



# KAMIRA AVENUE VILLAWOOD

RFI - URBAN DESIGN REPORT

JUNE 2023



# **SITE ANALYSIS**

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**KAMIRA AVENUE  
VILLAWOOD STAGE 02**



SITE ANALYSIS

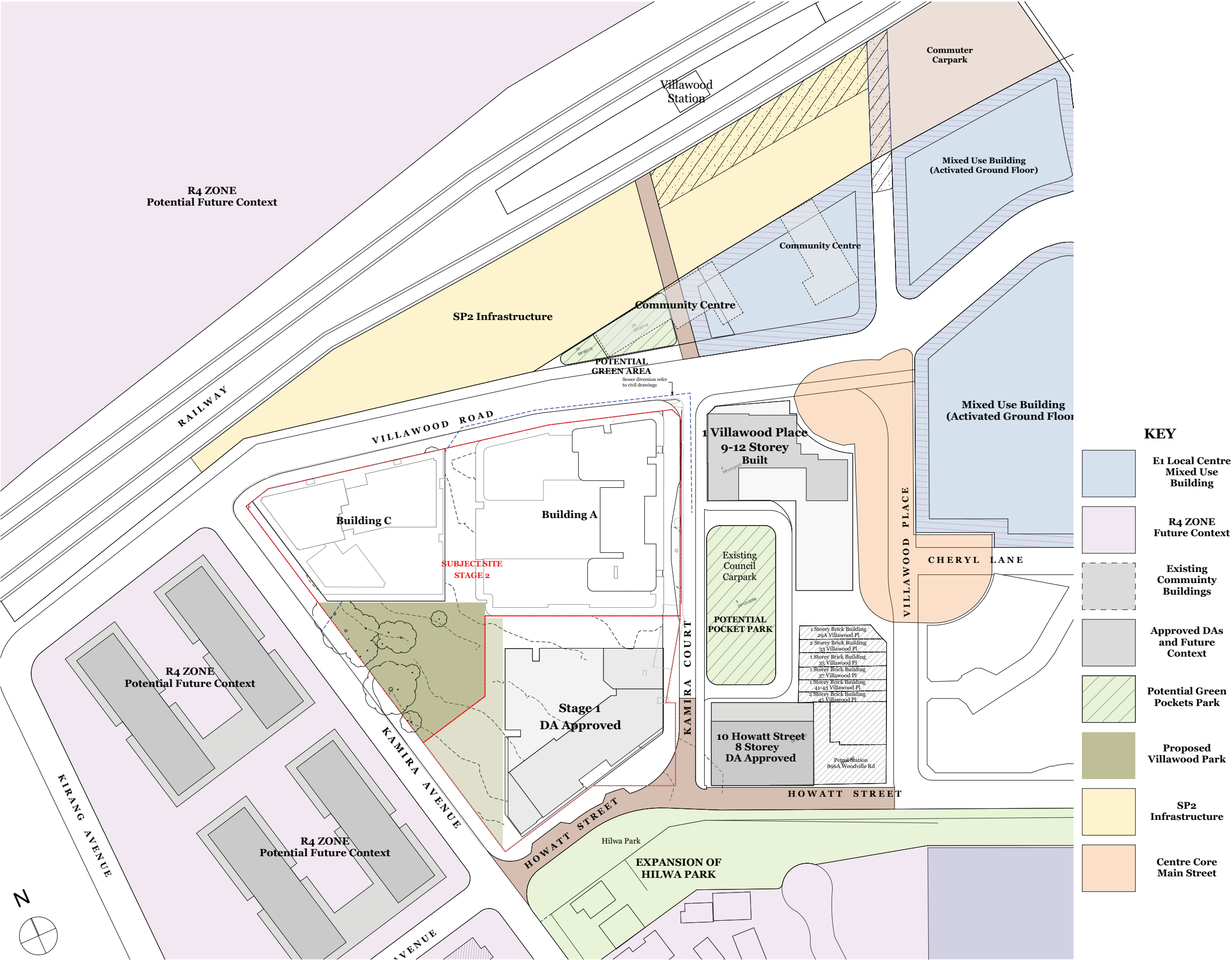
SITE ANALYSIS

Council Comments

Accordingly, the 3D modelling shall be updated to include a schematic/concept-built form of the R4 residential precincts to the west and south. The current UDR presents these sites as single storey dwellings. It would also be beneficial to understand what is happening north of Villawood Road adjacent the rail line on the mixed-use site to better understand the character of Villawood Road and the gateway when arriving from the west and east.

The site analysis shall be updated to indicate the current Development Applications for adjacent buildings and the potential massing of the R4 sites to west and south.

The analysis plans shall include all public parks and street verges/public domain, major infrastructure such as substations etc in adjacent sites including Hilwa Park to provide a comprehensive analysis of the context of the town centre.





# OVERSHADOWING

## Council Comments

The urban design approach and the solar assessment of Stage 2 must include more detailed description of the impacts on all neighbours including Stage 1 development, as well as existing and approved buildings/DAs on neighbouring properties such as Villawood Place and Pedestrian Mall.

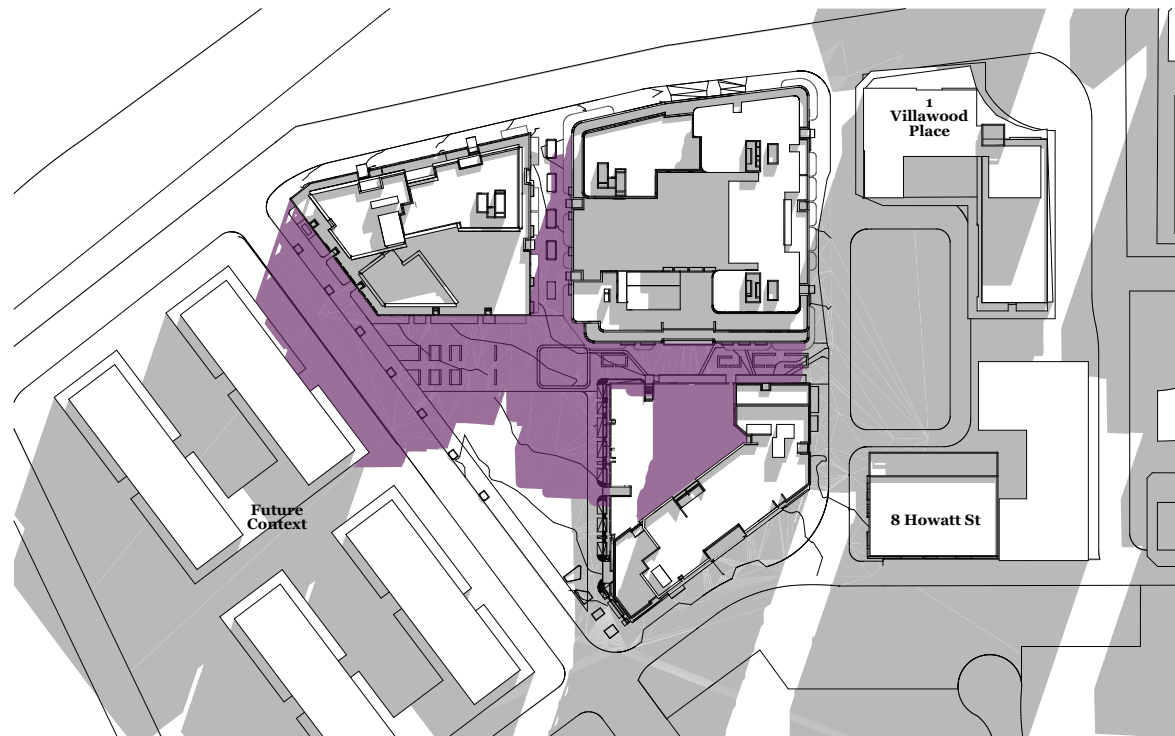
## Response

1 Villawood Place  
receives solar from 9am to 1pm

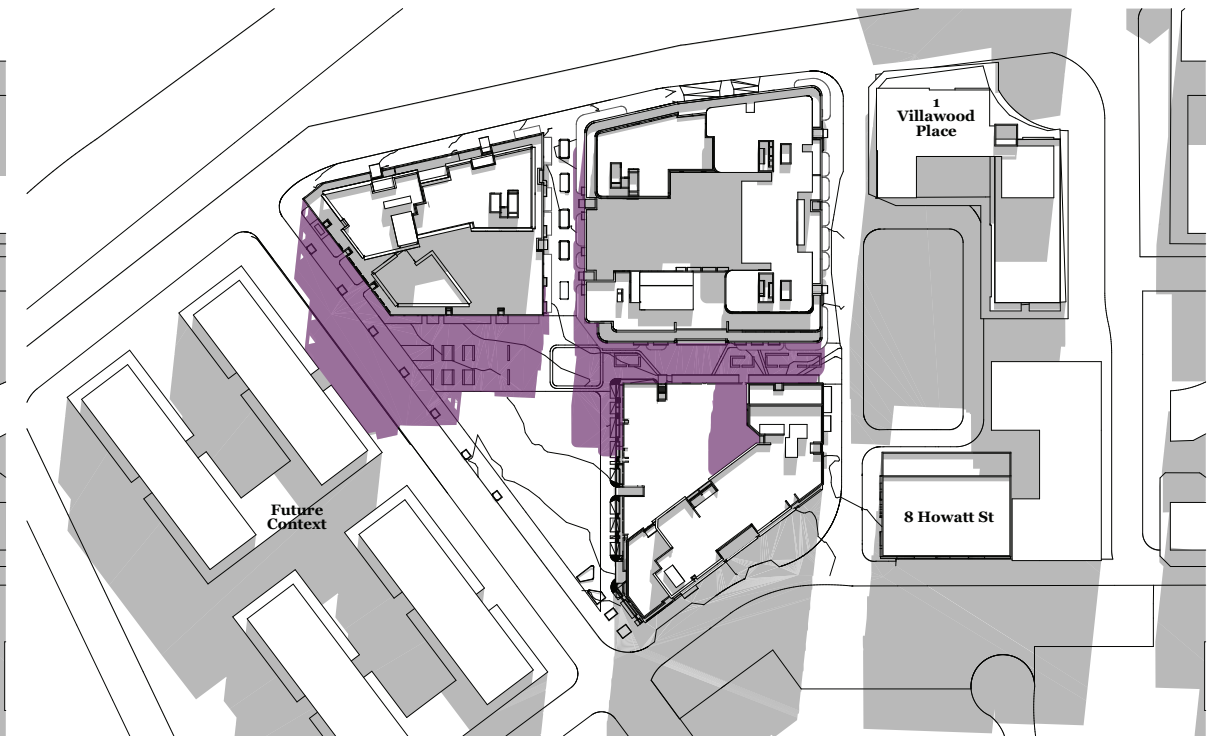
South and West Future R4 Zone  
receives solar from 11am to 3pm

8 Howatt street  
receives solar from 9am to 12pm

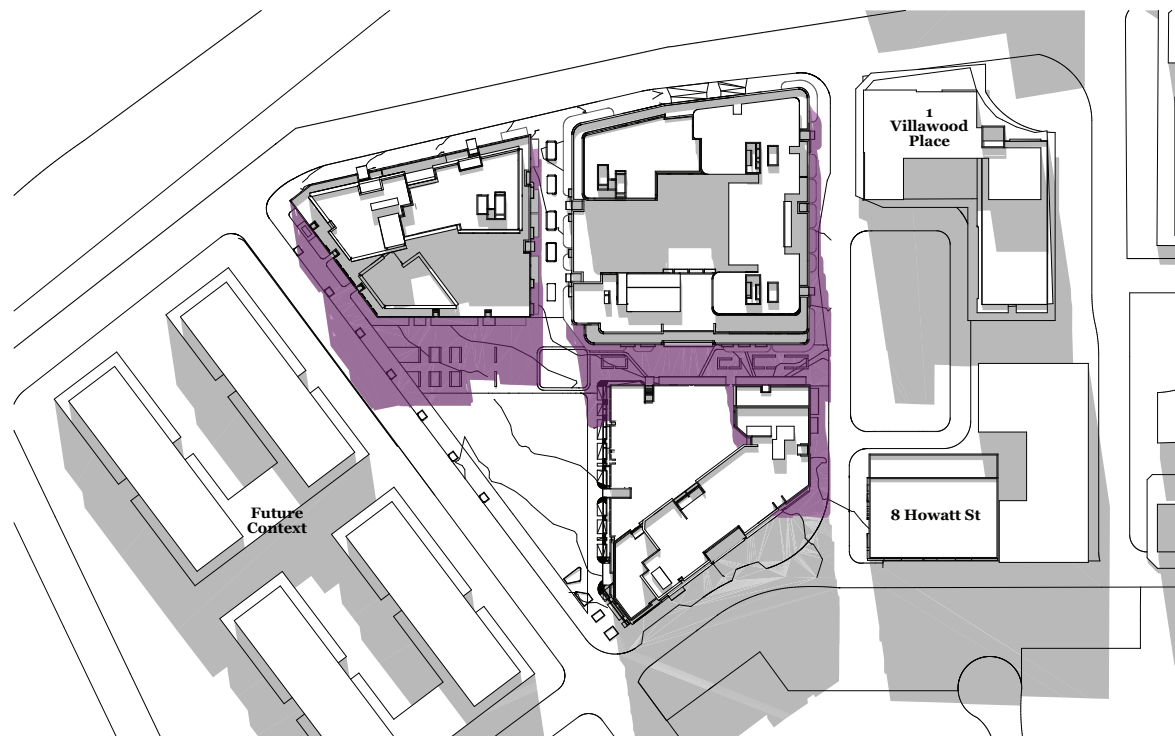
Stage 1  
receives solar from 12pm to 3pm



