agreement and as per EPA guidelines and Melbourne Water/City West Water guidelines.

It is also the Permit Holder's onus and responsibility to ensure that rainfall run-off does not enter the property in the event of a heavy storm. Adequate measures should be in place to prevent backwash from entering the property.

Additional Comments provided by Construction Management

- On Parkview Road, the current location of the power pole limits the useable footpath space for pedestrians. Footpath is proposed to be widened, resulting in the removal of vegetation. Current gas infrastructure located within the road reserve are to be relocated (please see photo).
- Overhead power lines are located close to property lines along Heidelberg Road, Parkview Road and Park Avenue road frontages. Some of these power lines are HV (high voltage) and require special attention from Jemena. (This area is not under CitiPower's jurisdiction).
- On Parkview Road, the electrical pole AO14453 has an existing transformer. Comment from Jemena is required regarding clearances from the transformer.
- In Park Avenue, a tree protection zone is to be implemented. Trees on Park Avenue significantly extend over building line. Tree roots could cause an issue when reconstructing the channel.
- Proposed new vehicle crossing on Park Avenue is located very close to the existing tree and proposed alteration the existing kerb extension/traffic management device has to be approved by Council's Open Space unit and Traffic unit.

Regards

Mark Pisani
Senior Development Engineer
Engineering Services Unit

Attachment 6 - Engineering Services Referral Comments

Existing gas infrastructure located in Parkview Road road reserve, adjacent to property boundary. This would need to be relocated once construction works commence.

Attachment 7 - Engineering Services additional comments on Park Avenue

Hodgen, Amy

From: Millican, Danny
Sent: Wednesday, 27 December 2017 1:48 PM
To: Pisani, Mark; Hodgen, Amy
Cc: Maher, Ciaran
Subject: RE: 700 Heidelberg Road - Park Avenue vehicle access

Hi Amy

I have no issue with the east side of the road being modified if needed. I would say that the process is as per the usual statutory planning and subsequent permit and design processes managed by the engineers and construction. I can't see any objections unless trees start being removed with no suitable alternative being identified.

Hopefully this addresses your query. If not, let me know.

Cheers

Danny

From: Pisani, Mark
Sent: Wednesday, 20 December 2017 2:26 PM
To: Hodgen, Amy; Millican, Danny
Cc: Maher, Ciaran
Subject: RE: 700 Heidelberg Road - Park Avenue vehicle access

Hi Amy

A check of Council's GIS indicates that the distance between the eastern boundary and the face of the kerb extension on the east side of Park Avenue is approximately 9.2 metres. The road narrowing is approximately 3.1 metres. A B99 design vehicle should be able to make a ninety-degree turn within this geometry.

The original swept path diagram from GTA Consultants had shown the swept path of a B99 design vehicle entering the site's Park Avenue access from the south. The swept path from the north was not provided. A left turning swept path from the north was also not provided.

The applicant should provide swept paths for B99 design vehicle entering the site from the north(right turn movement in), and for a vehicle exiting the site and proceeding north (left turn movement out). The kerb extensions on both side of the Park Avenue should be accurately depicted.

In the non-planning advice for the applicant, it was indicated that the proposed new vehicle crossing on Park Avenue is located very close to the existing tree and the proposed alterations to the existing kerb extension/traffic management device has to be approved by Council's Open Space unit and Traffic unit.

Regards
Mark

Mark Pisani
Senior Development Engineer

City of Yarra
Level 2, 31 Gleadell Street

1

Attachment 8 - Strategic Transport Referral Comments

MEMO

To:	**Amy Hodgen**
From:	**Julian Wearne**
Date:	**10/07/2017**
Subject:	**Strategic Transport Comments**
Application No:	**PLN17/0040**
Description:	**Development of the land for construction of a nine (9) storey building plus two levels of basement containing 109 dwellings and a café and shop at ground floor, use of land for accommodation (dwellings), reduction in the statutory car parking requirements and waiver of loading bay requirements (associated with café and shop).**
Site Address	**700-718 Heidelberg Road, Alphington**

I refer to the above Planning Application referred on 13 June 2017, and the accompanying report prepared by GTA Consultants in relation to the proposed development at 700-718 Heidelberg Road, Alphington. Council's Strategic Transport unit provides the following information:

Bicycle Parking Provision

Proposed Development

Under the provisions of Clause 52.34-3 of the Yarra Planning Scheme, the development's bicycle parking requirements are as follows:

Proposed Use	Quantity/ Size	Statutory Parking Rate	No. of Spaces Required	No. of Spaces Allocated
Dwellings	109	In developments of four or more storeys, 1 to each 5 dwellings	22 (21.8) resident spaces	
		In developments of four or more storeys, 1 to each 10 dwellings	11 (10.9) visitor spaces.	
Retail Premises (including Food & drink premises)	641 m^2	1 to each 300 sq m of leasable floor area	2 (2.14) employee spaces	
		1 to each 500 sq m of leasable floor area	1 (1.28) visitor space	
Bicycle Parking Spaces Total			24 resident / employee spaces	74 resident / employee spaces
			12 visitor spaces	8 visitor spaces
Showers / Change rooms		1 to the first 5 employee spaces and 1 to each additional 10 employee spaces	0 showers / change rooms	0 showers / change rooms

The development provides a total of 50 additional resident / employee spaces above what is required by the planning scheme, but provides 4 less visitor spaces than required by the planning scheme.

Attachment 8 - Strategic Transport Referral Comments

Adequacy of visitor spaces

- 8 spaces are suitably located to be used as visitor spaces. This does not meet the statutory requirement and is inadequate. At minimum 28 visitor spaces should be provided for the following reasons:
  - No visitor car parking appears to be provided onsite (all car parking is located within a secure car park);
  - Best-practice requires a rate of 0.25 visitor spaces to each dwelling[1], requiring 27 spaces for the 109 dwellings.
  - 1 visitor space is required to meet the retail requirement.
- The current location of the 8 visitor spaces is generally acceptable, however the bicycle hoops should be shown slightly closer to the building line, as bicycles will partially obstruct the footpath if the hoops are within 300mm of the title-boundary as shown. The hoop should be located to allow a 1.8m long bike sit entirely within the title boundary, whilst centred on the hoop.

Adequacy of employee spaces

Number of spaces

Whilst the proposal includes a surplus of 50 resident / employee spaces above the requirements of the planning scheme, it is noted:

- A reduction in car parking spaces is sought (20 spaces, including 8 residential visitor spaces);
- the subject site is located in an inner-urban area with already high cycling-to-work demand, and trends indicate demand will continue to increase; and
- both local and state planning policies include objectives to promote sustainable transport modes, including cycling;
- Given the above, best-practice requires a rate of 1 space to each dwelling[2]. Therefore it is recommended a minimum of 111 resident/employee spaces be provided.
- It would be acceptable if a further reduction in car parking spaces was sought to provide additional bicycle parking spaces.

Design and location of employee spaces and facilities

- According to the Traffic Impact Assessment, all bicycle parking spaces are to be floor mounted spaces. This is above the requirements of Australian Standard AS2890.3, which requires that at least 20% of spaces in any bicycle facility to be floor mounted spaces; and is therefore acceptable.
- Access to all resident/employee bicycle storage spaces appears to be acceptable.

Recommended Conditions

The following conditions should be included in the Planning Permit as part of the proposed development:

1. Before the use and/or development commences, amended plans to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of this permit. The plans must be drawn to scale with dimensions, and three copies must be provided. The plans must be generally in accordance with the decision plans but modified to show:

   a. A minimum of 28 visitor bicycle parking spaces be provided, in a location and configuration easily accessible, and suitable for short-term bicycle parking. Visitor spaces must be floor-mounted.

[1] *Category 6 of the Built Environment Sustainability Scorecard (BESS) offers the following best-practice guidance for residential visitor bicycle parking rates: Residential developments should provide 0.25 visitor spaces per dwelling.*

Attachment 8 - Strategic Transport Referral Comments

b. The 8 existing visitor bicycle parking devices (bicycle hoops) be relocated further within the title boundaries, so a bicycle centred against the device does not encroach outside the title boundaries.
c. At least 111 resident/employee bicycle parking spaces. All resident/employee bicycle storage spaces must:
    i. Be located within a secure storage facility,
    ii. Be easily and safely accessible;
    iii. Not cause a hazard to vehicles or pedestrians.

Regards

Julian Wearne
Sustainable Transport Officer
Strategic Transport Unit

Attachment 9 - ESD Advisor Referral Comments

CITY OF YARRA

MeMO

TO:	**Amy Hodgen**
cc:	
FROM:	**Euan Williamson, ESD Advisor**
DATE:	**17.01.2018**
FILE:	**PLN17/0400 – 700-718 Heidelberg Road, Alphington**
SUBJECT:	**ESD response to updated plans and SMP (re-issued)**

Amy,

I have reviewed the amended architectural drawings prepared by XO Projects, dated the 30.10.2018, and accompanying SMP prepared by SDC report. In summary, some issues have been resolved, specifically those concerning daylight, number of bike spaces, swimming pool efficiency; have all been resolved.

However, other issues remain and additional changes are still required; these are detailed here below;

Energy efficiency
Additional work on the NatHERS ratings and BESS report is required to demonstrate best practice.

- The sample NatHERS results include several sample groups that have high cooling loads well above the maximum cooling load of 21, for this climate zone. 14 of the 21 sample groups presented in the SMP exceed the maximum cooling threshold and represent a significant proportion of the proposed dwellings.
  Recommend that additional changes are made to the development to ensure the 21 MJ/m^2 cooling load threshold is not exceeded. Design options include glazing specification, glazing reduction, external shading. Please update plans and SMP and re-submit to Council.

- The SMP also describes a few changes required to meet the minimum NCC requires in a handful of dwellings, these are detailed in Appendix 7 of the SMP and must be implemented.

Natural Ventilation

- Common area corridors appear to have access to natural ventilation, but it is not entirely clear on the architectural drawings. Please confirm that the glazing into the corridors is operable into the courtyard and clearly mark this on plans.
- Window operability is not marked on elevations/floorplans, and is not particularly clear on all of the dwelling layout pages. Ensure that all habitable rooms have an operable window, positioned to effectively ventilate the dwelling, and clearly note on architectural drawings.

Language Used in the SMP

- The SMP states the project will include composting and green waste, and steel from a 'Responsible Steel' maker "where possible". Please remove the terms "where possible" from the SMP. Please

Attachment 9 - ESD Advisor Referral Comments

avoid the use of vague or open language that can lead to different interpretations and potential misunderstanding.

Outstanding Information to Follow up

- Prior to occupation please demonstrate that a minimum 10% energy efficiency improvement for the non- residential areas will be achieved via JV3 modelling and report or equivalent.

If you or the applicant would like to discuss my comments or recommendation further, please contact me.

Euan.

Euan Williamson
Environmental Sustainable Development Advisor
City of Yarra PO Box 168 Richmond 3121
T (03) 9205 5366 **F** (03) 8417 6666
E Euan.Williamson@yarracity.vic.gov.au
W www.yarracity.vic.gov.au

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

Sustainable Management Plan (SMP)
Referral Response by Yarra City Council

ESD in the Planning Permit Application Process

Yarra City Council's planning permit application process includes Environmentally Sustainable Development (ESD) considerations. This is now supported by the ESD Local Policy Clause 22.17 of the Yarra Planning Scheme, entitled *Environmentally Sustainable Development.*

The Clause 22.17 requires all eligible applications to demonstrate best practice in ESD, supported by the Built Environment Sustainability Scorecard (BESS) web-based application tool, which is based on the Sustainable Design Assessment in the Planning Process (SDAPP) program.