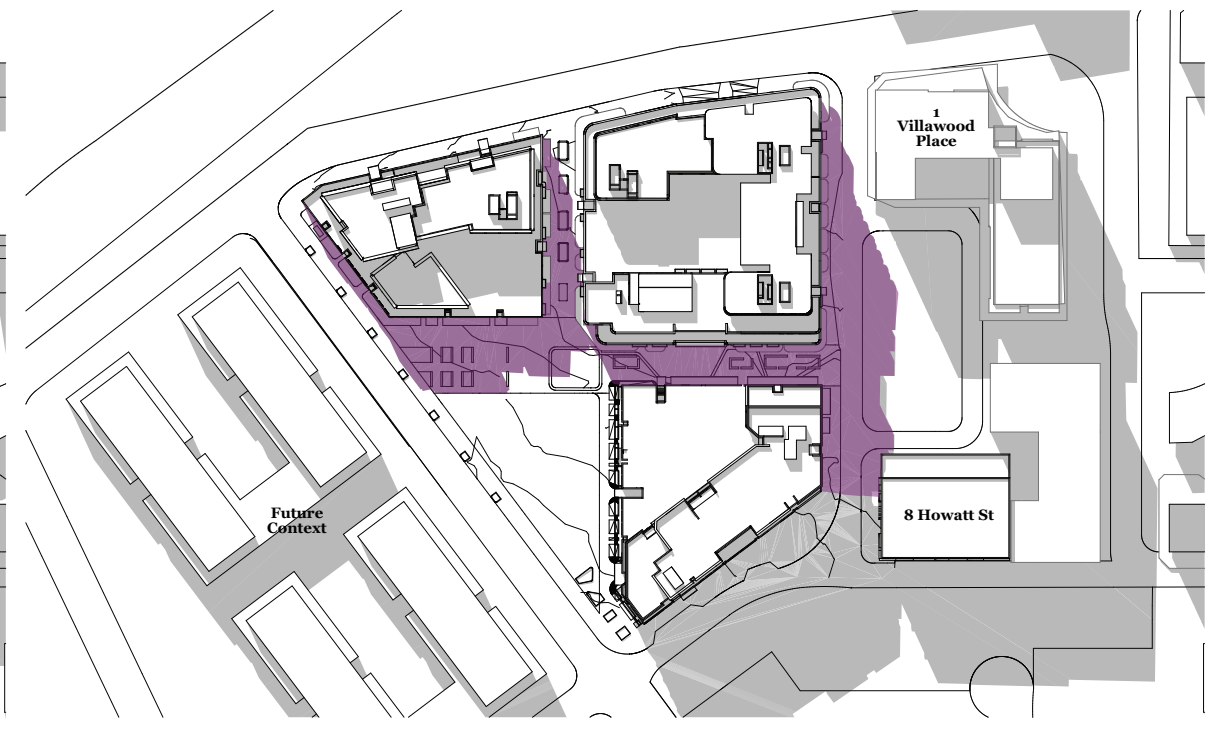
9am - June 21



10am - June 21



11am - June 21



12pm - June 21

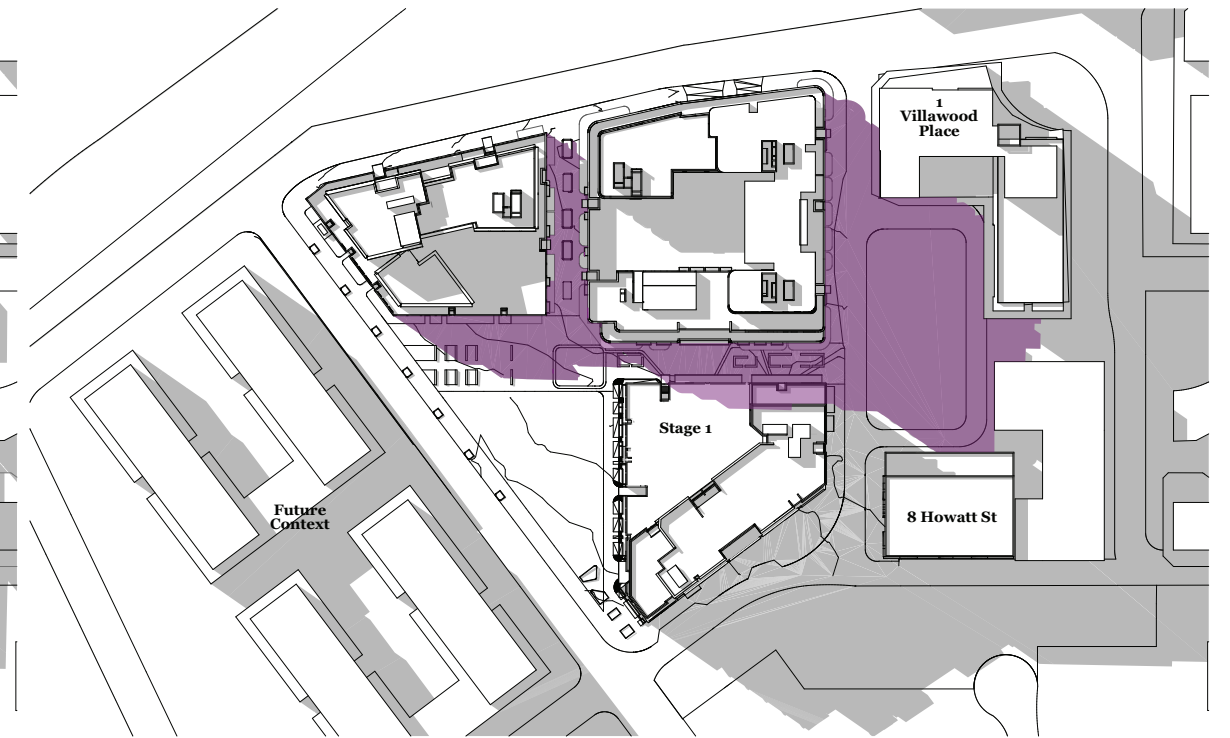
## Shadow Analysis

Building A & C Shadows

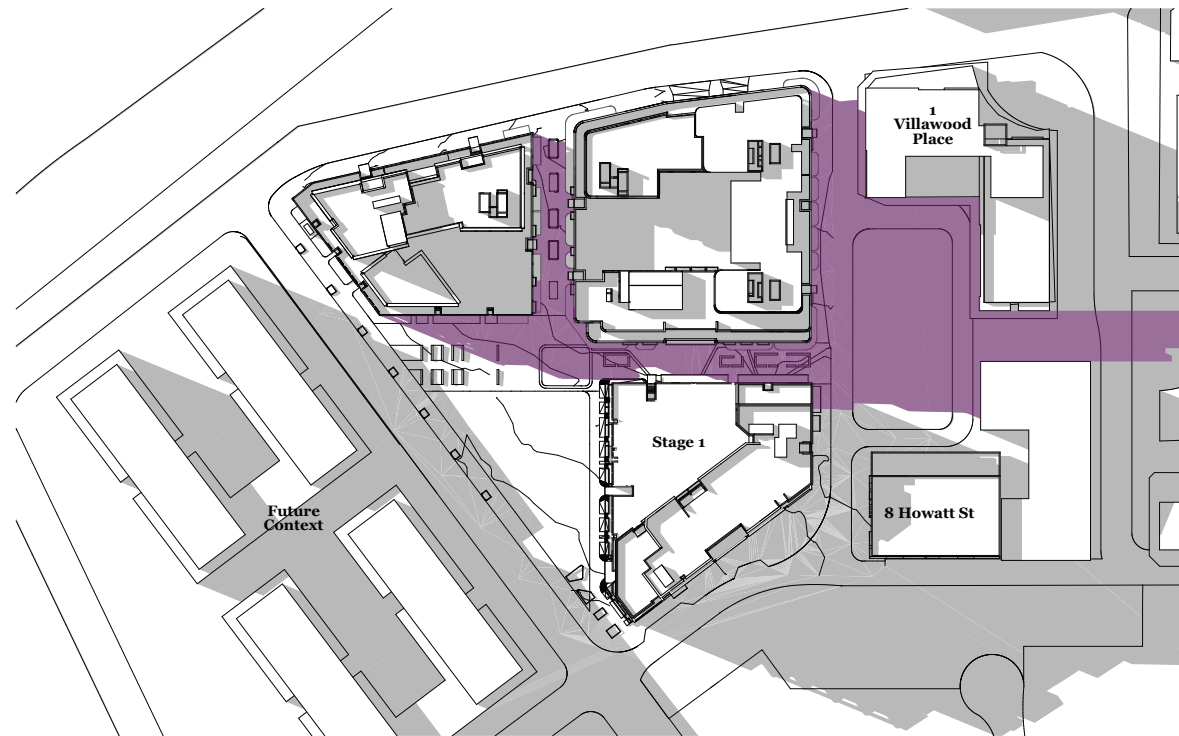




1pm - June 21



2pm - June 21



3pm - June 21

**Shadow Analysis**

Building A & C Shadows





# GROUND LEVEL AMENDMENTS

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KAMIRA AVENUE  
VILLAWOOD



GROUND LEVEL AMENDMENTS  
GROUND LEVEL



SUBMITTED DA



REVISED

- Medical Centre Relocated
- 6 Residential Units facing Kamira Ave and Pedestian Link
- 2 New Residential lobby entrances from Villawood Road
- Childcare centre removed



GROUND LEVEL AMENDMENTS

NEW LOBBY ENTRIES

Council Comments

Clause 4.14 (Active Street Frontages) of the DCP requires active frontages and pedestrian links to be provided to encourage pedestrian activity to interact with the active shop fronts to create a positive, usable and attractive space.

The provision of the back of house areas, a substation and extensively screened facades along the childcare centre elevations on the ground floor results in loss of opportunity for street activation and connectivity to the proposed public park.

Accordingly, it is considered that this arrangement is not consistent with the objectives of the DCP. The applicant shall consider relocating the back of house areas into the basement and reconsider the location and design of the childcare centre in order to provide active uses on the ground level.

Furthermore, the substation shall be provided within the building to reduce the visual impact of this structure.

Response

New lobby entries have been introduced to Villawood road to provide a street address and reduce the back of house visual impacts





# CONNECTIVITY

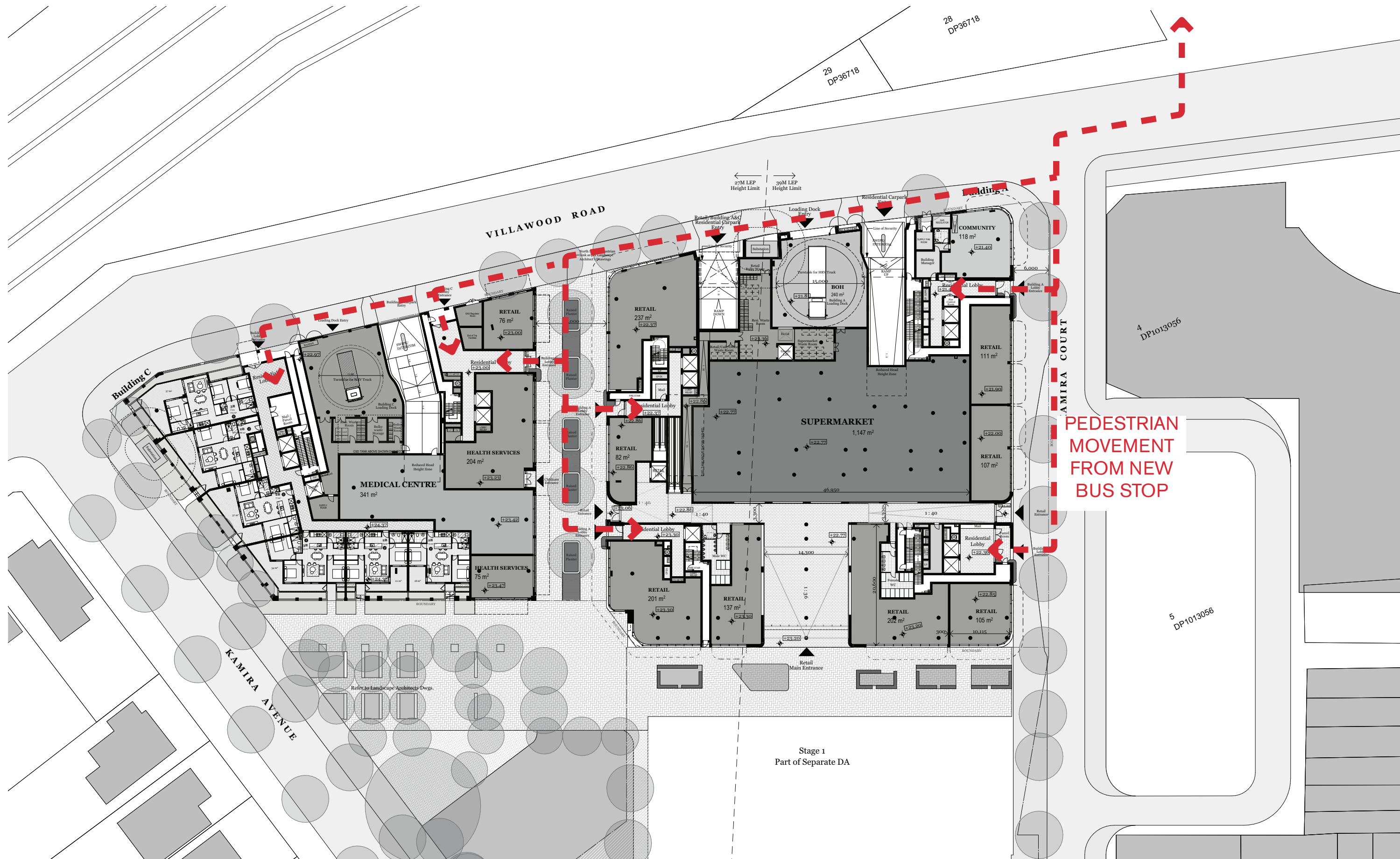
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KAMIRA AVENUE  
VILLAWOOD