As detailed in Clause 22.17, this application is a 'large' planning application as it meets the category *Residential 1. Ten or more dwellings.*

What is a Sustainable Management Plan (SMP)?
An SMP is a detailed sustainability assessment of a proposed design at the planning stage. An SMP demonstrates best practice in the 10 Key Sustainable Building Categories and;

- Provides a detailed assessment of the development. It may use relevant tools such as BESS and STORM or an alternative assessment approach to the satisfaction of the responsible authority; and
- Identifies achievable environmental performance outcomes having regard to the objectives of Clause 22.17 (as appropriate); and
- Demonstrates that the building has the design potential to achieve the relevant environmental performance outcomes, having regard to the site's opportunities and constraints; and
- Documents the means by which the performance outcomes can be achieved.

An SMP identifies beneficial, easy to implement, best practice initiatives. The nature of larger developments provides the opportunity for increased environmental benefits and the opportunity for major resource savings. Hence, greater rigour in investigation is justified. It may be necessary to engage a sustainability consultant to prepare an SMP.

Assessment Process:

The applicant's town planning drawings provide the basis for Council's ESD assessment. Through the provided drawings and the SMP, Council requires the applicant to demonstrate best practice.
The following comments are based on the review of the architectural drawings, prepared by *XO Architects (Rev A 23.03.2017)* and the accompanying SMP, prepared by *SDC Consultants (V3 prepared April 2017).*

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

Sustainable Management Plan (SMP)
Referral Response by Yarra City Council

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Sustainable Management Plan (SMP)
Referral Response by Yarra City Council

Assessment Summary:

Responsible Planner:	Amy Hodgen
ESD Advisor:	Euan Williamson
Date: 04.07.2017	Planning Application No: PLN17/0040
Subject Site:	700-718 Heidelberg Road, Alphington
Site Area: Approx. 2,979m^2	Site Coverage: 100%
Project Description:	Nine storey building comprising 109 dwellings, café and shop on the ground floor.
Pre-application meeting(s):	None.

The standard of the ESD does not meet Council's Environmental Sustainable Design (ESD) standards. Should a permit be issued, the following ESD commitments (1) and deficiencies (2) should be conditioned as part of a planning permit to ensure Council's ESD standards are fully met.

Furthermore, it is recommended that all ESD commitments (1), deficiencies (2) and the outstanding information (3) are addressed in an updated SMP report and are clearly shown on Condition 1 drawings. ESD improvement opportunities (4) have been summarised as a recommendation to the applicant.

(1) Applicant ESD Commitments:
- A MUSIC report that demonstrates best practice and relies on 258m^2 of roof connected to a 20,000 litre rainwater tank for flushing to toilets in all dwellings, and 0.2 Ha of rooftop and balconies connected to 165m^2 of podium planter boxes and rooftop lawn, as well as 0.035 Ha of communal terrace connected to 120m^2 of mezzanine lawn.
- Good access to natural ventilation to dwellings provided all habitable rooms have operable windows. Flyscreens, window locks and door catches provided to all apartments.
- A 22kW solar PV array to contribute to common area electricity consumption.
- Electric vehicle charging facilities (3 spaces), connected to common area solar PV power supply.
- Non-residential areas to exceed NCC energy efficiency requirements by 15%.
- Reverse cycle heating/cooling systems within one star of the most energy efficient available.
- Centralised heat pump hot water system, with efficiency unknown.
- Energy efficient lighting.
- Water efficient fixtures and taps.
- Landscaping to terraces and rooftops will marginally improve the ecological value of the site.

(2) Application ESD Deficiencies:
- Internal common area corridors with no access to natural ventilation. Recommend a floor-plate redesign to ensure an external operable window to all common area corridors, or another strategy to introduce natural ventilation into common area corridors.
- Good access to daylight to most dwellings, with the exception of living rooms noted in the daylight modelling report within the SMP. The glazing specification on the architectural drawings includes tinted glazing, but the daylight modelling assumes clear glazing throughout. Recommend re-design the dwellings that are noted in the SMP to reduce room depth and improve daylight access into living rooms. Recommend clear glazing to all glazing in dwellings (as assumed in the daylight assessment of the SMP).
- Most habitable windows have good shading at lower levels via balcony overhangs and wing-walls. Upper levels have large amounts of north, east and west facing glazing exposed to summer sun angles and unwanted amounts of solar gain. Recommend that the extended cantilevered concrete overhangs that feature on the lower levels continue to the top level of dwellings giving solar protection to the north, east and west, or another similarly effective shading strategy.

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

Sustainable Management Plan (SMP)
Referral Response by Yarra City Council

- A total of 34 secure bicycle spaces for residents on the ground floor, plus eight spaces on the footpath for visitors, plus 40 additional spaces on the lower basement (B2). This is not enough bike spaces to meet our best practice standard for bike parking, which is one per dwellings (109) plus spaces for staff and visitors.
- The SMP states the project will use "environmentally innovative" materials "where possible". Please remove the terms "where possible" from the SMP. Please avoid the use of vague or open language that can lead to different interpretations and potential misunderstanding.

(3) Outstanding Information:

- It is unclear what the average NatHERS Star rating is for dwellings. The SMP report states dwellings will have an average 6.2 Star NatHERS rating, the sample table (p.23) states 6.44 Stars and the BESS project file uses 6.6 Star average. Please confirm. Recommend that a 6.6 Star average NatHERS thermal efficiency rating is adopted.
- Ensure that all habitable rooms have an operable window, and clearly note on architectural drawings.
- The WSUD aspects of the planter boxes and lawns are not noted in the landscape plans. Please confirm that the WSUD strategy is consistently adopted across all plans and designs.
- Prior to occupation please demonstrate that the 15% energy efficiency improvement for the non-residential areas will be achieved via JV3 modelling and report or equivalent.
- It appears that there are three swimming pools on the plans (coloured blue areas) in courtyard area and on rooftop that are not labelled nor mentioned in the SMP. Please confirm if swimming pools are included in this development. If so, then strongly recommend high water and energy efficiency measures such as including rainwater for pool top-up and solar thermal pre-heating and VSDs on pumps.

(4) ESD Improvement Opportunities

- Recommend a high COP energy efficiency standard be specified for the centralised heat pump hot water system.
- See comments on building redesign above.

Further Recommendations:

The applicant is encouraged to consider the inclusion of ESD recommendations, detailed in this referral report. Further guidance on how to meet individual planning conditions has been provided in reference to the individual categories. The applicant is also encouraged to seek further advice or clarification from Council on the individual project recommendations.

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

1. Indoor Environment Quality (IEQ)

Objectives:

- to achieve a healthy indoor environment quality for the wellbeing of building occupants.
- to provide a naturally comfortable indoor environment will lower the need for building services, such as artificial lighting, mechanical ventilation and cooling and heating devices.

Issues	Applicant's Design Responses	Council Comments	CAR*
Natural Ventilation and Night Purging	Internal common area corridors with no access to natural ventilation. Good access to natural ventilation to all dwellings provided all dwellings have operable windows. Flyscreens, window locks and door catches provided to all apartments.	Recommend a floor-plate redesign to ensure an external operable window to all common area corridors, or another strategy to introduce natural ventilation into common area corridors. Ensure that all habitable rooms have an operable window, and clearly note on architectural drawings.	2
Daylight & Solar Access	Good access to daylight to most dwellings, with the exception of living rooms noted in the daylight modelling report within the SMP. The glazing specification on the architectural drawings includes tinted glazing, but the daylight modelling assumes clear glazing throughout.	Recommend re-design the dwellings that are noted in the SMP to reduce room depth and improve daylight access into living rooms. Recommend clear glazing to all glazing in dwellings (as assumed in the daylight assessment of the SMP).	2
External Views	External views from most dwellings.	-	1
Hazardous Materials and VOC	All paints, adhesives and sealants and flooring are low VOC type. All engineered timber contain no formaldehyde.	-	1
Thermal Comfort	Good thermal comfort is determined through a combination of good access to ventilation, balanced passive heat gains and high levels of insulation. The application proposes for the office areas: - Good access to natural ventilation - Some shading to manage heat gains - Good thermal efficiency standards.	Please refer to section on, *NCC Energy Efficiency Requirements Exceeded* and *Effective Shading*	1

*** Council Assessment Ratings:**

1 – Design Response is SATISFACTORY; 2 – Design Response is NOT SATISFACTORY
3 – MORE INFORMATION is required; 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:
SDAPP Fact Sheet: 1. Indoor Environment Quality
Good Environmental Choice Australia Standards www.geca.org.au
Australian Green Procurement www.greenprocurement.org
Residential Flat Design Code www.planning.nsw.gov.au
Your Home www.yourhome.gov.au

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

2. Energy Efficiency

Objectives:

- to ensure the efficient use of energy
- to reduce total operating greenhouse emissions
- to reduce energy peak demand
- to minimize associated energy costs.

Issues	Applicant's Design Responses	Council Comments	CAR*
NCC Energy Efficiency Requirements Exceeded	It is unclear what the average NatHERS Star rating is for dwellings. Non-residential areas to exceed NCC by 15%.	The SMP report sates an average 6.2 Star, the sample table (p.23) states 6.44 Stars and the BESS project file uses 6.6 Star average. Please confirm. Recommend that the 6.6 Star average is adopted. Prior to occupation please demonstrate that the 15% energy efficiency improvement for the non-residential areas will be achieved via JV3 modelling and report or equivalent.	2
Hot Water System	Centralised heat pump hot water system, with efficiency unknown.	Recommend a high COP heat pump system.	4
Peak Energy Demand	Peak demand reduced through various initiatives.	-	1
Effective Shading	Most habitable windows have good shading at lower levels via balcony overhangs and wingwalls. Upper levels have large amounts of north, east and west facing glazing exposed to summer sun angles and unwanted amounts of solar gain.	Recommend that the extended cantilevered concrete overhangs that feature on the lower levels continue to the top level of dwellings giving solar protection to the north, east and west, or another similarly effective shading strategy.	2
Efficient HVAC system	Reverse cycle heating/cooling systems within one star of the most energy efficient available.	-	1
Efficient Lighting	Energy efficient lighting 4W/m^2 in apartments and carparks and at least a 10% improvement for non-residential areas.	-	1
Electricity Generation	A 22kW solar PV array to contribute to common area electricity consumption.	-	1
Embedded network	Embedded network provided 100% Green Power at competitive prices.	-	1

*** Council Assessment Ratings:**

1 – Design Response is SATISFACTORY; 2 – Design Response is NOT SATISFACTORY
3 – MORE INFORMATION is required; 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

SDAPP Fact Sheet: 2. Energy Efficiency
House Energy Rating www.makeyourhomegreen.vic.gov.au
Building Code Australia www.abcb.gov.au
Window Efficiency Rating Scheme (WERS) www.wers.net
Minimum Energy Performance Standards (MEPS) www.energyrating.gov.au
Energy Efficiency www.resourcesmart.vic.gov.au

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

3. Water Efficiency

Objectives:

- to ensure the efficient use of water
- to reduce total operating potable water use
- to encourage the collection and reuse of rainwater and stormwater
- to encourage the appropriate use of alternative water sources (e.g. grey water)
- to minimise associated water costs.