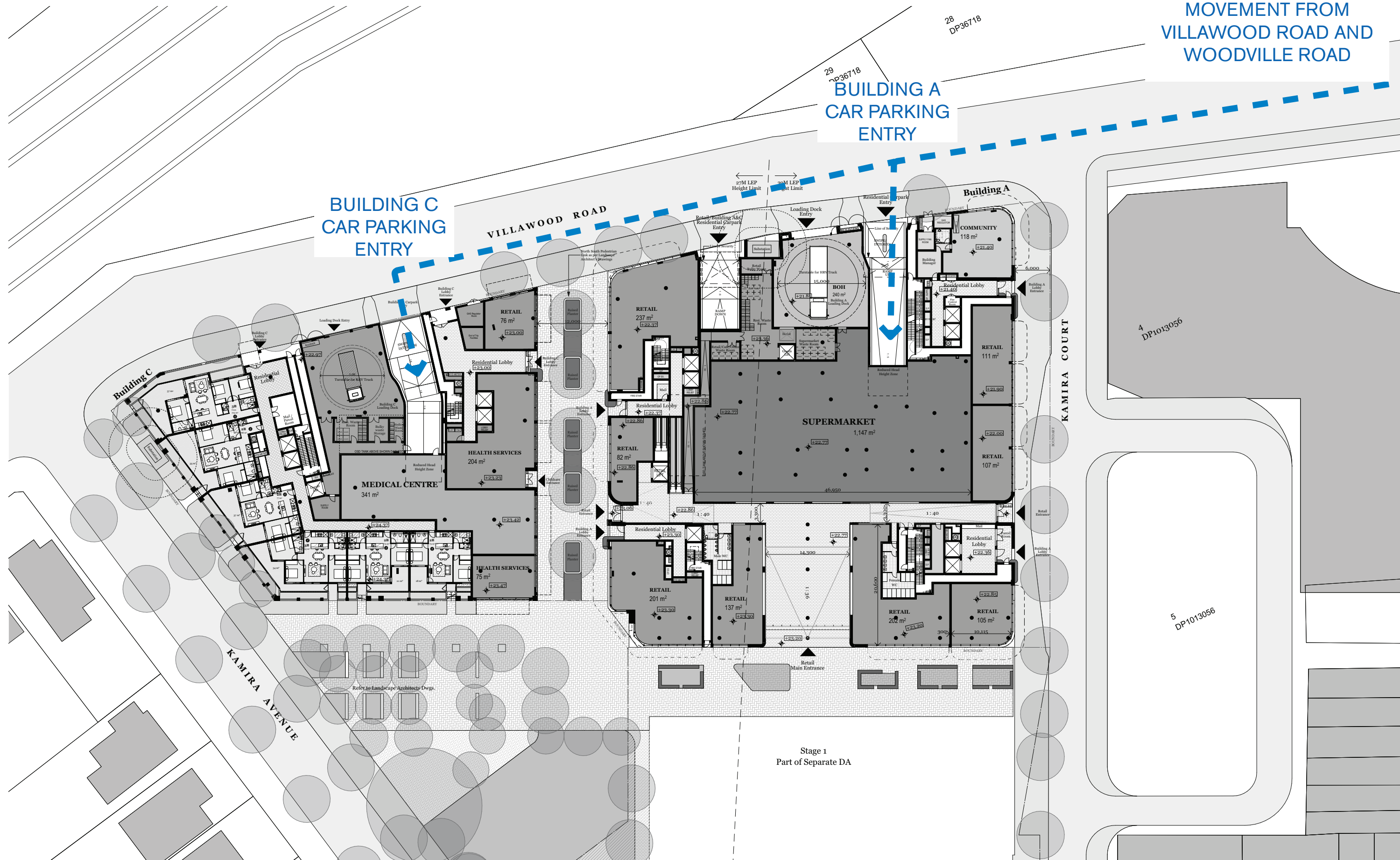


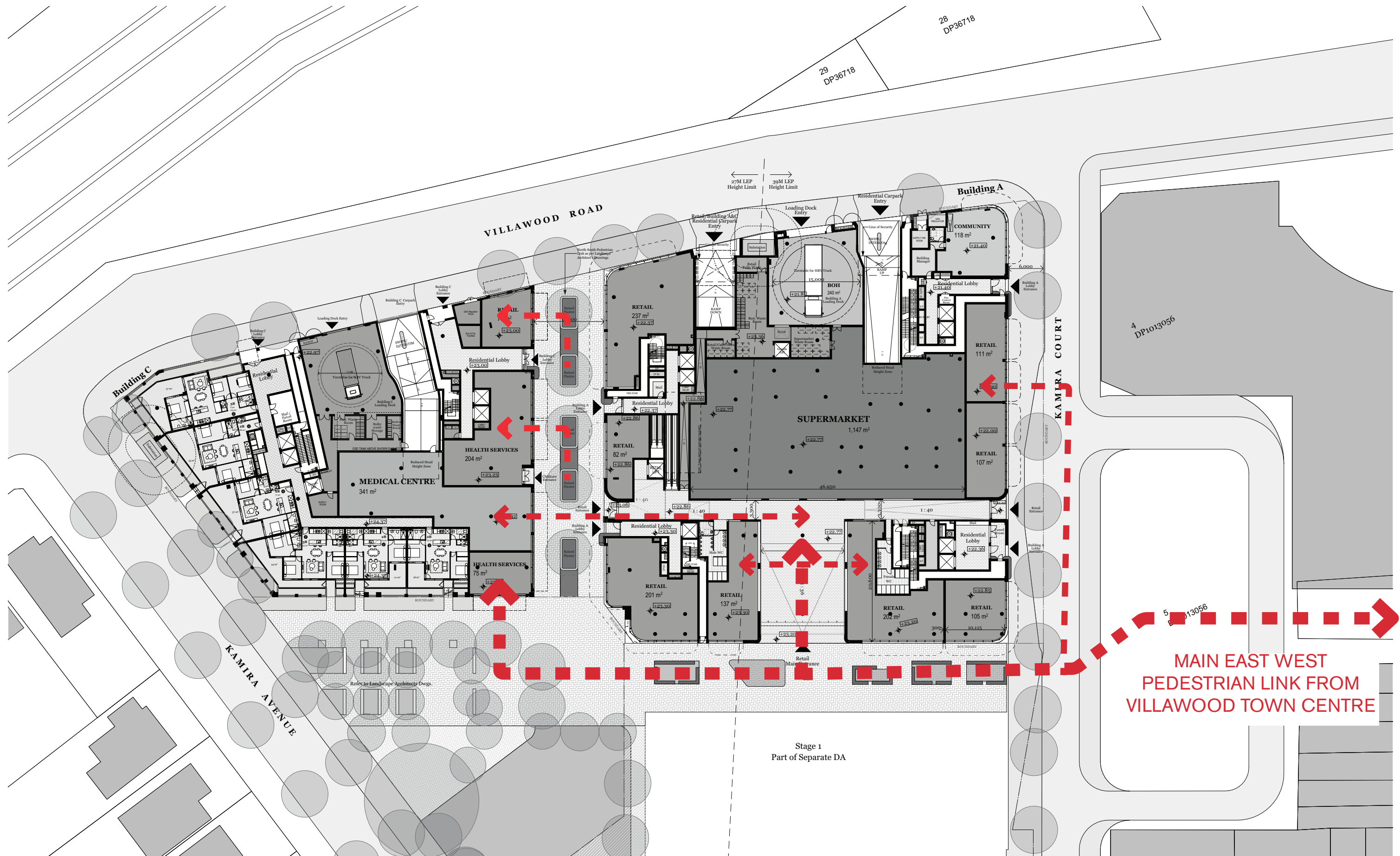
CONNECTIVITY  
RESIDENTIAL PEDESTRIAN MOVEMENT

PEDESTRIAN MOVEMENT  
FROM VILLAWOOD  
TRAIN STATION

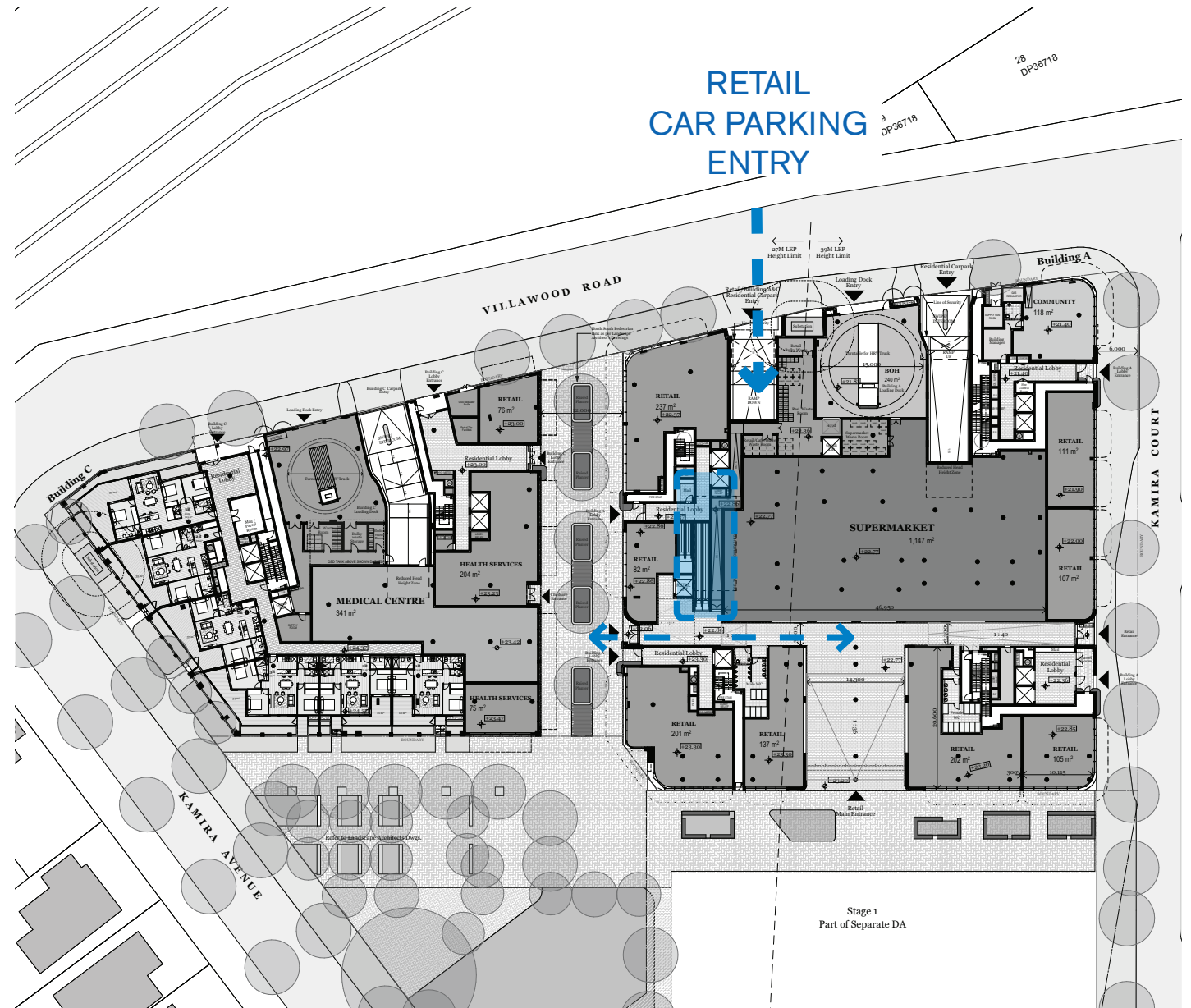




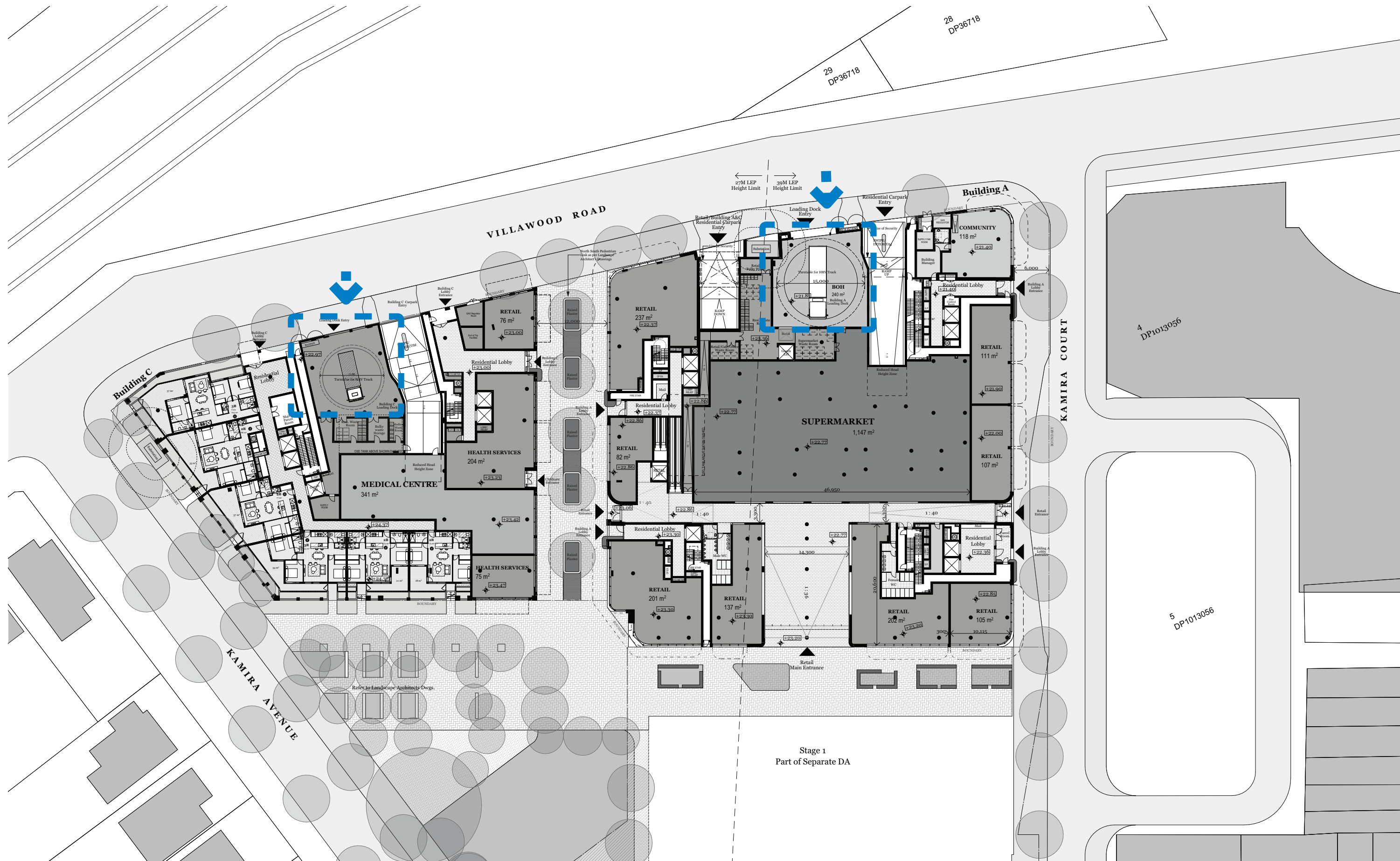






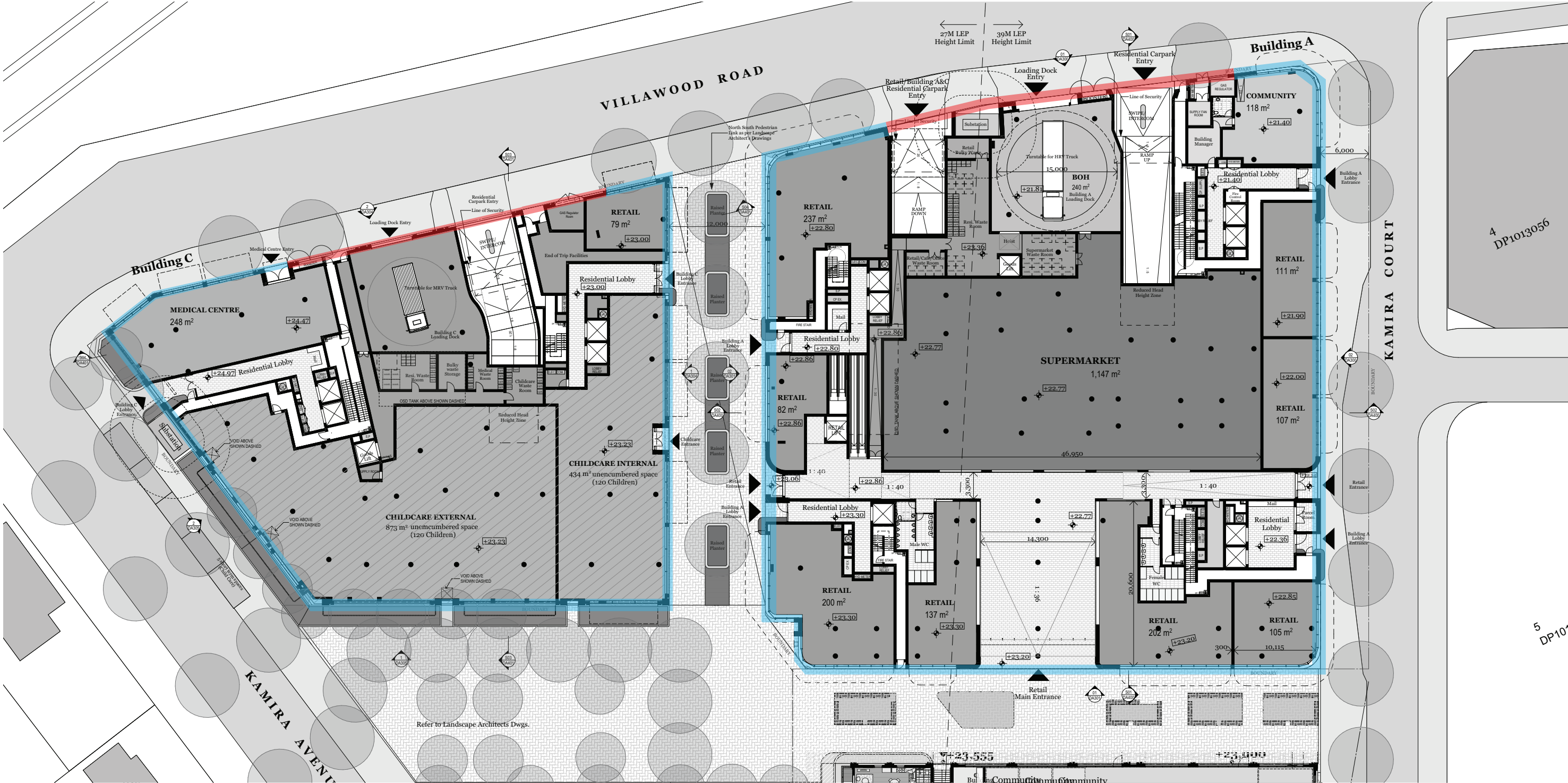


CONNECTIVITY  
REMOVALIST AND LOADING ZONES





STREET ACTIVATION  
ACTIVE STREET FRONTAGE DA



Building C

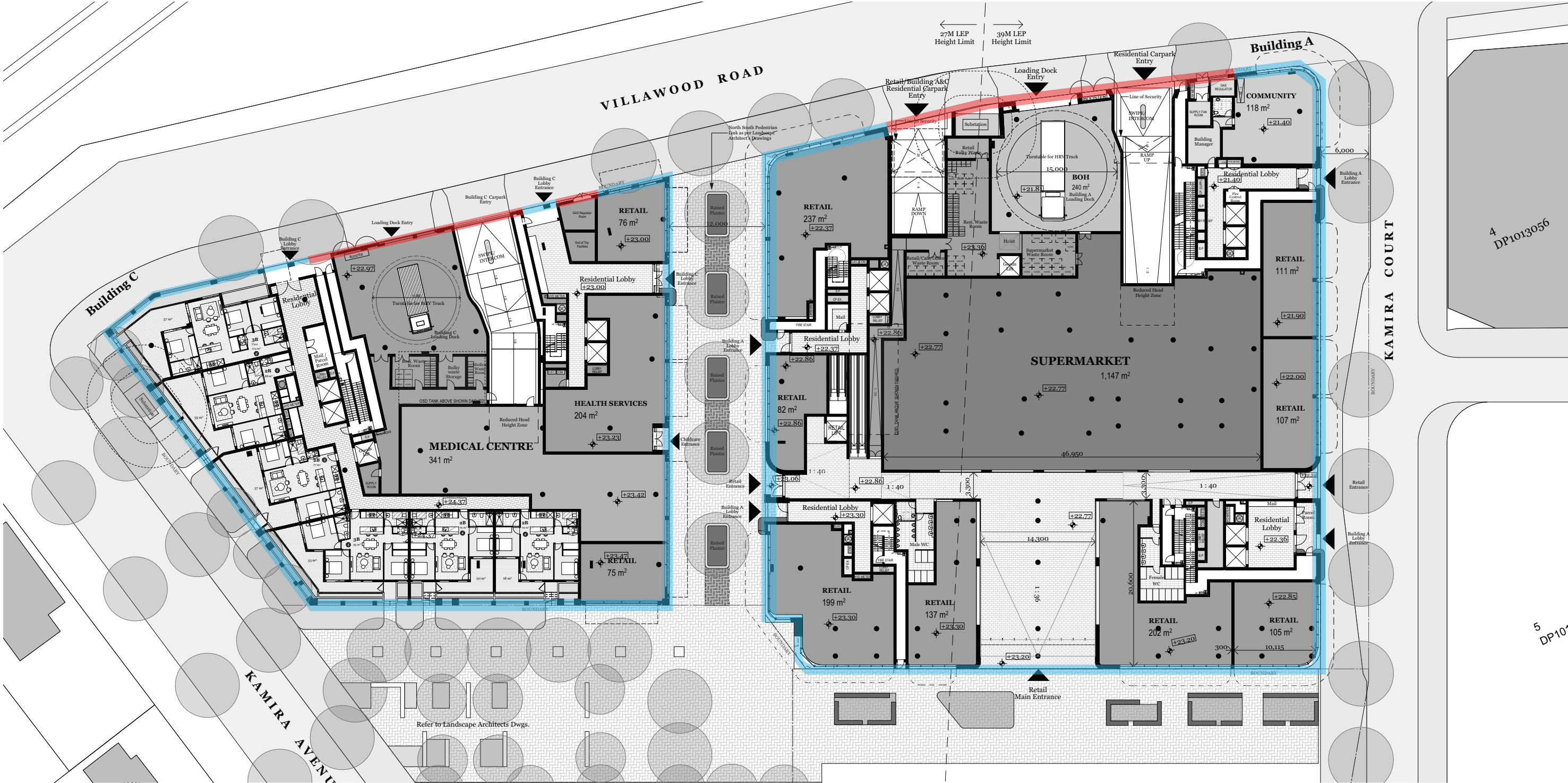
Active Edges	81%
Operational Back of House Areas	19%

Building A

Active Edges	84%
Operational Back of House Areas	16%



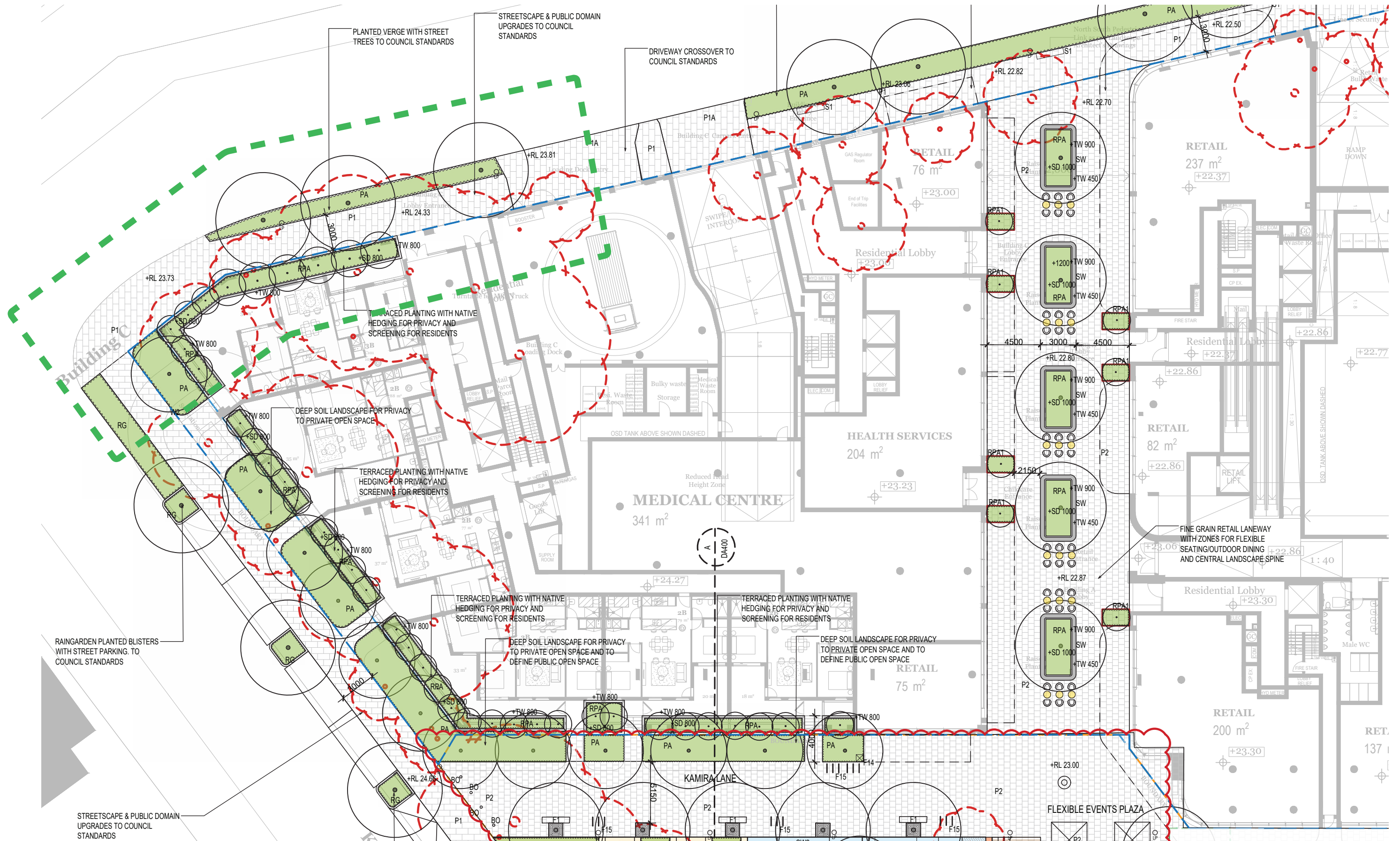
STREET ACTIVATION  
ACTIVE STREET FRONTAGE REVISED





## STREET ACTIVATION

### GREEN BUFFER TO VILLAWOOD ROAD



# BUILDING DESIGN

KAMIRA AVENUE  
VILLAWOOD



**BUILDING C SOUTH ELEVATION****Council Comments**

Building C (Western Block) could be improved to incorporate more grounded deep soil central zones to provide more access to light, ventilation and open space.

Remove the podium car park to provide greater landscaped areas, internal courtyard areas and reduce the bulk and scale/visual impacts from the extent of the podiums and add variety to design including definitive corner residential units with well-articulated corner, especially for Block C where the car park is located on south and western elevations.

**Response**

Building C (Western Block) could allow for deep planting zones with trees surrounded on western and south edge.