Issues	Applicant's Design Responses	Council Comments	CAR*
Minimising Amenity Water Demand	Water efficient taps and fittings throughout, including: - 4 Star toilets - 5 Star tapware - 3 Star showers <7.5 litres/min	-	1
Water for Toilet Flushing	A 20,000 litre rainwater tank connected to toilets in all dwellings.	-	1
Water Meter	Water metering for individual dwellings and each non-residential area.	-	1
Landscape Irrigation	Primarily native and drought tolerant vegetation provided with rainwater drip-irrigation system.	-	1
Swimming pools	It appears that there are three swimming pools on the plans (coloured blue areas) that are not labelled nor mentioned in the SMP.	Please confirm if swimming pools are included in this development. If so, then strongly recommend high water and energy efficiency measures such as including rainwater for pool top-up and solar thermal pre-heating and VSDs on pumps.	3

*** Council Assessment Ratings:**

1 – Design Response is SATISFACTORY; 2 – Design Response is NOT SATISFACTORY
3 – MORE INFORMATION is required; 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:
SDAPP Fact Sheet: 3. Water Efficiency
Water Efficient Labelling Scheme (WELS) www.waterrating.gov.au
Water Services Association of Australia www.wsaa.asn.au
Water Tank Requirement www.makeyourhomegreen.vic.gov.au
Melbourne Water STORM calculator www.storm.melbournewater.com.au
Sustainable Landscaping www.ourwater.vic.gov.au

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

4. Stormwater Management

Objectives:

- to reduce the impact of stormwater runoff
- to improve the water quality of stormwater runoff
- to achieve best practice stormwater quality outcomes
- to incorporate Water Sensitive Urban Design principles.

Issues	Applicant's Design Responses	Council Comments	CAR*
STORM Rating	A MUSIC report that demonstrates best practice and relies on 258m^2 of roof connected to 2,000 litre rainwater tank for flushing to toilets in all dwellings, and 0.2 Ha of rooftop and balconies connected to 165m2 of podium planter boxes and rooftop lawn, as well as 0.035 Ha of communal terrace connected to 120m2 of mezzanine lawn.	The WSUD aspects of the planter boxes and lawns are not noted in the landscape plans. Please confirm that the WSUD strategy is consistently adopted across all plans and designs.	3
Discharge to Sewer	-	-	-
Stormwater Diversion	-	-	-
Stormwater Detention	-	-	-
Stormwater Treatment	-	-	-
Others	-	-	-

*** Council Assessment Ratings:**

1 – Design Response is SATISFACTORY; 2 – Design Response is NOT SATISFACTORY
3 – MORE INFORMATION is required; 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:
SDAPP Fact Sheet: 4. Stormwater Management
Melbourne Water STORM calculator www.storm.melbournewater.com.au
Water Sensitive Urban Design Principles www.melbournewater.com.au
Environmental Protection Authority Victoria www.epa.vic.gov.au
Water Services Association of Australia www.wsaa.asn.au
Sustainable Landscaping www.ourwater.vic.gov.au

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

5. Building Materials

Objectives:

- to minimise the environmental impact of materials used by encouraging the use of materials with a favourable lifecycle assessment.

Issues	Applicant's Design Responses	Council Comments	CAR*
Reuse of Recycled Materials	The SMP states the project will use "environmentally innovative" materials "where possible".	Please remove the terms "where possible" from the SMP. Please avoid the use of vague or open language that can lead to different interpretations and potential misunderstanding.	2
Embodied Energy of Concrete and Steel	A minim of 50% of concrete to use recycled water and a minimum of 25% of sand is recycled or manufactured sand.	-	1
Sustainable Timber	All timber to be certified by FSC or PEFC as sustainable, or recycled/reused.	-	1
Design for Disassembly	No information has been provided.	Consider a small pallet of materials and construction techniques that can assist in disassembly.	4
Other		-	-

*** Council Assessment Ratings:**

1 – Design Response is SATISFACTORY; 2 – Design Response is NOT SATISFACTORY
3 – MORE INFORMATION is required; 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:
SDAPP Fact Sheet: 5. Building Materials
Building Materials, Technical Manuals www.yourhome.gov.au
Embodied Energy Technical Manual www.yourhome.gov.au
Good Environmental Choice Australia Standards www.geca.org.au
Forest Stewardship Council Certification Scheme www.fsc.org
Australian Green Procurement www.greenprocurement.org

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

6. Transport

Objectives:

- to minimise car dependency
- to ensure that the built environment is designed to promote the use of public transport, walking and cycling.

Issues	Applicant's Design Responses	Council Comments	CAR*
Minimising the Provision of Car Parks	Reduction in car parking proposed.	-	1
Bike Parking Spaces	A total of 34 secure bicycle spaces for residents on the ground floor, plus eight spaces on the footpath for visitors, plus 40 additional spaces on the lower basement (B2).	This is not enough bike spaces to meet our best practice standard for bike parking, which is one per dwellings (109) plus spaces for staff and visitors.	2
End of Trip Facilities	-	-	-
Car Share Facilities	No information has been provided.	-	1
Electric vehicle charging	Electric vehicles charging facilities (3 spaces) connected to common area solar PV power supply.	-	1

*** Council Assessment Ratings:**

1 – Design Response is SATISFACTORY; 2 – Design Response is NOT SATISFACTORY
3 – MORE INFORMATION is required; 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:
SDAPP Fact Sheet: 6. Transport
Off-setting Car Emissions Options www.greenfleet.com.au
Sustainable Transport www.transport.vic.gov.au/doi/internet/icy.nsf
Car share options www.yarracity.vic.gov.au/Parking-roads-and-transport/Transport-Services/Carsharing/
Bicycle Victoria www.bv.com.au

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

7. Waste Management

Objectives:

- to ensure waste avoidance, reuse and recycling during the design, construction and operation stages of development
- to ensure long term reusability of building materials.
- to meet Councils' requirement that all multi-unit developments must provide a Waste Management Plan in accordance with the *Guide to Best Practice for Waste Management in Multi-unit Developments 2010*, published by Sustainability Victoria.

Issues	Applicant's Design Responses	Council Comments	CAR*
Construction Waste Management	The building contractors will achieve a minimum 80% recycling/reuse target.	-	1
Operational Waste Management	Two dual waste chutes, one in each core, with bins for general waste and recycling.	-	1
Storage Spaces for Recycling and Green Waste	Area for separate recycling and general waste bins can be identified on the plans.	-	1
Others	-	-	-

*** Council Assessment Ratings:**

1 – Design Response is SATISFACTORY; 2 – Design Response is NOT SATISFACTORY
3 – MORE INFORMATION is required; 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:
SDAPP Fact Sheet: 7. Waste Management
Construction and Waste Management www.sustainability.vic.gov.au
Preparing a WMP www.epa.vic.gov.au
Waste and Recycling www.resourcesmart.vic.gov.au
Better Practice Guide for Waste Management in Multi-Unit Dwellings (2002) www.environment.nsw.gov.au
Waste reduction in office buildings (2002) www.environment.nsw.gov.au

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

8. Urban Ecology

Objectives:

- to protect and enhance biodiversity
- to provide sustainable landscaping
- to protect and manage all remnant indigenous plant communities
- to encourage the planting of indigenous vegetation.

Issues	Applicant's Design Responses	Council Comments	CAR*
On Site Topsoil Retention	There is no productive topsoil on this site.	-	NA
Maintaining / Enhancing Ecological Value	Landscaping on rooftop and terraces will marginally improve the ecological value of the site.	-	1
Heat Island Effect	No specific information has been submitted.	-	1
Other	-	-	-

*** Council Assessment Ratings:**

1 – Design Response is SATISFACTORY; 2 – Design Response is NOT SATISFACTORY
3 – MORE INFORMATION is required; 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:
SDAPP Fact Sheet: 8. Urban Ecology
Department of Sustainability and Environment www.dse.vic.gov.au
Australian Research Centre for Urban Ecology www.arcue.botany.unimelb.edu.au
Greening Australia www.greeningaustralia.org.au
Green Roof Technical Manual www.yourhome.gov.au

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

9. Innovation

Objective:

- to encourage innovative technology, design and processes in all development, which positively influence the sustainability of buildings.

Issues	Applicant's Design Responses	Council Comments	CAR*
Significant Enhancement to the Environmental Performance	-	-	-
Innovative Social Improvements	-	-	-
New Technology	-	-	-
New Design Approach	-	-	-
Others	-	-	-

*** Council Assessment Ratings:**

1 – Design Response is SATISFACTORY; 2 – Design Response is NOT SATISFACTORY
3 – MORE INFORMATION is required; 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:
SDAPP Fact Sheet: 9. Innovation
Green Building Council Australia www.gbca.org.au
Victorian Eco Innovation lab www.ecoinnovationlab.com
Business Victoria www.business.vic.gov.au
Environment Design Guide www.environmentdesignguide.com.au

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

10. Construction and Building Management

Objective:

- to encourage a holistic and integrated design and construction process and ongoing high performance

Issues	Applicant's Design Responses	Council Comments	CAR*
Building Tuning	Post construction commissioning and tuning to ASHRAE and other relevant standards.	-	1
Building Users Guide	A Building Users Guide will be provided to residents and staff explaining optimal usage of building services and sustainability features within the development and will include information on public transport.	-	1
Contractor has Valid ISO14001 Accreditation	No information has been provided.	-	1
Construction Management Plan	A Waste Management Plan will be developed by the building contractor to monitor and control activities undertaken during construction.	-	1
Others	-	-	-

*** Council Assessment Ratings:**

1 – Design Response is SATISFACTORY; 2 – Design Response is NOT SATISFACTORY
3 – MORE INFORMATION is required; 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:
SDAPP Fact Sheet: 10. Construction and Building Management
ASHRAE and CIBSE Commissioning handbooks
International Organization for standardization – ISO14001 – Environmental Management Systems
Keeping Our Stormwater Clean – A Builder's Guide www.melbournewater.com.au

Attachment 10 - ESD Advisor Referral Comments on Initial Plans

Sustainable Management Plan (SMP)
for planning applications being considered by Yarra Council

Applicant Response Guidelines

Project Information:

Applicants should state the property address and the proposed development's use and extent. They should describe neighbouring buildings that impact on or may be impacted by the development. It is required to outline relevant areas, such as site permeability, water capture areas and gross floor area of different building uses. Applicants should describe the development's sustainable design approach and summarise the project's key ESD objectives.

Environmental Categories:

Each criterion is one of the 10 Key Sustainable Building Categories. The applicant is required to address each criterion and demonstrate how the design meets its objectives.

Objectives:

Within this section the general intent, the aims and the purposes of the category are explained.

Issues:

This section comprises a list of topics that might be relevant within the environmental category. As each application responds to different opportunities and constraints, it is not required to address all issues. The list is non-exhaustive and topics can be added to tailor to specific application needs.

Assessment Method Description:

Where applicable, the Applicant needs to explain what standards have been used to assess the applicable issues.

Benchmarks Description:

The applicant is required to briefly explain the benchmark applied as outlined within the chosen standard. A benchmark description is required for each environmental issue that has been identified as relevant.

How does the proposal comply with the benchmarks?

The applicant should show how the proposed design meets the benchmarks of the chosen standard through making references to the design brief, drawings, specifications, consultant reports or other evidence that proves compliance with the chosen benchmark.

ESD Matters on Architectural Drawings:

Architectural drawings should reflect all relevant ESD matters where feasible. As an example, window attributes, sun shading and materials should be noted on elevations and finishes schedules, water tanks and renewable energy devices should be shown on plans. The site's permeability should be clearly noted. It is also recommended to indicate water catchment areas on roof- or site plans to confirm water re-use calculations.