Introduction of residential units to the ground level provides with activation to ground and planters that provide visual softening the facade

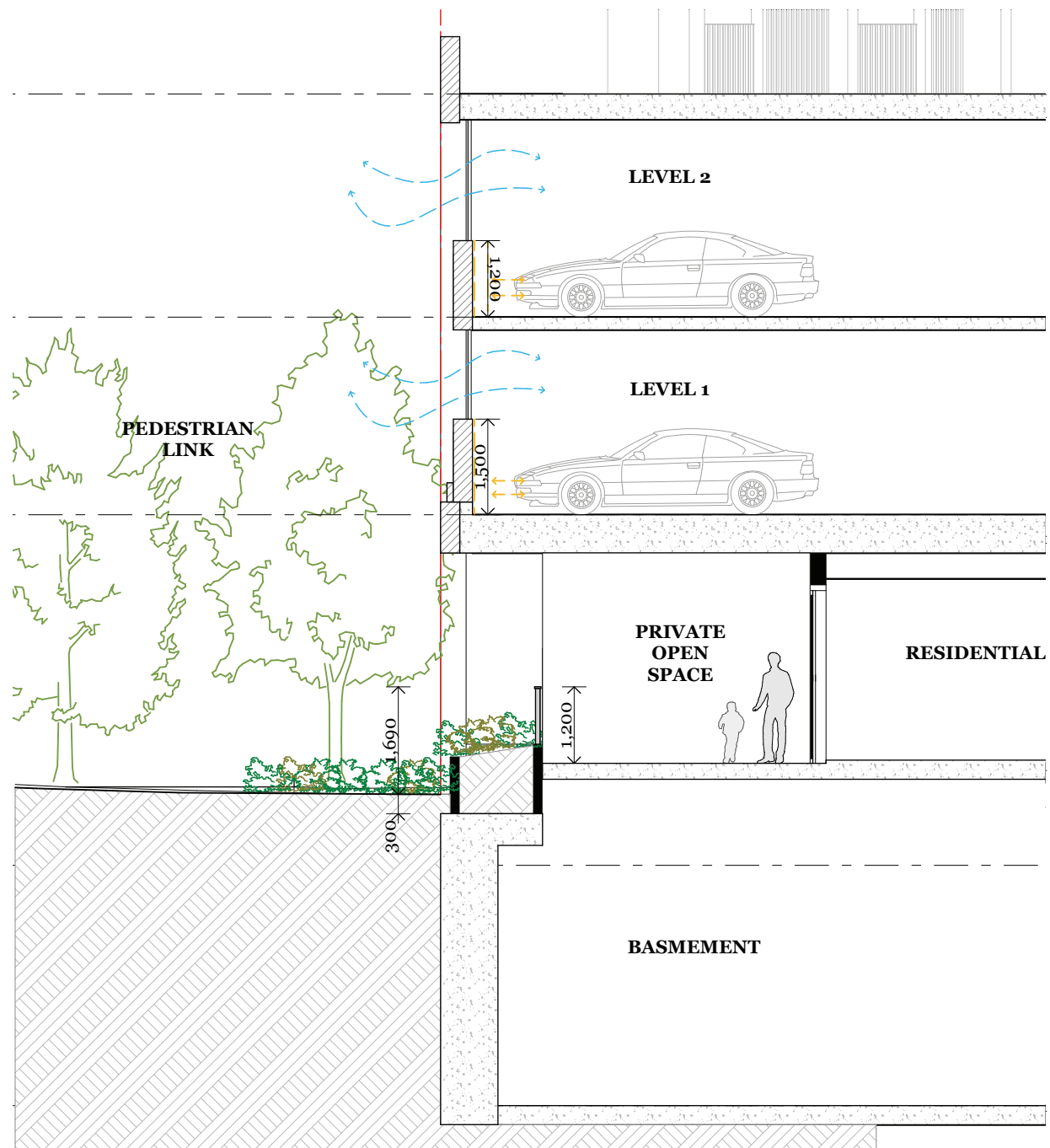








BUILDING DESIGN  
RESIDENTIAL INTERFACE









BUILDING DESIGN  
SIGNATURE BUILDING - KEY CORNER







### Council Comments

Create a signature building with more character onto the park corner at building B (Perspective 2) this could include the upper levels which are currently shown as dark recessive as same material and incorporate curves in plane and /or elevation to deliver a destination building visible across the park.



### Response

The dark recessive elements have been removed and further curves have been incorporated within the upper levels to create a signature building with character on the corner of the park. Delivering key destination with in the master plan precinct of all three buildings.









### Council Comments

Create additional breaks in buildings to reduce the monolithic appearance and provide a clearer picture of individual buildings rather than one.



### Response

Provide additional breaks within the podium  
Varying height in the gateway to the pedestrian link





### Council Comments

Façade to be improved by providing defined lobbies, roof and additional use of bricks in upper levels, particularly the NE elevation of Block A.

Provide some buildings with sense of being grounded on the site with identifiable destinations and lobbies.



### Response

Each Residential unit is identifiable through the curved entry feature and brick detailing on each side.

The retail stores around the ground plane have been frame with white portal frame and awnings within the glazing



BUILDING DESIGN  
MAIN SUPER MARKET ENTRY





# BUILDING SEPARATION DISTANCES

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KAMIRA AVENUE  
VILLAWOOD



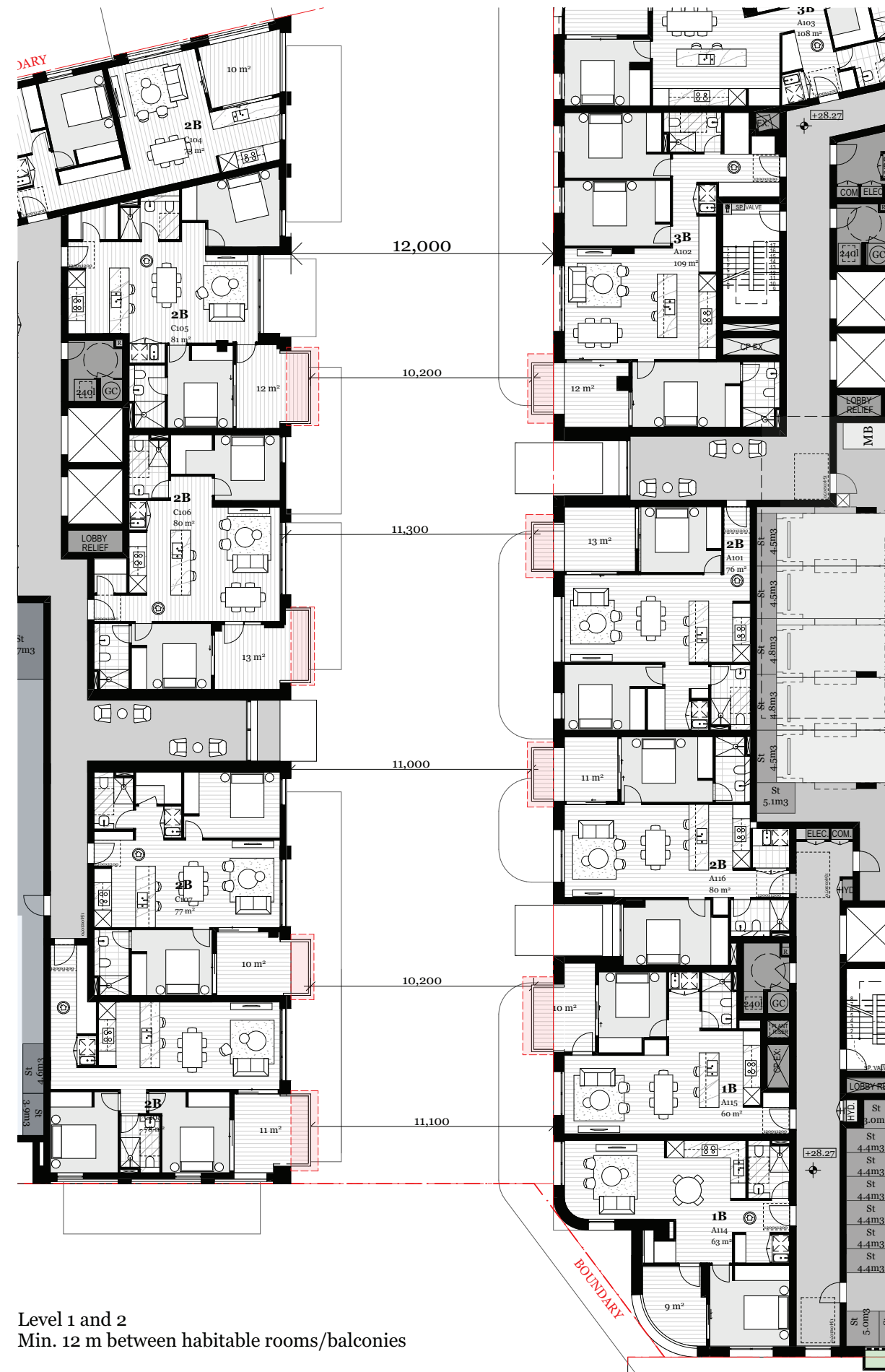
BUILDING SEPARATION  
NORTH SOUTH PEDESTRIAN LANE WAY

Council Comments

Building Separation Distances  
The proposed building separation distances do not comply with the ADG requirements: Across the new north-south pedestrian laneway balconies and windows for levels 1 and 2 face each other with less than the required 12 metres.

Response

The balconies provide articulation and passive surveillance to the lane way.





BUILDING SEPARATION  
STAGE 01 - 02 SETBACK

Considerations in setting building separation controls

Design and test building separation controls in plan and section

Test building separation controls for sunlight and daylight access to buildings and open spaces

Minimum separation distances for buildings are:

Up to four storeys (approximately 12m):

- 12m between habitable rooms/balconies
- 9m between habitable and non-habitable rooms
- 6m between non-habitable rooms

Five to eight storeys (approximately 25m):

- 18m between habitable rooms/balconies
- 12m between habitable and non-habitable rooms
- 9m between non-habitable rooms

Nine storeys and above (over 25m):

- 24m between habitable rooms/balconies
- 18m between habitable and non-habitable rooms
- 12m between non-habitable rooms

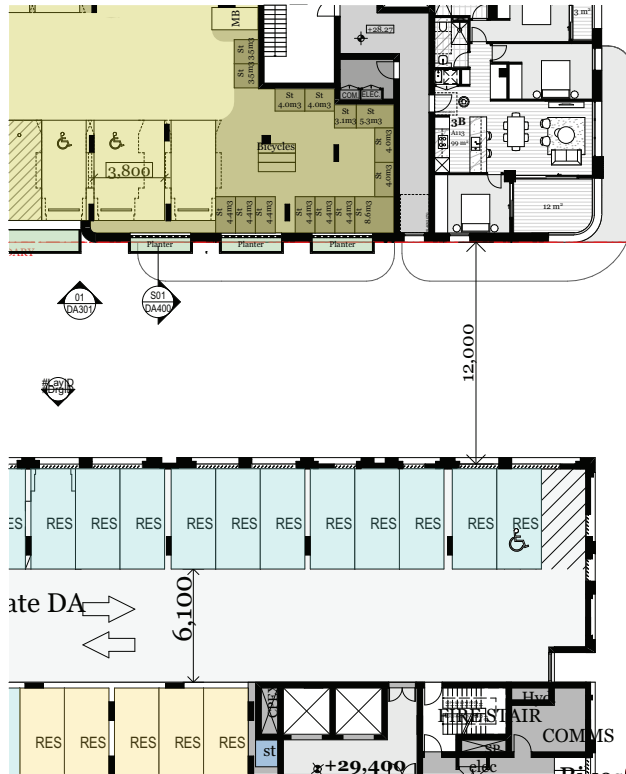
Building separation may need to be increased to achieve adequate sunlight access and enough open space on the site, for example on slopes

Increase building separation proportionally to the building height to achieve amenity and privacy for building occupants and a desirable urban form

At the boundary between a change in zone from apartment buildings to a lower density area, increase the building setback from the boundary by 3m

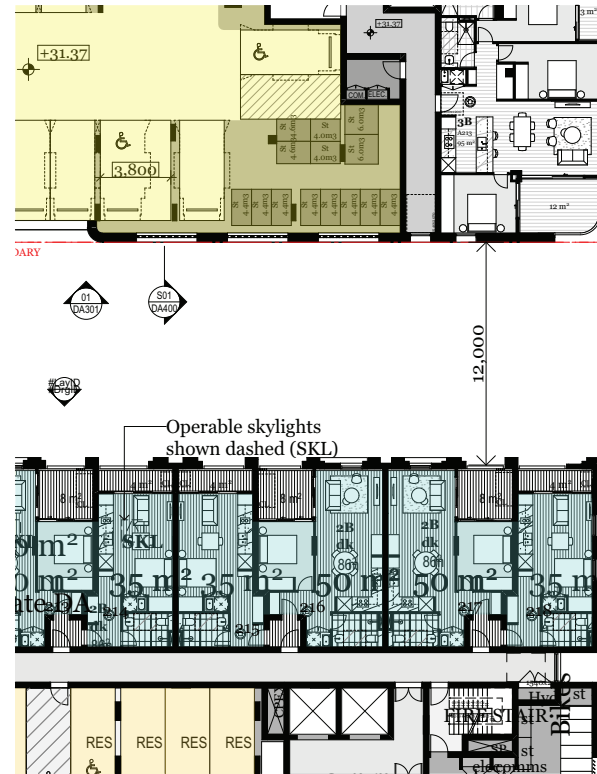
No building separation is necessary where building types incorporate blank party walls. Typically this occurs along a main street or at podium levels within centres

Required setbacks may be greater than required building separations to achieve better amenity outcomes



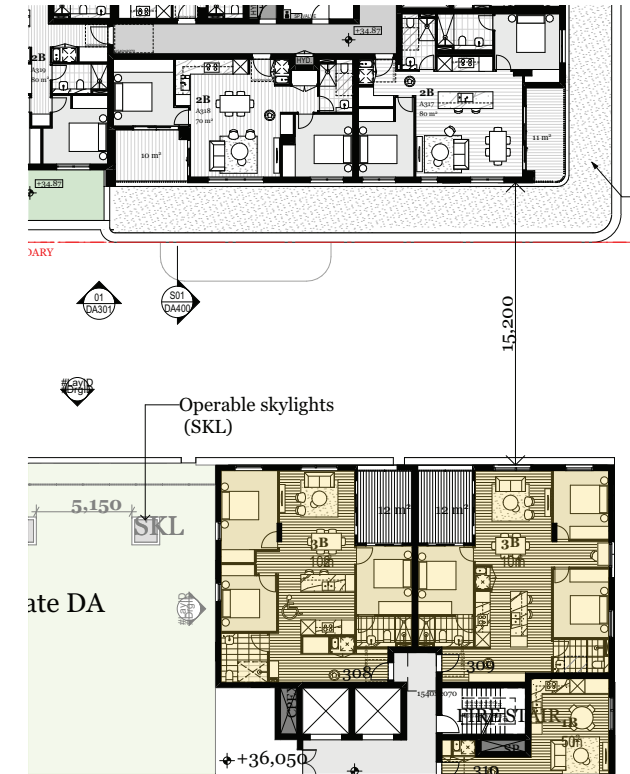
Level 1 ( 2nd Storey)  
Min. 9m between habitable rooms/balconies

**Compliant**



Level 2 ( 3rd Storey)  
Min. 12m between habitable rooms/balconies

**Compliant**



Level 3 ( 4th Storey)  
Min. 12m between habitable rooms/balconies

**Compliant**





## Considerations in setting building separation controls

Design and test building separation controls in plan and section

Test building separation controls for sunlight and daylight access to buildings and open spaces

Minimum separation distances for buildings are:

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*Nine storeys and above (over 25m):*

- 24m between habitable rooms/balconies
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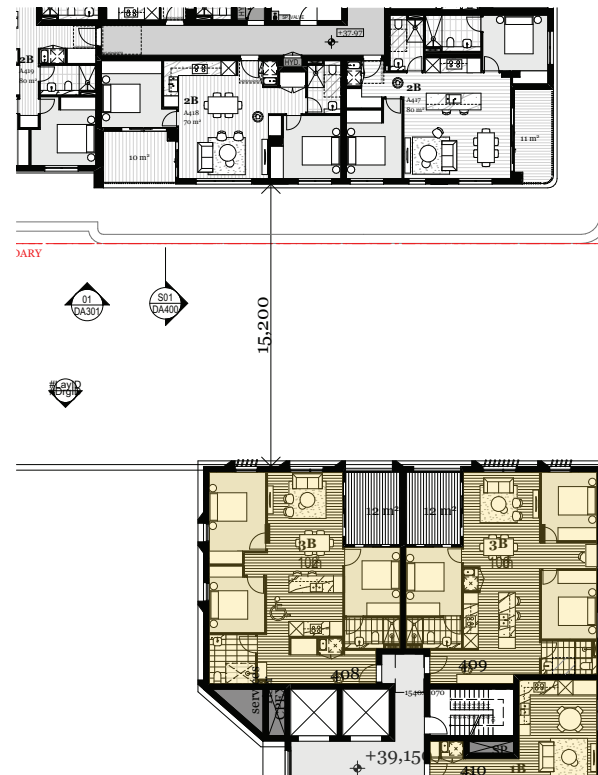
Building separation may need to be increased to achieve adequate sunlight access and enough open space on the site, for example on slopes

Increase building separation proportionally to the building height to achieve amenity and privacy for building occupants and a desirable urban form

At the boundary between a change in zone from apartment buildings to a lower density area, increase the building setback from the boundary by 3m

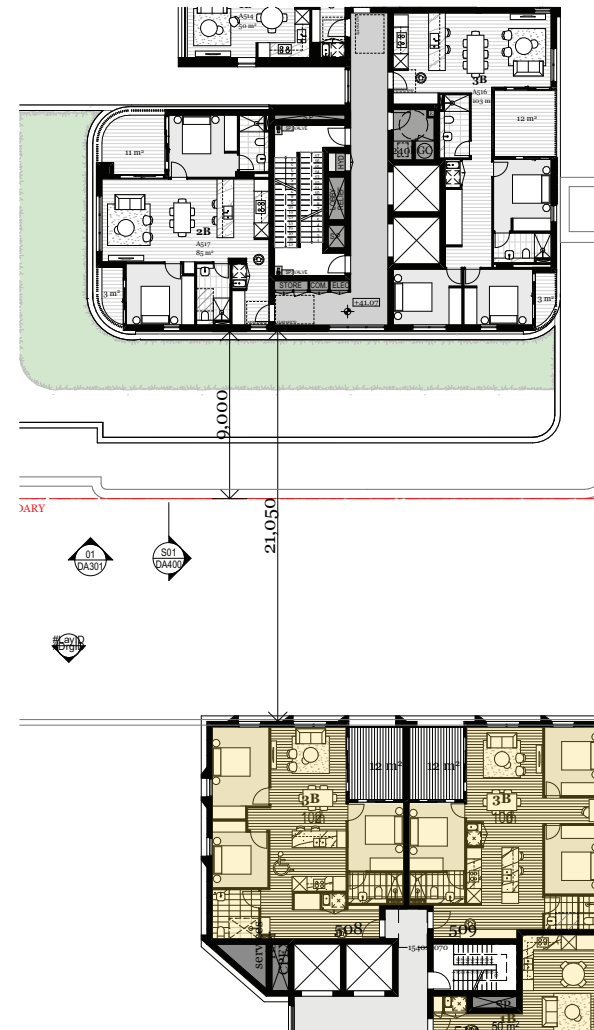
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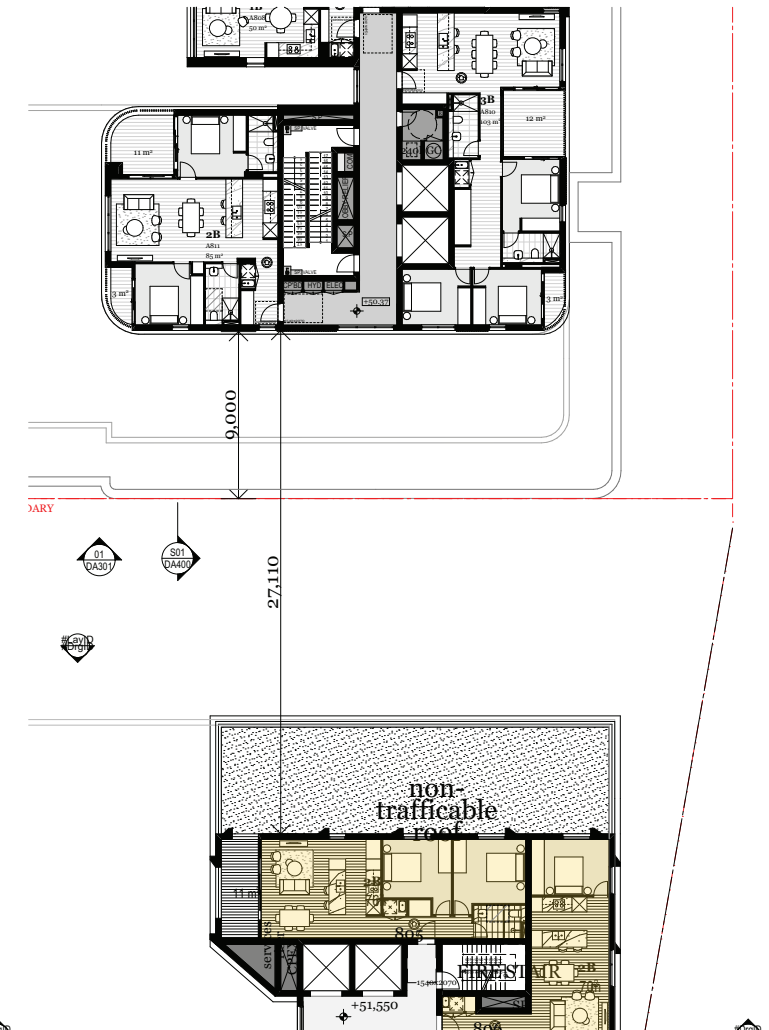
Level 4 ( 5th Storey)  
Min. 18m between habitable rooms/balconies