Attachment 11 - Open Space Referral Comments

Memo

diverse

vibrant

exciting

inclusive

To: Amy Hodgen

Cc: Julia Mardjuki

From: Clare Lee

Date: 23/02/2018

Subject: PLN17/0040 - 700-718 Heidelberg Rd, Alphington – revised plans 17.10.2017

Dear Amy,

Thank you for the opportunity to comment on the revised landscape plans submitted for PLN17/0040. We have the following comments:

Level 1

- Noted that the previous mezzanine level has been replaced with Level 1. The Level 1 plan provided is satisfactory.

Balcony planters

- The depth of the balcony planters is adequate. The width of the balcony planters should provide adequate space to sustain the proposed tree planting and the dimension/s noted on the drawings.

Roof level

- Proposed tree species have been revised to those which will cope with full sun.

Heidelberg Road

- The species of the existing 4 trees is accurate and notes included about tree retention and protection during construction.

Parkview Road

- The grassed nature strip and tree planting has been positioned on the outer edge of the footpath as requested. The nature strip does however appear narrow – it should be 1.4 m wide to be consistent the existing nature strip along the street and to provide adequate space for tree growth. It would also be preferable to extend the nature strip further towards the Heidelberg Road corner. This would provide opportunity to plant two additional Euky Dwarf trees to provide shade to the retail business on this corner.
- Clarification has not been provided on maintenance responsibility for the grassed nature strip.

Park Avenue

Attachment 11 - Open Space Referral Comments

- Deciduous trees are now proposed for planting in Park Avenue in keeping with the existing street tree type. Council's recommended species is *Acer negundo* 'Sensation' to link with the existing Plane trees along Park Avenue. *Acer platanoides* 'Crimson Sentry' is not supported due to its foliage colour and its likely vulnerability to future temperature rises (refer to City of Melbourne document: Future Urban Forest: Identifying vulnerability to future temperatures).
- Only two replacement trees have been shown rather than the four replacement trees requested. The applicant should investigate placement of the two additional trees on the roadway within parking bays, allowing for a 1.5m x 1.5m tree cut out size.

In addition, I have the following comments:

Street paving materials:

- Feature paving at the entrances on Heidelberg Road, Parkview Road and Park Avenue should be sawn bluestone rather than black granite.
- Car park entry threshold paving – bluestone setts should be used instead of porphyry stone.
- The street paving materials palette is required to be consistent with Yarra's Public Domain Manual (refer to Section 4.1.3: https://www.yarracity.vic.gov.au/-/media/files/roads/technical-notes/yarra-city-council-public-domain-manual-technical-notes.pdf).

Please get back to me if you have any questions or require anything further.

Kind regards,

Clare Lee – Landscape Architect, Streetscapes
Julia Mardjuki – Open Space Planner

Attachment 12 - Open Space Referral Comments on Original Plans

Memo

diverse

vibrant

exciting

inclusive

To: Amy Hodgen

Cc:

From: Clare Lee and Julia Mardjuki

Date: 29/06/2017

Subject: PLN17/0040 - 700-718 Heidelberg Rd, Alphington

Dear Amy,

Thank you for the opportunity to comment on PLN17/0040. We have the following comments:

Landscape Plan

Ground level

- Provide further details for the entry planter beds at the retail entry in the public realm.
- Please confirm this will be managed by the Owners Corporation.
- Extra maintenance requirements may be needed for green spaces in the public realm and provisions should be made for this.

Mezzanine level

- Provide details on the 'edge planter' and how it sits on the building footprint to ensure safety standards are maintained and there is no risk to the area below.
- Please update the section line on the plan and update the section to accurately reflect the design.
- Proposed tree species *Ficus hillii* can quickly grow to a large mature species and will require regular foliage pruning to keep in check. The vigorous root system, when restricted in a planter can grow up and out of the container and break the planter. This will be a future maintenance concern if the trees require root pruning. Queensland grown species will require six weeks hardening off before planting in Melbourne.
- Proposed tree species *Hymenosporum flavum, Laegrstoemia indica* and *Ginko biloba* prefer full sun, given this area will be shaded for most of the day, please review the proposed selection.
- Provisions for universal access could be considered in this space to cater for residents of all abilities.

Balcony planters

- We support the proposed inclusions of tree planting in balcony planters to provide amenity to the building façade and surrounding area.
- Refer to the point on *Ficus Hilli* above.
- The creepers and climbers selected will tend toward a vertical ascent, consider plants that will have a cascading form if that is the desired effect.

Roof level

Attachment 12 - Open Space Referral Comments on Original Plans

- Proposed tree species *Acer palmatum* and *sp.,* prefer shady conditions. Given this area will be in full sun for most of the day, please review the proposed selection.
- Provide more details on the edge planters and how this area sits on the main building footprint.

Streetscapes

Heidelberg Road

- The existing 4 trees are *Hakea* species (rather than *Acacia implexa* as noted on the landscape concept plan).

Parkview Road

- It is preferable that the new street trees and grassed nature strip area are positioned on the outer edge of the footpath rather than on the boundary line of the building as shown on the landscape plan (page 5). This will be in keeping with the existing nature strip in this block.
- Please confirm that the development body corporate would be responsible for maintenance of the grassed nature strip.
- *Hymenosporum flavum* is not supported as the species to be planted as it is does not respond well to pruning under powerlines. The preferred species is dwarf *Eucalyptus leucoxylon* (Euky Dwarf) to be in keeping with the future planting of Eucalypts further along Parkview Road.

Park Avenue

- Council's arborist has recommended removal of 3 of the 4 Plane trees adjacent to the site. The Plane tree closest to Heidelberg Road is to be retained.
- Deciduous trees are required for planting in Park Avenue in keeping with the existing street tree type (rather than Brachychiton and Euky Dwarf which are referred to on page 5). The recommended species is Acer negundo 'Sensation'.
- It is preferable that 4 replacement street trees are allowed for along the Park Avenue frontage of the site.

Protection of existing street trees

- The existing street trees in Heidelberg Road and Park Avenue should be protected during construction works according to Australian Standard AS 4970-2009, including a TPZ for the duration of the building works. Protection Bonds should also be placed on these trees. The contractor should liaise with Council's arborist during construction works in the vicinity of the car park entry driveway which is close to an existing street tree.

Street tree planting

- Council's tree planting contractor would undertake sourcing, planting and maintenance of all new street trees. The Developer would be required to pay a contribution to the Open Space Developer Fund to cover this work.

Public Open Space Contribution

Much of the proposed landscape elements will be internal to the building to benefit residents. We would seek a cash contribution for this development.

Please get back to us if you have any questions or require further information.

Kind regards,

Clare Lee - Landscape Architect Streetscapes
Julia Mardjuki – Open Space Planner

Attachment 13 - DLA Urban Design Referral Comments

DAVID LOCK ASSOCIATES
TOWN PLANNING & URBAN DESIGN

700-718 Heidelberg Road, ALPHINGTON

Urban Design Referral

Date	4th January 2018
Council Reference	PLN17/0040
To	Amy Hodgen
From	David Lock Associates

INTRODUCTION

In May 2017, City of Yarra requested that David Lock Associates ('DLA') undertake an urban design assessment of a proposed development at 700-718 Heidelberg Road, Alphington (the subject site). The proposal seeks approval to construct a nine storey mixed use development consisting of ground floor retail with eight storeys of residential development above (126 dwellings).

In undertaking this assessment we have had regard to the following:

- The physical context of the subject site as well as the wider area;
- The relevant provisions of the Yarra Planning Scheme and Reference Documents (including the approved Alphington Paper Mills Development Plan [2015]);
- The relevant provisions of the Darebin Planning Scheme (insofar as they apply to the northern side of Heidelberg Road);
- The architectural plans and urban context report prepared by XO Architects (dated May 2017);
- The town planning report prepared by Urbis (April 2017); and
- The landscape plan prepared by Urbis (April 2017).

In December 2017, City of Yarra requested that David Lock Associates undertake un updated urban design assessment of an amended eight storey proposal for the subject site. In undertaking this assessment, we have had regard to the amended plans prepared by XO Architects (Revision B, dated October 30, 2017) as well as the 'Comparison Study' prepared by XO Architects (no date). All urban design comments pertinent to the amended plans are identified in this referral in red.

CHARACTER

Context

The subject site is a large amalgamated allotment located on the southern side of Heidelberg Road, Alphington, between Park Avenue (to the east) and Parkview Road (to the west). The site constitutes the northern end of the block in which it is located and consequently presents with three street frontages to each of these streets respectively. The site is currently utilised for the

Attachment 13 - DLA Urban Design Referral Comments

commercial purposes and contains single storey commercial built form within the north of the site and at-grade car parking within the south (with vehicle access/egress by way of both Park Avenue and Parkview Road), and is generally flat and devoid of vegetation. The subject site is also located in general proximity to a range of services (Station Street Fairfield is located approximately 1km west) and transportation options (Alphington train station is located 350m north-east of the site).

In terms of abuttals, Heidelberg Road is located directly north of the subject site and is a 21m wide regionally significant road reserve. The municipal boundaries of the City of Yarra also terminate mid-way within the Heidelberg Road reserve, noting that the City of Darebin is the Responsible Authority for all properties along the northern side of Heidelberg Road. East and west of the subject site are the Park Avenue and Parkview Road road reserves respectively, which are both lower order local access streets with widths in the order of 15m. South of the subject site is 4 Park Avenue and 4 Parkview Road, which both comprise low set (single and double storey) detached dwellings with POS elements.

The subject site forms part of the 'Alphington Neighbourhood Activity Centre' (NAC) pursuant to Clause 21.03 of the Yarra Planning Scheme, which is partly reflected in the site's predominant Commercial 1 (C1Z) zoning. Of relevance, the purpose of the C1Z is to *'create vibrant mixed use commercial centres'* and *'provide for residential uses at densities complimentary to the role and scale of the commercial centre'* – noting that a number of properties with Heidelberg Road frontages within proximity of the subject site are similarly zoned C1Z. Notably, a portion of the site's south east corner is zoned 'Neighbourhood Residential Zone Schedule 2 (NRZ2)', whose primary purpose is to recognise areas of predominantly single and double storey residential development and ensure development respects the neighbourhood character. All southern abutting properties are similarly zoned NRZ2, which mandates a maximum two storey (9m) built form expectation for future development. None of the site's overlays are of relevance from an urban design perspective.

The wider Alphington NAC is a declining commercial strip that is somewhat 'disjointed' by way of Heidelberg Road (divisive, high volume road reserve) and the differing Responsible Authorities. Existing built form heights are typically in the order of one to two storeys, with the notable exception being the remnant built form within the former Alphington Paper Mill precinct (directly west of the subject site) that presents to Heidelberg Road with heights in the approximate order of 3-4 commercial storeys. Conversely, the hinterland south of the subject site is distinctly residential in character and comprised of typically single and double storey detached dwellings that will be protected in perpetuity by way of the hinterland's NRZ zoning.

The pertinent policy framework within the Yarra Planning Scheme in-principle supports higher density development on sites such as this (within an Activity Centre and proximate to services and transport), whilst simultaneously requiring development to have regard to existing and preferred neighbourhood character as well as off-site and public realm amenity (Clauses 15.01, 16.01, 21.05 and 22.10). More specifically, built form policy guidance stems for Activity Centres such as the Alphington NAC primarily from Clause 21.05-2, which specifies a maximum building height for of five to six storeys that can be exceeded provided a development achieves specific benefits (such as

significant upper level setbacks, architectural design excellence and a positive contribution to the public realm).