## Privacy Screens Provided



Level 5 - 7 (6 - 8 Storeys)  
Min. 18m between habitable rooms/balconies

**Compliant**



Level 8 - 9 (9 -10 Storeys)  
Min. 24m between habitable rooms/balconies

**Compliant**





BUILDING SEPARATION  
BUILDING A

HIGH LEVEL  
WINDOW

HIGH LEVEL  
WINDOW

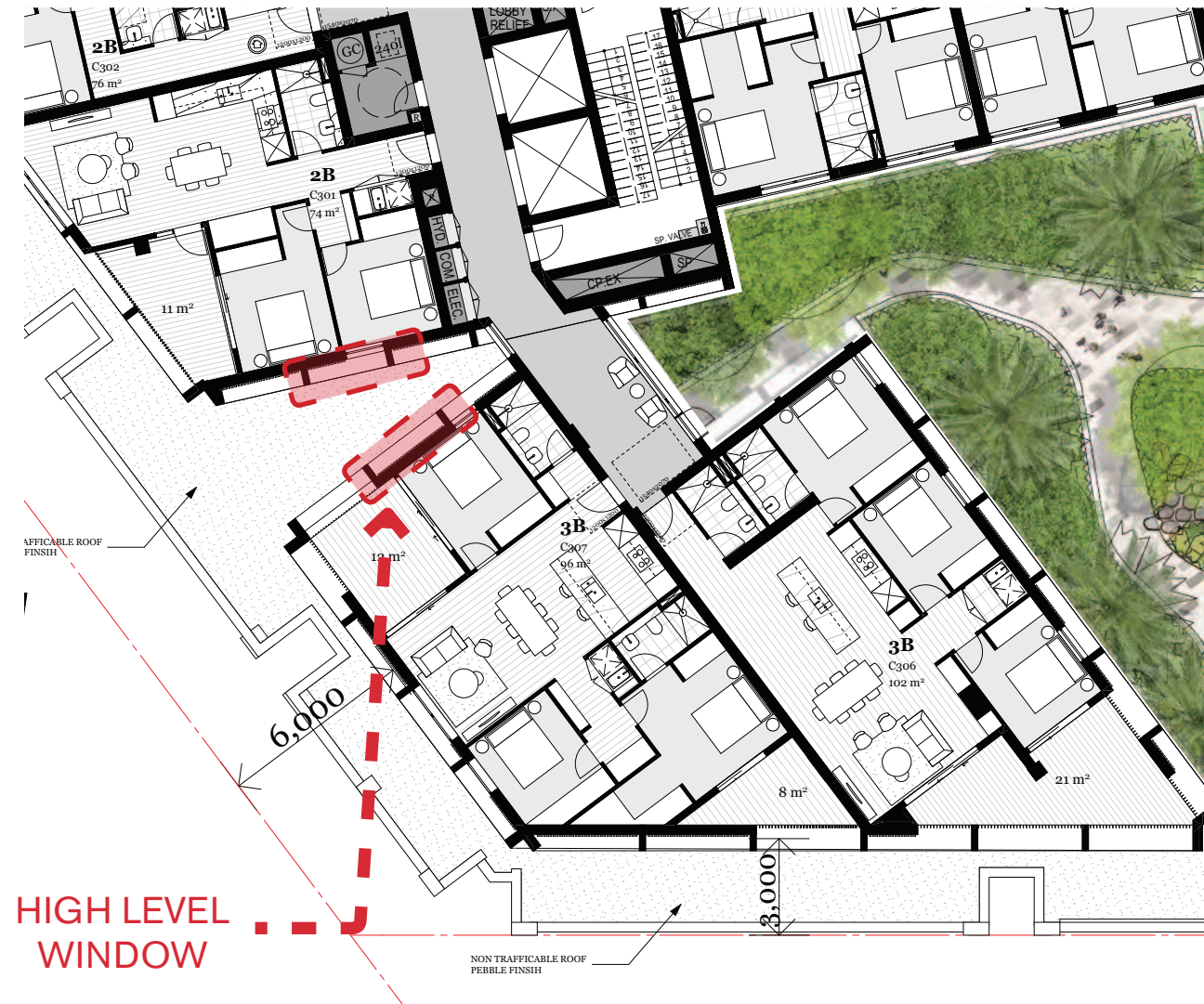


Level 3 Typical

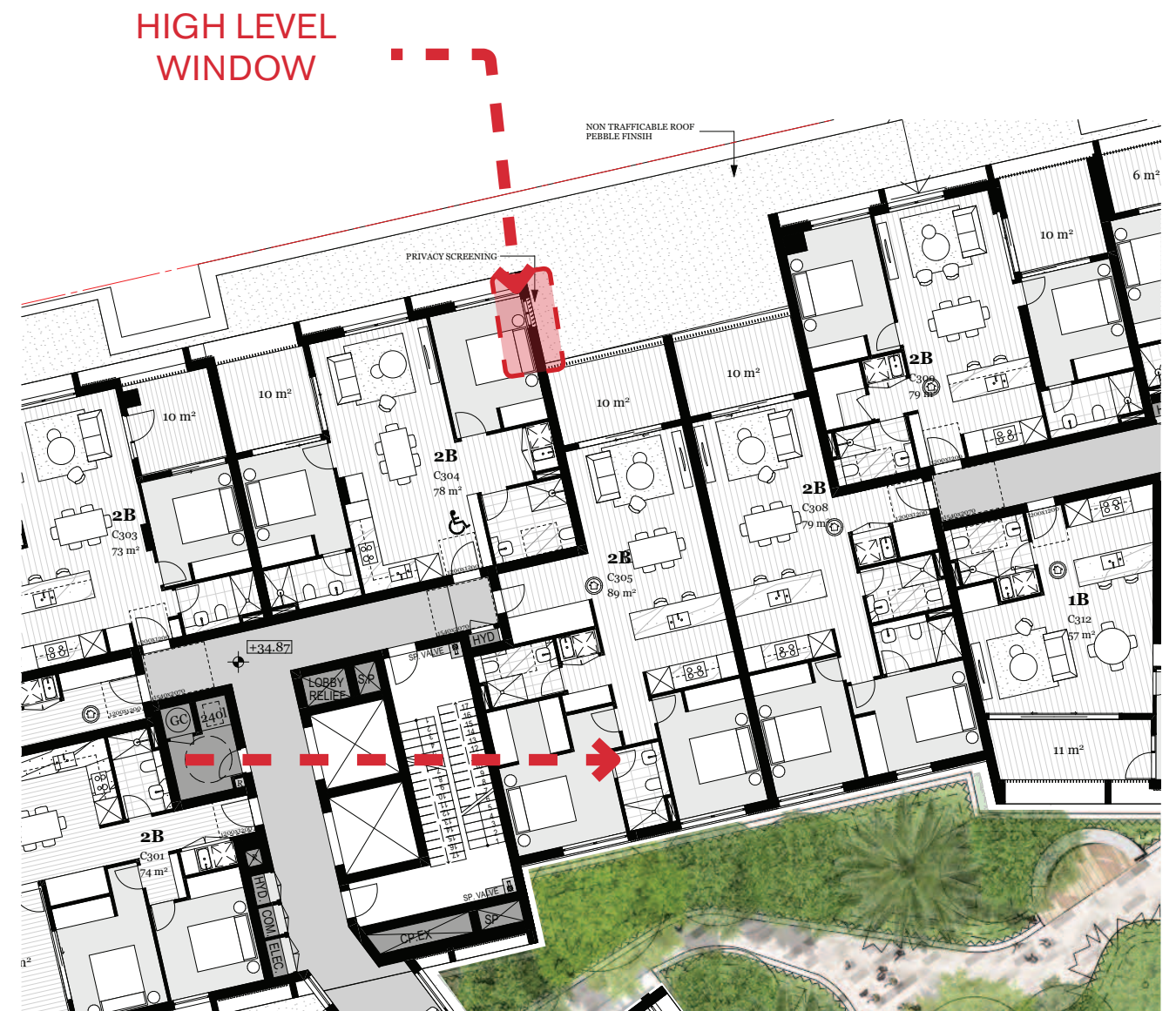




BUILDING SEPARATION  
BUILDING C



Level 3 Typical



Level 3 Typical





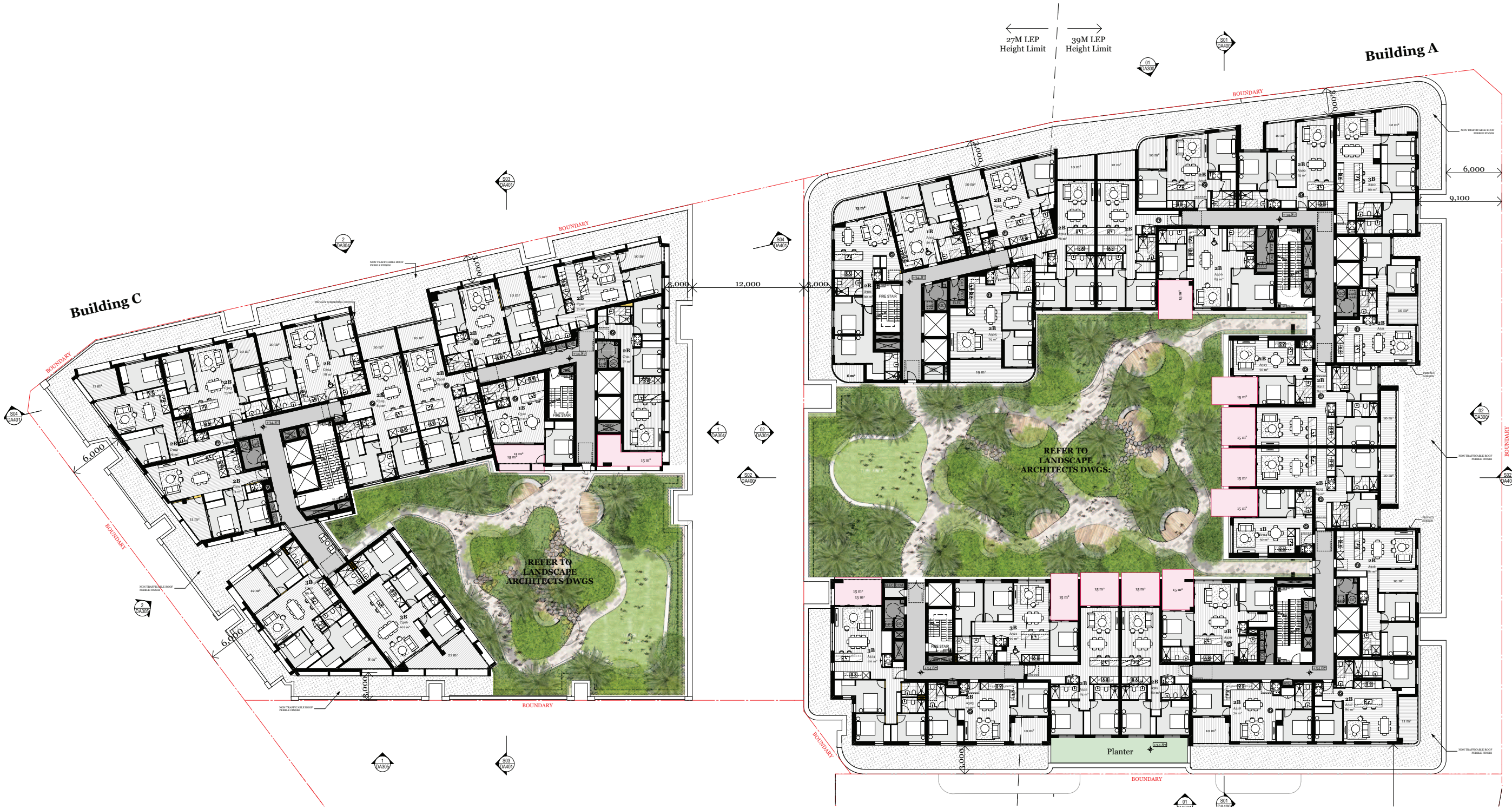
# PRIVATE OPEN SPACE

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KAMIRA AVENUE  
VILLAWOOD



PRIVATE OPEN SPACE  
LEVEL 3 PODIUM





**UNIT/ROOM SIZE AND DIMENSIONS**

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KAMIRA AVENUE  
VILLAWOOD

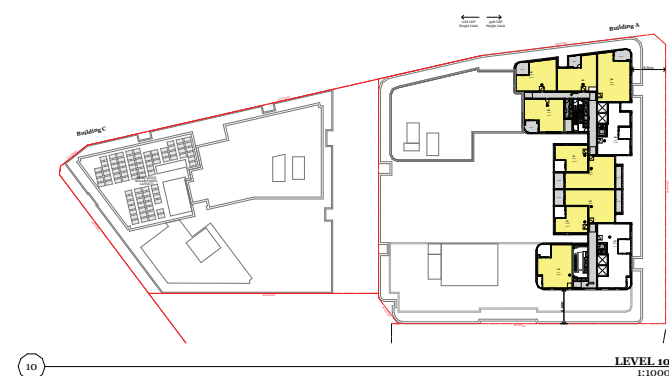
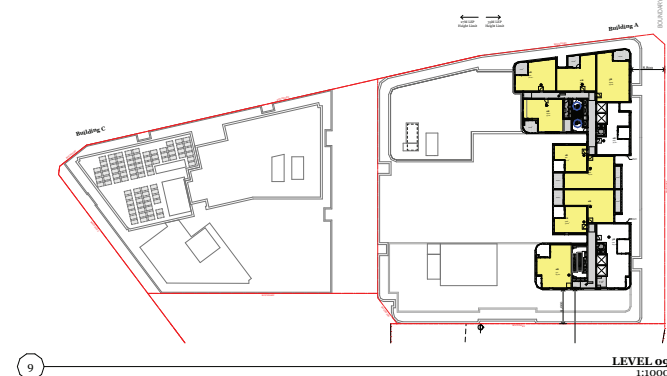
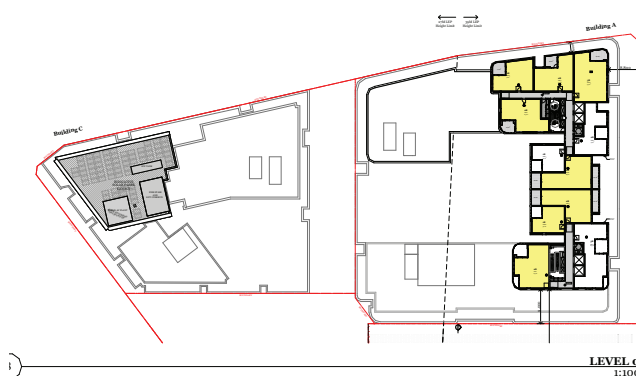
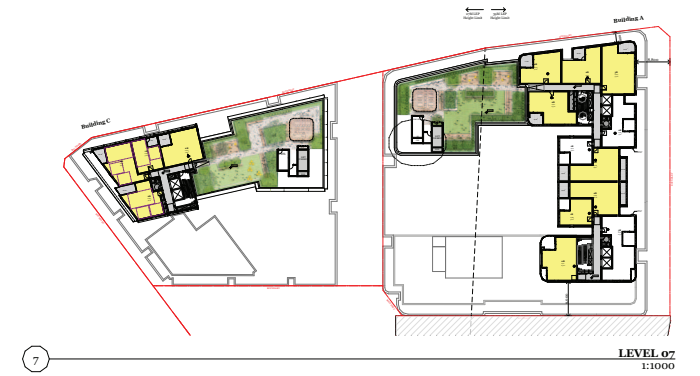
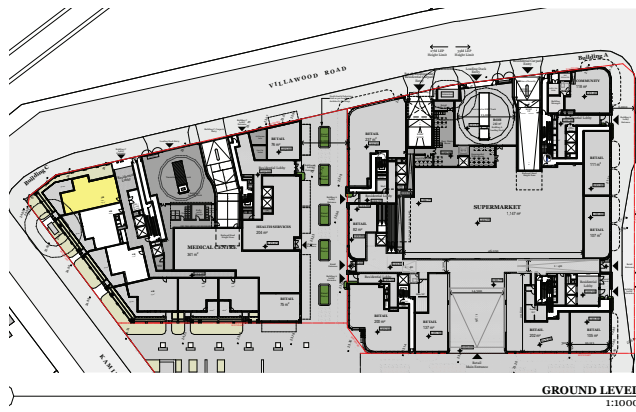


# **SOLAR ACCESS**

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**KAMIRA AVENUE  
VILLAWOOD**





## Solar Analysis

Solar access to units (min. 2 hours)   
 No solar access to units

### Solar Building A

110/158  
**70%**

### Solar Building C

49/70  
**70%**

### Total Solar

159/228  
**70%**

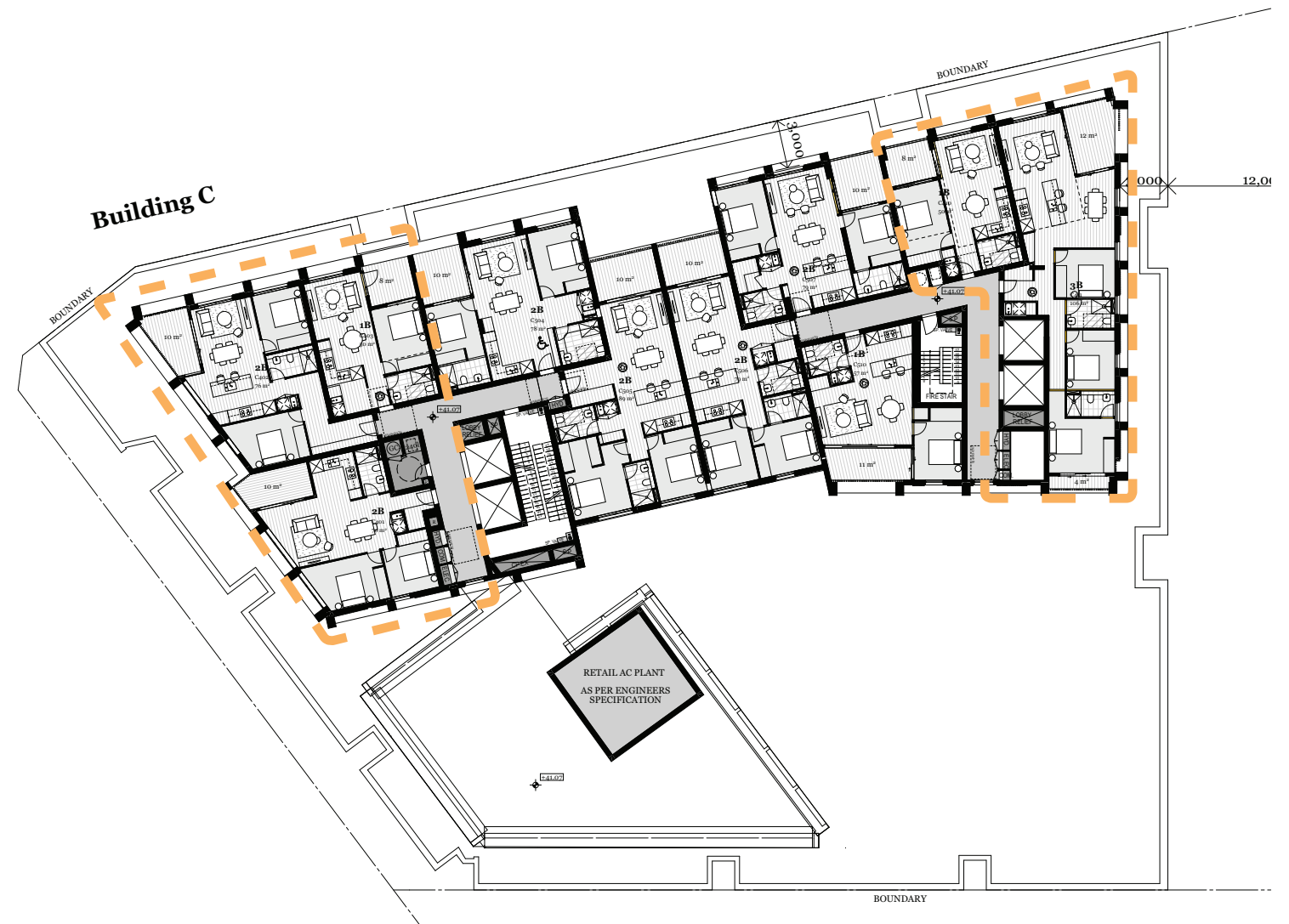
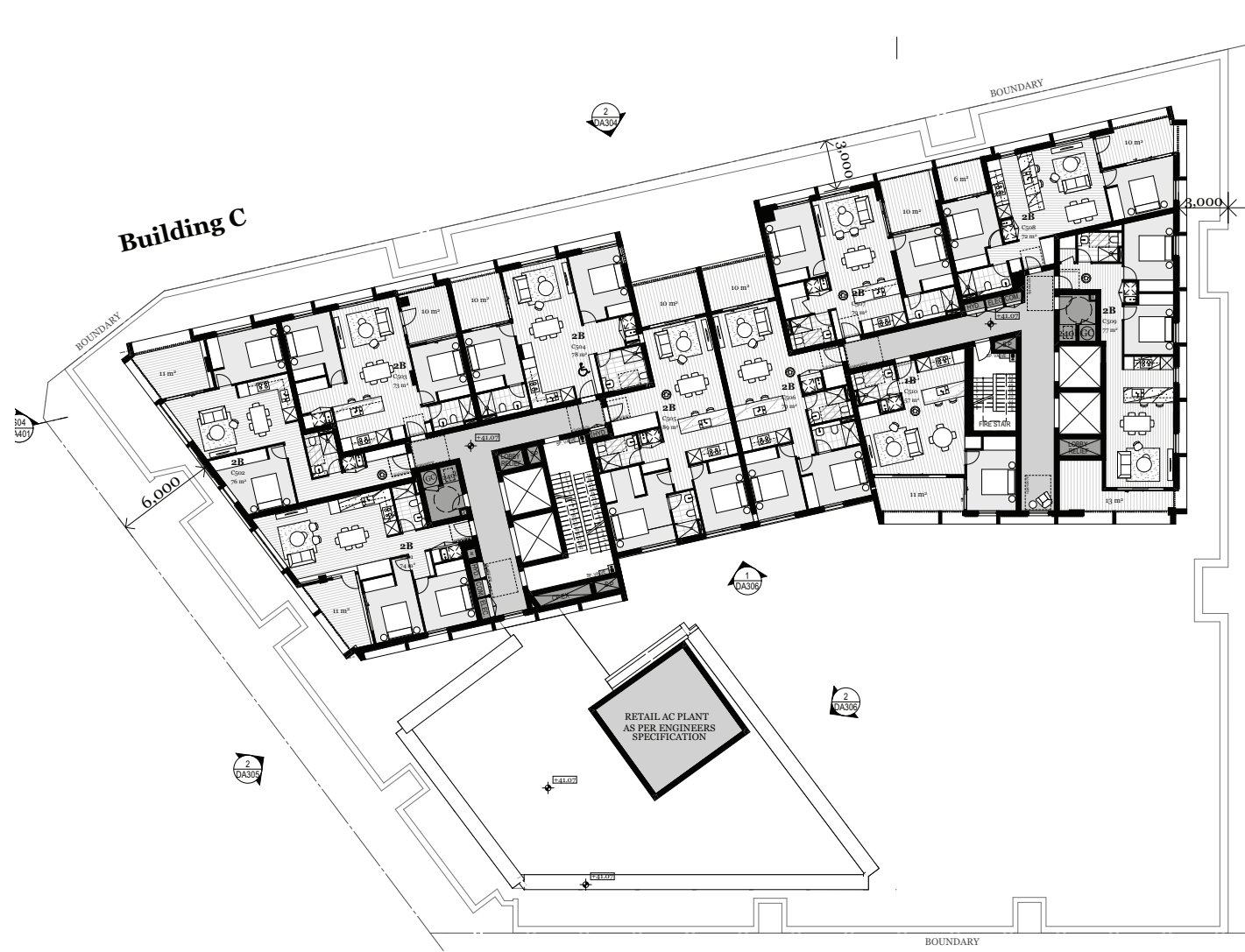
### Total No Solar