Further compounding the preferred future character of the broader Heidelberg Road precinct is the2015 approval of the Amcor Paper Mill Development Plan (DPO11), which applies to all land immediately west of the subject site across Parkview Road. Although the Development Plan (DP) does not technically apply to the subject site itself, it does articulate a future built form expectation for future built form that ranges in height from six storeys (street wall) to fourteen storeys (where closest to Grange Road). It is also understood that Council is in receipt of the first planning permit application under the approved DP for an eight storey scheme at 680 Heidelberg Road (Stage 1b, immediately west of the subject site).

The final determining factor that will influence the built form future character of Heidelberg Road are the intermittent 'pockets' of GRZ and NRZ zoned land in both relevant Planning Schemes, with commensurate 3 storey and 2 storey mandatory height controls respectively. Pockets of INZ3 opposite the subject site are also relevant factors. Figure 1 below captures this and articulates the likely future built form character of the subject site's broader area (Heidelberg Road between Grange Road and Darebin Creek) based on the spectrum of abovementioned drivers and policy considerations.

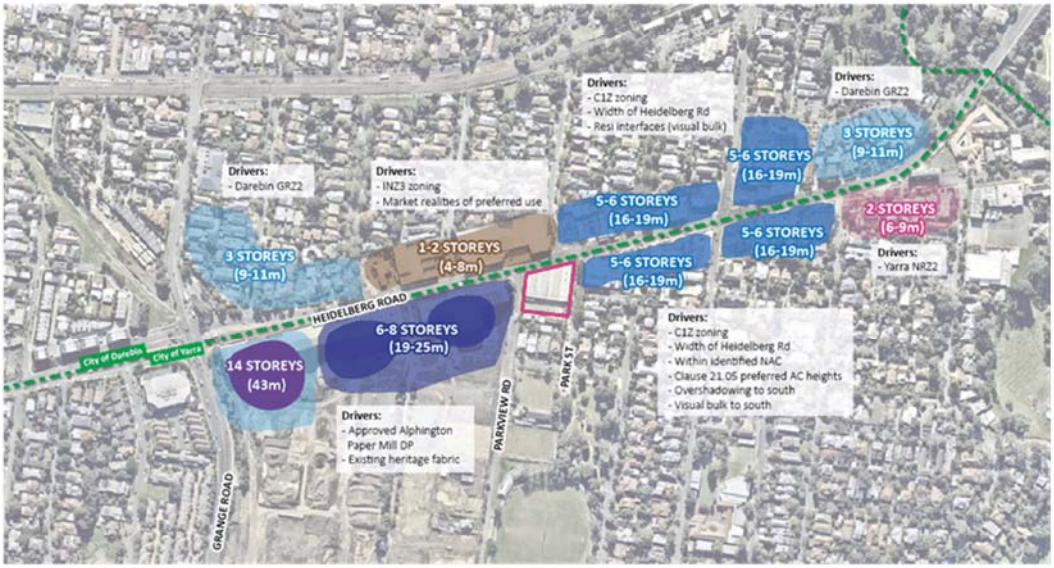

Figure 1 – Likely future built form character of Heidelberg Road (between Grange Road and Darebin Creek) based on existing planning controls in the Yarra and Darebin Planning Schemes

Therefore, in lieu of specific built form guidance for the Alphington NAC and subject site within the Yarra Planning Scheme (such as within a Structure/Local Area Plan or DDO), future development of the subject site should strike the balance between the preferred *future* built form character of more intensive development within Heidelberg Road, and the embedded mandate for a response

DAVID LOCK ASSOCIATES
TOWN PLANNING & URBAN DESIGN

to *existing* built form character within both Park Avenue and Parkview Road. The site's physical context - combined with the provisions of the site's dual zoning and future built form character guidance under existing planning policy –provide the most pertinent built form guidance on how best to achieve this.

Height and Massing

As viewed from the public realm, the proposal has been fundamentally designed as an extruded Ground Floor program with effectively 0m street setbacks (~300mm), with all built form above arranged in an outward 'U' shape and which are set back approximately 2m from each street interface. The use of cantilevered balconies at Levels 1-3 provides the impression of a four storey streetwall as viewed from Heidelberg Road (approx. 16.5m high, or the equivalent of a five storey residential building), with the retained 'inset' of balconies for the upper remaining levels relied upon to create an impression of podium/tower distinction. The overall height of the proposal is approximately 34.1m (or the equivalent of an 11 storey residential building), and the massing of the proposal relies on a 'cascading' built from response to the southern abutting residences.

With respect to the proposed 'street wall', the use of expressed balcony cantilevers at the lower levels is an effective approach to emphasising a podium/tower typology, which in principle is an appropriate design response having regard to site context and the future character aspirations of the western abutting DP. However, Clause 22.10 and the DP together envision street wall heights that respond to surrounding built form character, and the 'maximisation' of the envisioned built form height within Activity Centres under Clause 21.05 (five to six storeys, which is the equivalent height of the proposed street walls) for the proposed street wall alone is challenging within this context – particularly within side street contexts such as Park Avenue and Parkview Road which are distinctly residential in character.

A more useful indicator regarding appropriate street wall heights to side street interfaces stems from the approved DP, which envisions three storey street wall heights to Parkview Avenue. This is further reinforced by our understanding that the first of the planning permit applications for Stage 1b of the Alphington Paper Mill respects the implied three storey street wall height to Parkview Road. Given this – combined with the likely future built form character of Heidelberg Road east of the subject site, and the presence of NRZ2 zoned properties immediately south of the subject site - we recommend reducing the height of the proposed street wall to a clear maximum of three storeys (11m) for all C1Z-zoned street interfaces of the site that retains the currently proposed street wall height transition to the southern abutting NRZ properties.

Amended Plan Comments: As viewed from Heidelberg Road, the design of the revised street wall is proposed to be 14.9m (approx.) in height, which constitutes a reduction of approximately 1.7m from the applicant's previous street wall iteration. The height of the street wall is generally proposed to transition southward along each side street interface through a reduction in height to 11.8m (approx.). Whilst the transition is supported in principle, the height of the proposed street wall height as viewed from Heidelberg Road continues to remain insufficient within the context of the emerging preferred future character of Heidelberg Road.

Attachment 13 - DLA Urban Design Referral Comments

DAVID LOCK ASSOCIATES
TOWN PLANNING & URBAN DESIGN

Turning now to the overall height of the proposal, Figure 1 earlier outlined the clear envisioned future built form character of Heidelberg Road and identified that the tallest built form is intended to be located closest to Grange Road (14 storeys under the DP) before reducing to a likely maximum of 5-6 storeys east of the site within the remnant commercially zoned pockets of the Alphington NAC (Clause 21.05 and the offsite amenity impacts of excessive height upon their immediate southern NRZ abuttals). Pockets of double storey built form will also characterise the Heidelberg Road future built form character east of the site by way of the NRZ zoning. Whilst there are aspects of the site that would support taller buildings (including large land area and abuttal to the Alphington Paper Mill future built form), the proposal's 34m height is the equivalent of 11 residential storeys and is far in excess of the preferred emerging future character of the subject site's portion of Heidelberg Road and the Alphington NAC – particularly given the height proposed comes at the expense of the reasonable amenity expectations of the site's southern abuttals (refer to the 'Offsite Amenity' section of this statement). The question of height also needs to be considered within the context of the compositional architectural outcomes of a taller tower form atop a reduced street wall height (as recommended earlier). We therefore recommend reducing the height of the proposal to a maximum of eight storeys (25m), with the uppermost storey set back so as to read as no more than a recessive 'cap' in longer range views toward the proposal. Doing so will reduce overshadowing to the southern abutting properties, respect the envisioned emergent built form scale within the Alphington Paper Mill, and achieve a '3+4+1' compositional outcome that better responds to the reduced height of the proposed street wall.

Amended Plan Comments: The applicant's revised proposal also indicate an overall reduction in height to 27.3m (approx.), which has been achieved primarily through the removal of an upper residential level and the 'crunching' of the FTC heights of the Ground Floor. The composition of the revised proposal has also been amended, with the resultant built form outcome being one that effectively 'reads' as 4-storey podium with a 4-storey recessed upper form. In our view, the revised height is still too high – particularly when considered in conjunction with the revised '4+4'composition of the proposal. We therefore continue to recommend a maximum building height of approximately 25m, and strongly encourage the adoption of a clearly legible and elegant '3+4+1' built form composition.

At the rear of the proposal, an alternating cascading setback profile is proposed that consists of basecase B17 compliance (where closest to the southern abutting residential properties) before 'splitting' into two separate 'wings': the westernmost of which incorporates incremental built form steps at every storey (along Parkview Road) and the easternmost of which adopts 'two level increments' (along Park Avenue, noting that incremental balcony cantilevering interrupts the continuity of the double storey steps within the eastern wing at Levels 4 and 6). From a compositional perspective, there is a certain aesthetic to the juxtaposition between each of the alternate approaches to the rear setbacks of each 'wing', and it is recommended that each be retained (along with B17 compliance) within the recommended street wall and overall height recommendations made earlier.

Attachment 13 - DLA Urban Design Referral Comments

Design Detail

There is a clear contemporary architectural concept underpinning the proposal, which is broadly responsive to the pattern of emerging development within Heidelberg Road as evidenced by the recent planning permit application for 680 Heidelberg Road. The spectrum of proposed materials (coloured glazing, precast concrete and metal accents) is broadly appropriate, and is employed in a manner that further reinforces the podium/tower distinction and achieve a visually interesting architectural outcome.

Of note is the incorporation of pockets of deeper soil greenery within the overall architectural expression of the proposal, including within the cantilevered balconies of the proposed 'street wall'. In principle, this will provide a further level of visual interest to the proposal and will 'soften' the ultimate built form outcome, particularly when coupled with the landscape intent for the NRZ-zoned communal rooftop component. Council should satisfy itself that any proposed species within these landscape balcony elements is sufficiently hardy within the context of Heidelberg Road.

PUBLIC REALM AND OFFSITE AMENITY

Public Realm Amenity

Clauses 15 and 21.05 together seek to ensure a broad range of public realm urban design outcomes in environments such as the Alphington NAC. In response, the proposal fully activates the Heidelberg Road public realm by way of Ground Floor commercial uses (retail space and a café) with full height glazing, which is an appropriate response to the site's predominant commercial zoning and location within an identified NAC. However, the architect should be invited to clarify the point of entry to the proposed café use within drawing number A0100.

The proposal also seeks to provide a communal pedestrian entry lobby to each side interface, which combine with the commercial use 'returns' to activate approximately one third of each side street. The balance of each side street Ground Floor interface has been poorly resolved, however, and consists of a mix of car parking, servicing and sheer walls. Far more needs to be done with respect to Ground Floor public realm activation to both Park Avenue and Parkview road and the applicant should be invited to consider this further. Potential solution include core relocation (particularly within the western 'wing' where the uppermost floor plan shows room to move), a 'sinking' of the substation to Parkview Road within the basement, and glazing of storage cages (or swapping these with the internal bicycle storage element, and giving this an activated street frontage).

The proposal also fails to provide meaningful weather protection to Heidelberg Road commensurate with reasonable expectations for a commercially zoned NAC. This should be provided for the entirety of the Heidelberg Road frontage, and return along each side street to provide weather protection for each residential lobby.

Attachment 13 - DLA Urban Design Referral Comments

DAVID LOCK ASSOCIATES
TOWN PLANNING & URBAN DESIGN

Amended Plan Comments: The applicant's revised proposal seeks to address the spectrum of identified Ground Floor public realm amenity concerns through built form recession (in response to weather protection comments) and a range of minor design mechanisms, such as inclusion of a 'gallery space' to Park Avenue, lobby amendments through core relocation (both side street interfaces) and an extrusion of commercial street interface widths (both side street interfaces).

Beginning with the applicant's response to weather protection, insetting at Ground Floor results in a built form condition that counter-intuitively reduces the length and extent of public realm activation to all street frontages, and which results in a far weaker degree of public realm definition compared to that provided previously. We recommend reverting to the previously-proposed 0m setback at Ground Floor, and including a cantilevered weather.

With respect to the applicant's revised lobby arrangements, we appreciate the intent behind the proposed amendments (as well as the difficulties associated with core relocation) but continue to believe that far more can be done with respect to side street activation. The majority of each side street interface continues to remain inactivated under the revised arrangement (defined as <50% of the width of each), when the narrative could easily be one in which the majority of each interface is active through previously-recommended design amendments.

Finally, in no way do we support the proposed 'gallery' space design mechanism as a substitute for meaningful active design and the previously-recommended design changes.

Above the Ground Floor, the proposal seeks to provide a number of 'shoptop' dwellings generally oriented outward to the street network where they will be capable of passively surveying and activating the public realm to the benefit of public realm amenity. This is consistent with Clause 15 and 22.10 and therefore supported.

The shadow diagrams provided indicate that public realm equinox overshadowing of Parkview Road and Park Avenue will occur within the Equinox morning and afternoon respectively. The aforementioned reduction in building height will further improve the public realm overshadowing outcome of the proposal.

Finally, all proposed vehicle access and egress is proposed to be taken from each side street, which are inherently logical locations that will avoid disruption of the Heidelberg Road public realm and reduce the likelihood of pedestrian/vehicle conflict.

Offsite Amenity

The proposal is located in direct abuttal to two NRZ2-zoned properties to the south at 4 Park Avenue and 4 Parkview Road, which are both detached low-set dwellings primarily oriented eastward and westward respectively. Whilst 4 Parkview Road appears to have a small south-facing primary POS courtyard that is enveloped by the dwelling's own built form, 4 Park Avenue has a rear POS component within the north west of the property that is open to the sky. Both dwellings

also have a number of sensitive north-facing windows. There are therefore considerations with respect to overshadowing, visual bulk and overlooking.

Beginning with overshadowing, the shadow diagrams submitted by the applicant are misleading in that they do not appear to pick up on the nuances of the south-facing POS component of 4 Parkview Road, nor acknowledge that the rear POS of 4 Park Avenue consists of a 'less sensitive' southern half (by way of the existing patio) and a 'more sensitive' northern half. The applicant should be invited to rectify this in order to make an informed assessment (Section 3.8 of the architectural plans). What is evident, however, is that the proposal in its current form will result in an excessive degree of Equinox overshadowing of each throughout the day that is far in excess of the provisions of Standard B21 of Clause 55, particularly within the context of the NRZ zoning and the reasonable expectations for commensurate overshadowing of 4 Park Ave by way of the subject site's NRZ zoned abuttal. The subject site is also a deep site more than capable of containing it's own shadow impacts, and accordingly it is recommended that strict compliance with the provisions of Standard B22 to both 4 Park Avenue and 4 Parkview Road be achieved. We suspect that the aforementioned height reduction recommendations will assist in this, as it will also assist in reducing the extent of overshadowing to 3 and 5 Park Avenue (eastern side of Park Avenue) from 2.00pm onwards at the Equinox.

Amended Plan Comments: The overshadowing outcome associated with the applicant's revised envelope (and the degree of overshadowing analysis provided in support of this) is compelling and supported with respect to the subject site's southern residential abuttals.

With respect to visual bulk, the applicant's section diagrams (AO950 and AO951) generally demonstrate that the proposal achieves a high level of compliance with the provisions of B17 from the site's southern boundary, which will only be further achieved through the aforementioned height reduction recommendations. What is more challenging, however, is the extent of boundary wall proposed to the southern residential abuttal (a 3.6m high wall that runs the entirety of the site's southern interface). Consideration needs to be given to reducing the continuity of this, particularly given reasonable boundary wall expectations for the portion of the site's southern common boundary that is zoned NRZ/NRZ. No other visual bulk considerations appear to apply.

Amended Plan Comments: The amended proposal has reduced the visual bulk presenting to the southern boundary through a series of stepped planters, which terrace and which are proposed to contain garden beds and landscaping. Whilst the revised arrangement sufficiently reduces the dominance of the proposed southern boundary wall from our perspective, Council should satisfy itself of the proposed access and maintenance program.

Finally, with respect to overlooking, the proposed floorplans indicate a number of south-facing balconies within the western 'wing' to Parkview Road at Level 2 to Level 4 that are within 9m horizontal of 4 Parkview Road. Further information should be provided regarding the intended preclusion of downward views from these aspects. Similarly, the proposed communal terrace at the 'mezzanine' level will also require further explanation as to how downward views are intended to be precluded to the southern residential abuttals.

Attachment 13 - DLA Urban Design Referral Comments

Amended Plan Comments: The amended plans have addressed overlooking to the south in-principal through a series of planter boxes along the terrace edges within 9m of the southern property boundary. Whilst this will sufficiently preclude downward views to the southern abutting residential properties in principal, we were unable to locate a section diagram similar to Section 1 on A1102 for balconies within 9m horizontal and recommend requesting the applicant prepare this (if they have not already) to provide clarity and closure on this issue.

OTHER

Internal Amenity

Whilst not an urban design issue per se, it is clear that the proposed 'mezzanine top' communal open space will experience very little solar access by virtue of it's location at the south of the proposed tower form. Whilst this could be interpreted as 'secondary' within the context of the proposed rooftop communal open space (and whilst cognisant of the limitations placed upon this portion of the site by the NRZ mandatory height control), Council should satisfy itself of the proposed amenity of this space and the viability of any proposed landscaping.

Similarly, a number of dwellings are proposed that internally face inwards into the 'U' and which are also screened by way privacy screening. These dwellings will already have limited access to sunlight, and the addition of further screening as a result of the proposed yield will further reduce daylight access too. Any balcony that is screened to a height of 1.7m and which is also 'capped' by the balcony of the level above should be 'offset' from the level below to allow primary amenity to be derived from above rather than out.

In the same vein, a number of dwellings within the upper levels are proposed to be primarily oriented southward where the opportunity for alternative eastern or western orientations is readily available. Consideration should be given to amending the orientation of these dwellings accordingly.

Equitable Development

By virtue of the site's large amalgamated landholding and the zoning of the site's southern abuttals, the site is not in abuttal to any significant future development sites that would warrant a form of equitable development response above that which is generally proposed currently.

SUMMARY

There are many attributes of the subject site that position it as a candidate for higher density mixed use infill development, including its predominant zoning, location within the Alphington NAC and proximity to transport and services. Within this context, it is the site's physical context, relevant provisions of the Yarra Planning Scheme (Clauses 15, 21.05 and 22.10) as well as the implied future character of the site's broader area (including Alphington DP and certain provisions of the Darebin Planning Scheme) that provide the most useful built form guidance.

Attachment 13 - DLA Urban Design Referral Comments

DAVID LOCK ASSOCIATES
TOWN PLANNING & URBAN DESIGN

In response, the proposal as a typology is generally acceptable. However, it is too tall in terms of street wall height and overall height and fails to appropriately respond to the reasonable amenity expectations of its southern NRZ-zoned abuttals. The proposal also fails to respond appropriately from a public realm amenity perspective.

Whilst the applicant's revised proposal has responded well to previous commentary regarding offsite amenity, far more needs to be done with respect to built form and character. Importantly, in our opinion the composition of the proposal reads as far less 'elegant' and refined as viewed from Heidelberg Road compared to that which was submitted previously.

In our view, the applicant's revised concept sufficiently responds to the following previous urban design recommendations:

- **Reduce the extent of offsite overshadowing to 4 Park Avenue and 4 Parkview Road to full compliance with the provisions of Standard B21 of Clause 55. Invite the applicant to update their offsite shadow analysis with additional information on the nuances and details of the existing condition of each southern abutting dwelling;**
- **Explore alternative approaches to the proposed sheer 3.6m high boundary wall that is proposed to run the full length of the site's southern boundary;**
- **Include design mechanisms that preclude downward views of all south facing balconies within 9m horizontal of 4 Parkview Road. Invite the applicant to confirm the intent regarding overlooking preclusion from the 'mezzanine top' communal open space; and**
- **Any balcony that is required to be screened to a height of 1.7m and which is also 'capped' by the balcony of the level above should be offset so that primary amenity is derived from above, rather than out.**

However, the following recommendations remain outstanding:

- **Reduce the height of the proposed 'street wall' to no more than three storeys (11m) to all C1Z-zoned street interfaces. Retain the proposed street wall height transition where closest to the southern abutting NRZ properties;**
- **Reduce the height of the proposal to no more than eight storeys (25m). The eighth storey should be further recessed so as to read as no more than a recessive 'cap' in longer views toward the proposal and to reinforce a '3+4+1' built form composition;**
- **Significantly enhance the extent of Ground Floor activation of both Park Avenue and Parkview Road;**
- **Provide a weather canopy for the full length of the proposal's Heidelberg Road frontage, which 'returns' along each side street to also provide weather protection to each**

Attachment 13 - DLA Urban Design Referral Comments

proposed communal pedestrian lobby. The height of the canopy should be no more than 3.6m above the footpath NGL, and should extend no less than 750mm from the kerbline.

Please do not hesitate to contact Brodie Blades or Danielle Cull on (03) 9682 8568 or at brodieb@dlaaust.com should you wish to discuss any aspect of this information further.

DAVID LOCK ASSOCIATES

Attachment 14 - MEL Consultants Referral Comments

22 CLEELAND ROAD
SOUTH OAKLEIGH VIC 3167
AUSTRALIA

M E L
CONSULTANTS

(ACN 004 230 013)

Ref: D136/17

27 September 2017

City of Yarra
PO Box 168
Richmond VIC 3121

Attn: Amy Hodgen
Coordinator - Statutory Planning

Dear Amy,

700 – 718 Heidelberg Road, Alphington
Review of Vipac Wind Impact Assessment
Vipac Document Number: 30N-17-0026-TNT-615079-1

The review of the Vipac Wind Effects Statement is based on our experience of wind flow around buildings and structures. This experience has been developed from a company experience of more than 40 years of desktop, wind tunnel, and full scale studies of environmental wind conditions in urban and sub-urban areas. No wind tunnel studies have been undertaken to support the review. Our comments are as follows:

- The Vipac Wind Effects Statement has been prepared based on the experience of the consultancy and no wind tunnel testing by Vipac has been carried out to support the report. We have no issue with this approach for a desktop study as this is a common approach to provide architects, developers, and responsible authorities' advice on the wind effects of the design.

- We have no issue with the Analysis Approach, Site Exposure, and Regional Wind Climate that have been used as the basis for the assessment. Vipac has clearly identified the process for the desktop assessment and this is consistent

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Attachment 14 - MEL Consultants Referral Comments

with the approach that MEL Consultants would take to prepare a desktop wind impact assessment. A clear description of the proposed development has been provided along with reference drawings list in the Appendix of the report. The desktop assessment has also identified the adjacent developments as the heights of the existing buildings.

- We have no issue with the assessment criteria that Vipac have used for the desktop assessment. The recommended criteria for the immediate surroundings streetscapes would be walking comfort and the standing criteria for the entrances to the building.

- We note that on the ground floor plan (drawings A0100-Rev A) the entrance to the proposed northeast corner café has not been indicated. If an external entrance to the café is proposed, then depending on its location, wind conditions would be expected to be between the standing comfort and walking comfort criterion as indicated in Figure 7 from the desktop assessment. Additionally if there is a potential for outdoor seating (not shown on the drawings), then wind conditions for outdoor seating area would need to be reassessed.

- We agree that the gradual setback from Levels 1-6 and balconies from Levels 1-4 would reduce some downwash by northerly winds. However due to the exposure of the majority of the broad north face and its angled orientation to the northerly winds, which would skew the stagnation point on the north face towards the east side of the facade, additional wind flow would be expected to accelerate towards the northwest corner of the development. As a result we would expect wind conditions near the northwest corner of the development to be above the walking comfort criterion and wind conditions near the Parkview Road entrance to the lobby to be above the standing comfort criterion. We would suggest that wind conditions in these areas be quantified by a wind tunnel study and, if necessary, mitigation strategies developed to achieve the recommended criteria.

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Attachment 14 - MEL Consultants Referral Comments

- We note that the wind impact across the road from the development have not been assessed. Based on the height and exposure of the proposed development at 700 – 718 Heidelberg Road, we would expect the wind conditions across the roads from the development would be higher than the current conditions but still meet the walking comfort criterion for all wind directions.

- We agree that the rooftop level with 1.6 m high glazed balustrades would achieve the criterion for walking comfort wind conditions on the outdoor communal terrace and localised porous screens around seating area would mitigate wind conditions to achieve the standing/seating criteria. However, being on the rooftop, the proposed pergola over the shaded blue region in Figure 8 of the desktop assessment would not be expected to mitigate wind flow rolling off over the top of the balustrades for wind directions that approach the balustrades at an angle. Therefore, we would expect that additional wind-break screens around that area would be required for wind conditions to achieve the sitting comfort criteria.

- We agree with Vipac's general commentary on the utilisation of balconies; the need to educate residents on the usage of these spaces, the tethering of objects, and would add that any objects that are not tethered should not be left unattended or permanently on the terraces.

In conclusion, the Vipac Wind Impact Assessment has been prepared based on the consultant's experience of wind flow around buildings and structures. We have no issues with the Analysis Approach, Site Exposure, Regional Wind Climate, and description of the development used in the preparation of the assessment. This is consistent with the approach MEL Consultants would take to prepare a similar desktop environmental wind assessment. We agree with many aspects of the Vipac Wind Impact Statement for the assessment of the wind conditions. However, we have commented on the possibility of wind conditions being above the walking comfort criterion near the northwest corner and above the standing comfort criterion near the Parkview Road entrance to the lobby, due to the exposure and orientation of the

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building. Therefore, we would recommend a wind tunnel study be conducted to quantify wind conditions at these locations and, if necessary, mitigation strategies developed to achieve the recommended criteria. We have commented on an expected increase in wind conditions across the roads from the development which we would expect to still meet the walking comfort criterion. We have also commented on the wind conditions on the rooftop, especially under the pergola and seating areas where we would expect that additional wind-break screens would be required to mitigate wind conditions in areas where standing/sitting comfort criteria are desired.

Prepared by:

Y. Padayatchy
MEL Consultants Pty Ltd

Checked and Released by:

M. Eaddy
MEL Consultants Pty Ltd

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Attachment 15 - SLR Acoustic Referral Comments

21 July 2017

640.10090.04840 700-718 Heidelberg Rd Alphington 20170720.docx

City of Yarra
PO Box 168
Richmond VIC 3121

Attention: Amy Hodgen

Dear Amy

700-718 Heidelberg Road, Alphington
Planning Assessment Acoustical Review
PLN 17/0040

SLR Consulting Pty Ltd (SLR) has been retained by the City of Yarra to provide a review of the acoustic assessment report for the mixed use development proposed for 700-718 Heidelberg Road, Alphington.

Details of the report are as follows:

- Title: 700-718 Heidelberg Road, Alphington
- Reference: 20170378.1/2803A/RO/SG
- Date: 7 April 2017
- Prepared by: Acoustic Logic

The proposal is for a nine storey mixed use development with ground floor retail and cafe, eight levels of apartments and underground carparking. The project is proposed to have a range of residential amenities including communal terraces, a gym, pool and function room. A planning permit has not been issued for the project and the acoustic report has been prepared to address Item 35 of the City of Yarra Request for Further Information on the project. Item 35 is reproduced below:

> *An acoustic report assessing noise sources both internally and externally to the site (including traffic noise and any service equipment etc) and any recommendations for addressing impacts.*

1 Preliminary *(agreed / no comment)*

(Section 2 of the acoustic report)

The proposed development and the surrounding area are described in this section of the report. The main noise impacts to the subject development are identified as being road traffic on Heidelberg Road and mechanical plant on the roof of the commercial tenancy at 720-724 Heidelberg Road.

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Attachment 15 - SLR Acoustic Referral Comments

2 Road Traffic Noise

2.1 Design Targets

(Section 6.1 of the acoustic report)

Road traffic noise is proposed to be assessed to AS/NZS 2107:2016 recommended internal noise levels for developments near major roads. The recommended ranges are provided in Table 5 of the report.

SLR Comment: *Acoustic Logic do not nominate which part of the AS/NZS2107 ranges they propose to meet and under what conditions. The specific design targets should be nominated in the report to avoid ambiguity. We recommend the following:*

- *Average traffic noise levels not to exceed 40 dBA $L_{eq,16h}$ in all habitable rooms and 35 dBA $L_{eq,8h}$ in bedrooms. These targets are in line with the recently released Better Apartments Design Standards and are within the AS/NZS 2107 ranges, and*
- *Loudest hour of road traffic noise is not to exceed 45 dBA $L_{eq,1h}$ in habitable rooms from 7 am to 10 pm, and 40 dBA $L_{eq,1h}$ in bedrooms from 10 pm to 7 am the following morning. The basis for the loudest hour targets is AS/NZS2107:2016, with the day and night periods defined in accordance with Victorian EPA legislation and guidelines rather than in accordance with the Better Apartment Design Standards.*

2.2 Traffic Noise Measurements

(Section 5 of the acoustic report)

Traffic noise impacts to the subject site have been quantified through attended and unattended noise measurements. The unattended measurements were undertaken on the northern boundary of the adjacent site for 6 day period (photo and graphical logging data provided). The microphone was 3 m above ground. Logging was undertaken from 2 to 8 March 2017. Attended measurements were undertaken during morning peak hour on Wednesday 8 February, in the same area, with the microphone 1.5 m above ground in front of a building.

The noise logging data is summarised in Table 2 of the report. The day and night average levels, and the typical repeatable loudest hour levels are presented. The results of attended measurement are reported in Table 4.

SLR Comment: *The traffic noise measurements were undertaken at appropriate times and in suitable locations. The results are clearly reported and the data looks reasonable.*

2.3 Façade Upgrade Treatments for Road Traffic

(Section 7 of the report and marked up drawings included in Appendix 1)

Substantial glazing upgrades are proposed for north facing apartments to control road traffic noise ingress. Some advice is provided for roof / ceiling and external wall construction.

SLR Comment: *The glazing upgrades proposed appear appropriate for controlling the high levels of road traffic noise measured at this site.*

We recommend that the report include a recommended minimum R_w rating for lightweight external walls exposed to high levels of road traffic.

Attachment 15 - SLR Acoustic Referral Comments

3 Commercial Noise Impacts (existing sources)

3.1 Design Targets

(Section 6.4 of the report)

Noise from existing commercial uses is proposed to be assessed to SEPP N-1 externally and, if an exceedance of SEPP N-1 limits is identified, façade upgrade treatments are proposed to ensure that the SEPP N-1 internal noise targets are met. The internal targets are provided in Table 9 of the acoustic report and are equal to 40 dBA L_{eq}, day, 34 dBA L_{eq}, evening, and 29 dBA L_{eq}, night.

SLR Comment: *We agree that internal noise targets for existing commercial noise are appropriate, however our recommendation would be that the targets adopted are equal to the lower of the following:*

- *The effective SEPP N-1 internal noise limit, taking into consideration any relevant corrections for noise character (corrections for character are required under SEPP N-1), and*
- *Not more than 35 dBA L_{eq} in habitable rooms during the day period or 30 dBA L_{eq} in bedrooms at night.*

In addition to the above, consideration of noise from the plant to balconies should be provided.

We recommend adopting this more conservative approach to indoor targets to minimise the likelihood of complaint. Strictly speaking, SEPP N-1 indoor limits do not apply to noise from the mechanical plant, and if the equipment is found to be annoying by future occupants of the development, there is potential for an external SEPP N-1 noise assessment to be conducted. A finding of non-compliance with the SEPP N-1 external limits could result in the owner of the plant being required to control the noise. The likelihood of this outcome would be minimised if the equipment does not cause annoyance.

Our recommended targets are approximately 5 dB lower than Acoustic Logic are proposing for the day period. For the day and evening periods, the targets provided in the acoustic report are lower.

3.2 Noise Measurements and Assessment

(Section 7.4 of the report)

Noise from roof mounted mechanical plant at 720-724 Heidelberg Road has been identified as audible and potentially non-compliant at the subject development. However, measurements of noise from this equipment have not been undertaken. Acoustic Logic propose to conduct the measurement during the detailed design phase in order to quantify noise impacts. Façade upgrade advice to achieve the nominated internal targets is proposed to be provided at that time.

SLR Comment: *Our preference would be for the commercial noise to be assessed and for the façade upgrade works (if required) to be developed during the planning stage of the project. This ensures that any difficult problems are identified in a timely fashion. However, the approach proposed by Acoustic Logic is reasonable provided that there is some means for ensuring that the work is undertaken before the façade design is finalised. This could take the form of submission of a revised acoustic report addressing the planning permit conditions, or a post construction acoustic report demonstrating that SEPP N-1 internal limits have been met.*

Attachment 15 - SLR Acoustic Referral Comments

4 Project Mechanical Plant

4.1 Criteria

(Section 6.2 and 6.3 of the report)

Centralised mechanical plant associated with the project is proposed to be assessed to SEPP N-1 and fixed domestic plant (e.g. balcony mounted condenser units) to the EPA Noise Control Guidelines. SEPP N-1 noise limits are provided in Table 7 of the report. The limits take into consideration measured background noise levels and the calculated SEPP N-1 zoning levels.

Background noise levels for the purpose of determining SEPP N-1 noise limits were conducted on an adjacent site, at the same distance from Heidelberg Road as the potentially most impacted existing dwellings in Riverview Grove, south of the subject development.

SLR Comment: *The identified zoning levels are appropriate for dwellings to the south of the subject site.*

The background noise monitoring undertaken to determine SEPP N-1 noise limits was conducted in an appropriate location. Some commentary should be included regarding the source of the background noise, as there is potential for contribution from earth works and truck movements at the Amcor site to the west of the logger location. However, Acoustic Logic appear to have used some of the lowest of the measured background noise levels to determine noise limits. This is a conservative approach as the SEPP allows for averaging of the day, evening and night levels. Additionally it would seem unlikely that there was much noise from the Amcor site during the evening and night periods.

The identified SEPP N-1 noise limits are classified as 'neutral', and are consequently not directly affected by the measured background noise levels.

4.2 Assessment

(Section 8 of the report)

Assessment of noise from mechanical plant is proposed to be undertaken during the detailed design for the development, once equipment selections have been made.

SLR Comment: *This is a reasonable approach for most items of mechanical plant. We recommend that more detail is provided during the planning stage for potentially high risk items only (e.g. car stackers proposed to be installed close to existing dwellings).*

5 Noise from the Development

5.1 Gymnasium

A gymnasium is proposed for the ground floor of the development. The gym will be separated from apartments on the same level by a common wall, and will have apartments directly above.

(Section 9.1 of the report)

Guidelines for minimising noise and vibration impacts from the gym are provided in the report. These include both administrative controls (restricted operating hours, provision of headphones for music and the like), and building construction works. The building upgrades comprise installation of an approved floor system and upgraded walls and ceiling (R_w+C_{tr} not less than 55 dB).

SLR Comment: *The advice for controlling noise from the gym is sufficient for the planning phase of the project.*

Attachment 15 - SLR Acoustic Referral Comments

5.2 Function Room

A ground floor function room is proposed for the southern side of the development. The function space opens onto a communal terrace, which abuts the residential boundary to the south. The space is separated from a ground floor apartment by a common wall and has apartments above. A number of apartments also overlook the communal terrace.

(Section 9.2 of the report)

Guidelines for minimising noise and vibration impacts from the function room are provided in the report. These include both administrative controls (restricted operating hours, restricted access to the terrace during functions and installation of a music noise monitor), and building construction works. The building upgrades comprise installation of an approved floor system and upgraded walls and ceiling (R_w+C_{tr} not less than 55 dB). Carpet or a hard floor system on an acoustic underlay is also proposed.

SLR Comment:

The advice provided is adequate for a small, limited operation function room. This space is too close to apartments to be able to be used for large, late or particularly noisy gatherings.

Upgrading the glazing of the function room north wall and door may improve the flexibility of this space, particularly given the close proximity of apartments.

5.3 Rooftop Swimming Pool

An open air swimming pool is proposed for Level 9 of the development.

(Section 9.3 of the acoustic report)

The pool is proposed to be isolated from the building structure with the design of isolation proposed to be undertaken during detailed design phase of the project. Access to the pool is proposed to be restricted from 7 am to 10 pm. The architectural drawings show a 1.6 m high glass balustrade around the rooftop communal area.

SLR Comment:

The issue of noise and vibration from the pool to apartments is adequately addressed through the proposed measures.

The 1.6 m high solid balustrade shown on the architectural drawings should be adequate to control voice noise from the pool and associated communal area to existing dwellings (which are approximately 50 m away).

5.4 Café and Retail

A ground floor retail outlet (325 m²) and large café (316 m²) is proposed for the northern side of the development.

(Section 10 of the report)

This section of the report lists the regulatory requirements to be met by noise from the retail and café premises, and includes administrative guidelines for minimising noise impacts.

Attachment 15 - SLR Acoustic Referral Comments

SLR Comment:

The information provided is generally appropriate for this stage of the development. In addition to the issues addressed in the report we would also recommend that the fitout of the spaces address the issue of structureborne sound transfer from hard floors to the apartments above. This can be a problem where trolleys or heavy furniture are moved over hard floors.

5.5 Carpark Entry Gates

The carpark entrance gates are proposed to be installed approximately 15 m from an existing dwelling at 3 Park Street.

(Section 11 of the acoustic report)

A target of 65 dBA L_{max} has been nominated for noise from the carpark entrance gate. Advice is provided in the report for controlling structureborne sound from the gate to the apartments above. The report also includes the statement that doors are to be 'quiet in operation'.

SLR Comment:

Noise from the carpark entrance gate is also required to comply with SEPP N-1. The SEPP N-1 assessment takes into consideration the frequency and duration of use, and the characteristics of the noise produced (decibel penalties apply if the noise includes a tonal or impulsive component). For large developments such as this one, where the carpark entrance gate may be in frequent use, the SEPP N-1 noise limits can drive the design.

The gate should also comply with sleep disturbance and amenity targets in apartments within the development. Targets we have proposed for developments within the City of Yarra in the past are:

- *35 dB L_{Amax} inside bedrooms of apartments within the development (corresponding to a AAAC '4 star' level)*
- *40 dB L_{Amax} inside living rooms of apartments within the development (corresponding to a AAAC '4 star' level)*

Sufficient information should ideally be included in the report to provide the builder / developer with guidance for selecting appropriate equipment. This may include a recommended maximum noise level at 1 m for any item of plant and equipment, such that SEPP N-1 and L_{max} targets are likely to be met at noise sensitive locations.

6 Ground Floor Communal Outdoor Area

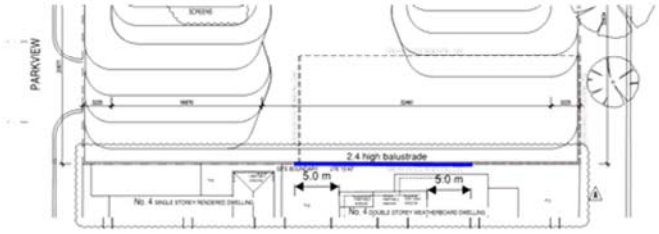
Noise from the ground floor communal terrace is not explicitly addressed in the report. The terrace is shown as having a 1.2 m high glass balustrade around it. The terrace will be overlooked by the upper level windows of the dwelling at 4 Park Avenue. The only access to the terrace appears to be via the function room, which is proposed to be closed from 10 pm to 7 am. This will address the issue of sleep disturbance. However, there is nevertheless potential for activity on the terrace to result in unacceptably high levels of voice noise at the dwelling at other times, particularly if the area is used for functions.

It may be appropriate to increase the height of the balustrade from 1.2 m to 2.4 m in the vicinity of the second level of the dwelling, with the elevated section extending at least 5 m either side of the second level (see marked up drawing below for concept).

Additionally, voice noise from the terrace should meet the targets applied to commercial outdoor patron areas (i.e. SEPP N-1 limits or the MDA background noise based targets). If these targets cannot be met by functions, further restrictions on the use should be applied.

Attachment 15 - SLR Acoustic Referral Comments

Figure 1 Possible location of elevated balustrade to control voice noise to 4 Park Avenue



7 SLR Summary

The acoustic report for 700-718 Heidelberg Road, Alphington has been prepared to address potential noise impacts to and from the project. The areas we recommend addressing in further detail are listed below.

Road Traffic Noise

1. The specific road noise targets adopted for the project should be nominated in the report to avoid ambiguity.
2. Recommended minimum R_w ratings should be provided for lightweight walls exposed to noise from Heidelberg Road.

Existing Commercial Noise

3. Noise from exisitng roof mounted mechanical plant at 720-724 Heidelberg Road has been identified as a potential impact to some parts of the site, however the noise has not been assessed. We recommend that either an assessment is undertaken during the planning phase, and included in the acoustic report, or that a post construction report is provided to demonstrate compliance with the internal noise targets.
4. The SEPP N-1 internal targets identified in the report are generally appropriate, however we recommend that the façade should also be designed to ensure that the lower daytime target of 35 dBA will also be met. Consideration of noise to balconies should also be provided in the report.

Café / Retail

5. In addition to the issues raised in the acoustic report we recommended that fitout of the café and retail outlet address the issue of structureborne sound transfer from these spaces to the apartments above.

Carpark Entrance Gates

6. Noise from the carpark entrace gate should be required to meet SEPP N-1 noise limits and indoor amenity targets of 40 dBA L_{max} in apartment living rooms and 35 dBA L_{max} in apartment bedrooms (windows closed), as well as the sleep disturbance targets nominated in the report for existing dwellings.
7. Indicative advice should be included in the acoustic report to assist the developer / builder in selection of this equipment. The advice can comprise a recommended sound level (e.g. Lmax and Leq) at a reference distance, such that SEPP N-1 and sleep disturbance targets are likely to be met.

Attachment 15 - SLR Acoustic Referral Comments

Ground Floor Communal Outdoor Area

8. Consideration should be given to control noise from the ground floor outdoor communal area to the nearby dwellings. Increasing the height of the balustrade to 2.4 m in the vicinity of the second level of the dwelling at 4 Park Avenue would assist.
9. Additionally, voice noise from the terrace should meet the targets applied to commercial outdoor patron areas (i.e. SEPP N-1 limits or the MDA background noise based targets). If these targets cannot be met by functions, further restrictions on use of the terrace should be applied.

Regards,

Dianne Williams
Associate - Acoustics

Checked by: JA

Attachment 16 - City Works Referral Comments

Hodgen, Amy

From: Agostino, Joe
Sent: Wednesday, 17 January 2018 5:54 PM
To: Hodgen, Amy
Cc: Orr, Patrick
Subject: RE: PLN17/0040 - 700-718 Heidelberg Rd, Alphington - Internal referral of Application

Hi Amy

The Waste Management Plan prepared by RB Waste Consulting Group dated 12th Jan 2018 for 700-718 Heidelberg Rd, Alphington is satisfactory from the Cityworks Branch's perspective. This WMP supersedes all previous WMP's.

Kind Regards

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Attachment 17 - Internal Urban Design Referral Comments

Hodgen, Amy

From: McNicol, Hayley
Sent: Tuesday, 16 January 2018 4:25 PM
To: Hodgen, Amy
Subject: RE: PLN17/0040 - 700-718 Heidelberg Rd, Alphington - Request for comments on Streetscape works

Hi Amy

Nice to catch up yesterday.

Following our discussion about this development, I have added below responses to the two questions you had:

- **Is the ground floor setback acceptable?**

  I understand the proposal has been amended to increase the setback at ground floor level, along Heidelberg Road as well as the Park Avenue and Parkview Road frontages. As this is an island site, it provides a good opportunity to improve to the public realm by setting the ground floor back and increasing the footpath space over a reasonable distance. We support the ground floor setback, particularly on Heidelberg Road which is a busy road with fast moving traffic – the setback will provide greater space for pedestrians away from the carriageway. The setbacks along the side streets will also allow for additional pedestrian space too which is welcomed. A few things to consider:

  - How does the setback and extent of covered footpath align with what is proposed on the Amcor site? It would be beneficial to synchronise these as much as possible to create a consistent pedestrian environment along Heidelberg Road. I don't know much about the current status of Amcor, but remember Richa having some previous discussions about setting the buildings back along the Heidelberg frontage, so is worth checking.

  - The bicycles are located in the setback, which interrupts the covered pedestrian environment at all times, and also means that bicycles parked there would be half covered and half not. We recommend that the bicycle parking located within the setback is relocated on the public footpath, to allow more space for pedestrians in the covered area. Our Strategic Transport team can recommend the exact location/orientation of the cycle parking if that would be helpful.

  - We recommend that the 'Supply air fan room' on Parkview Road is also set back to align with the prevailing setback, so that it opens up this space and reduces any hiding spots.

- **Is the window gallery on the Park Avenue frontage acceptable?**

  A section of the Park Avenue frontage is occupied by a 'window gallery', which sits in front of the ground floor car park. It is our first preference that an active use is provided along this stretch, but I accept the points you have raised around the zoning of the land that would make it difficult to put in any commercial unit along here. If a residential unit is not possible here, we consider that the window gallery could help to screen the car park and add visual interest along this frontage. However further detail is required to understand what this window gallery would look like and how it would be managed, and we recommend that Arts and Culture are involved in any discussions on this. A few thoughts:

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- Not sure if having the recess gallery with the glass is the right approach as it might require lots of maintenance. It is worth getting advice from Arts and Culture on what options would work best here, and the value of having temporary/changeable artworks vs. more permanent ones.

- It may be worth opening the window gallery (or artwork/treatment) slightly around on the northern end where the car park entry is, and extending the treatment on the northern edge. This would help to improve the appearance of this corner at the car park entry and make the artwork more visible from Heidelberg Road.

- There is an opportunity for improved lighting along here, to ensure that the frontage does not appear dead and dark. This should consider any amenity requirements/impacts on the adjoining residential properties.

I hope this helps – please let me know if you need anything further.

Thanks

Hayley