Building A No Solar: 13/158 (8%)  
 Building C No Solar: 7/70 (10%)

Total No Solar: 20/228  
**10%**









# CROSS VENTILATION

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KAMIRA AVENUE  
VILLAWOOD



LETTER TO BE PROVIDED



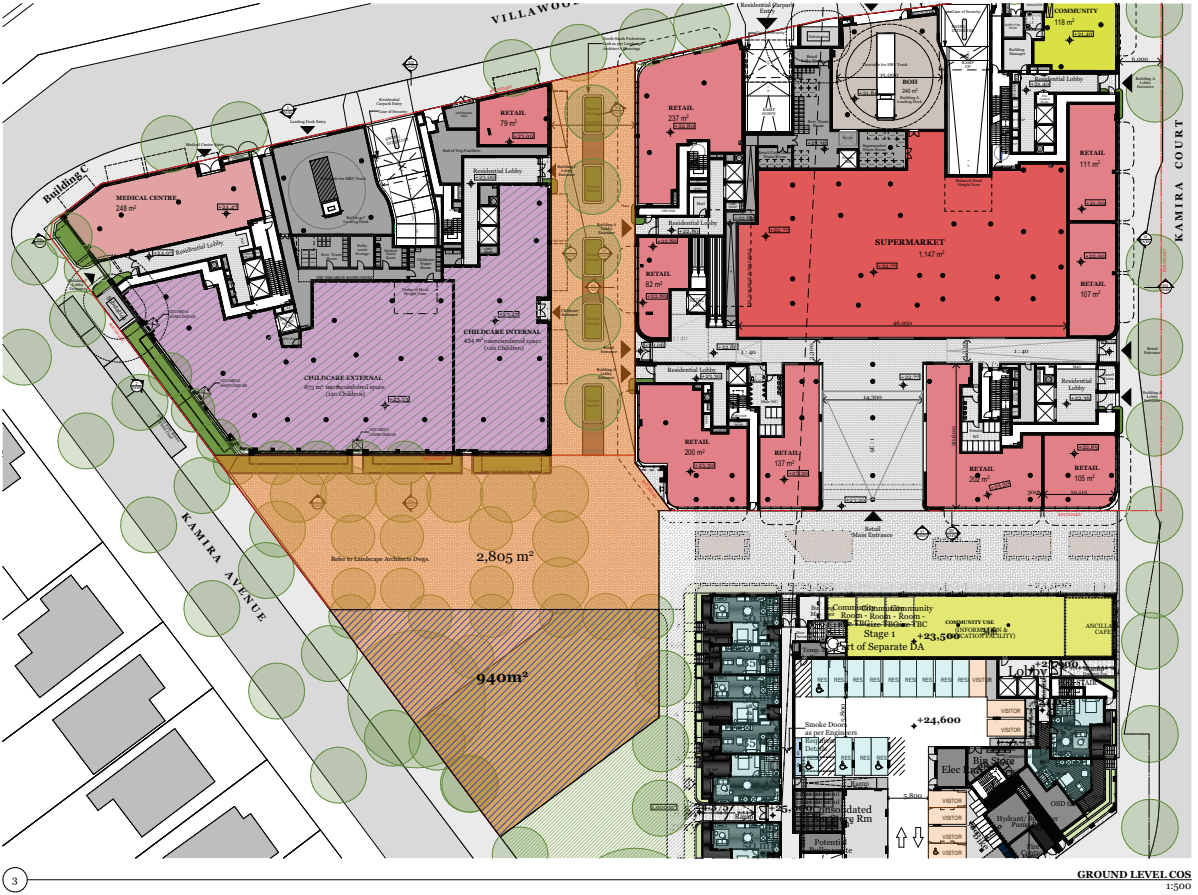
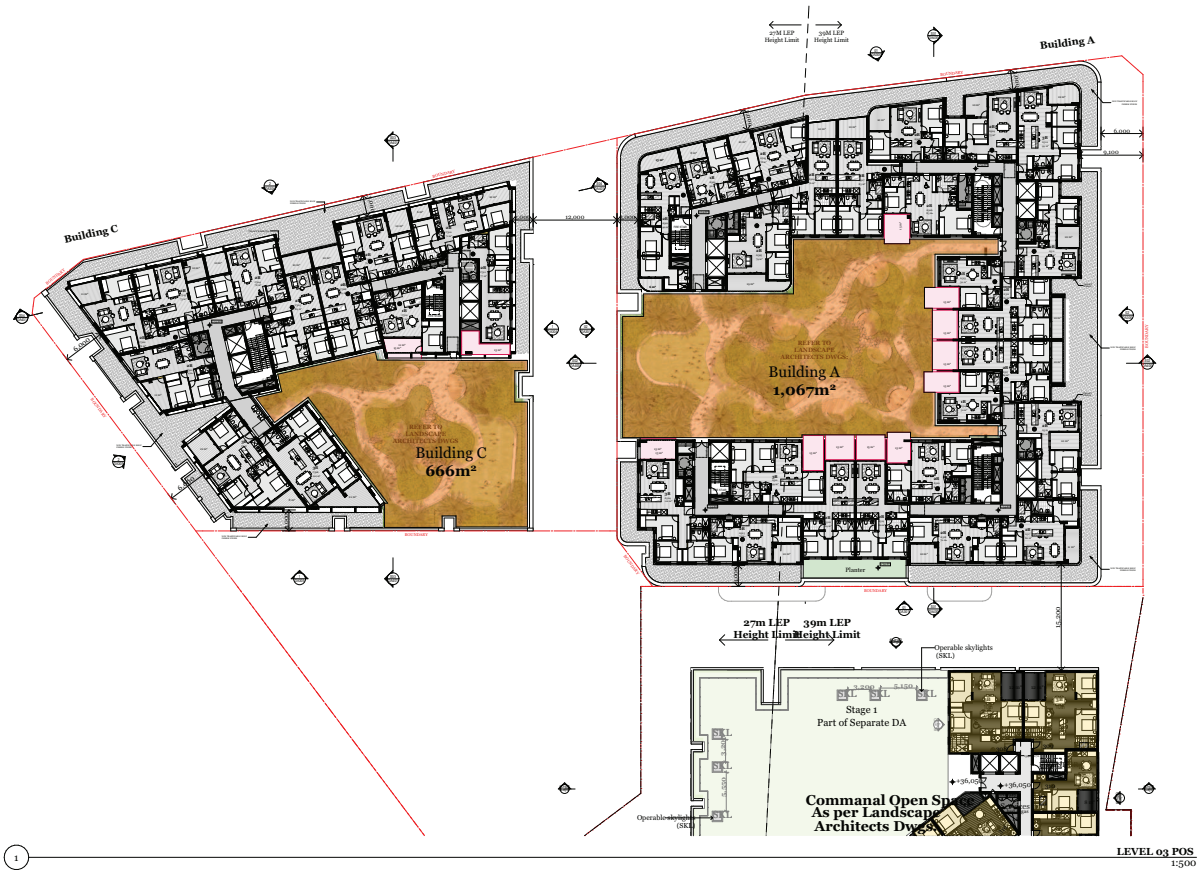


# COMMUNAL OPEN SPACE

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KAMIRA AVENUE  
VILLAWOOD

COMMUNAL OPEN SPACE  
CALCULATIONS



Communal Open Space & Deep Soil Area		
Communal Open Space		
Deep Soil Area		
Site Area: 10958 m <sup>2</sup>		
Required COS: 3288m <sup>2</sup> (30 %) - DCP		
Required Deep Soil: 767m <sup>2</sup> (7%)		
Ground Level Communal Open Space		
		2805m <sup>2</sup>
Building A Communal Open Space		
L3	L7	
1067m <sup>2</sup>	515m <sup>2</sup>	1582m <sup>2</sup>
Building C Communal Open Space		
L3	L7	
666m <sup>2</sup>	496m <sup>2</sup>	1162m <sup>2</sup>
Overall Communal Open Space		
50%		5549m <sup>2</sup>
Deep Soil Area		
Deep Soil Coverage of whole site		
9%		940m <sup>2</sup>





# FLOOR SPACE RATIO

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KAMIRA AVENUE  
VILLAWOOD

FLOOR SPACE RATIO  
GFA CALCULATIONS



Ground Floor  
GFA: 6084m²



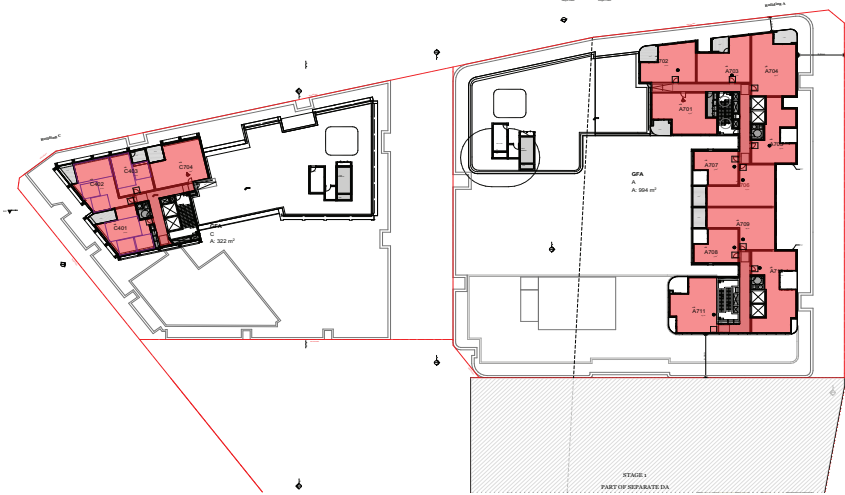
Level 1-2  
GFA: 2547m²



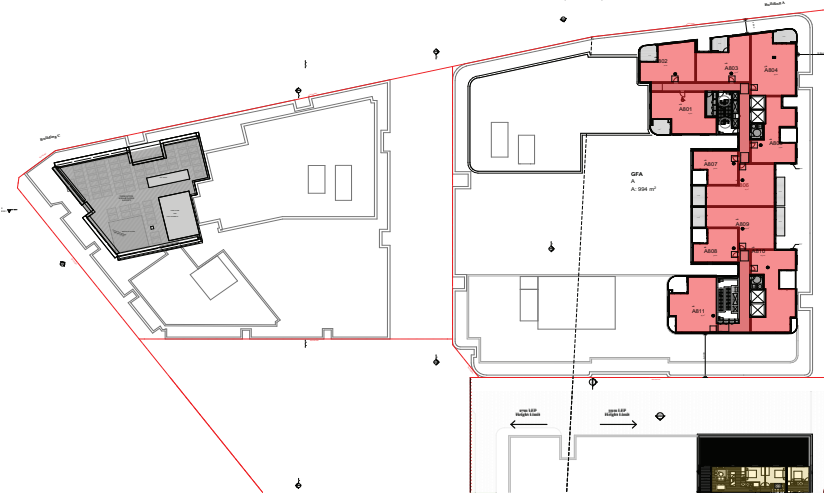
Level 3-4  
GFA: 3253m²



Level 5-6  
GFA: 2388m²



Level 7  
GFA: 1347m²



Level 8-10  
GFA: 994m²

GFA Calculations	
Calculated Area	
Ground	5643m²
Level 1	2547m²
Level 2	2547m²
Level 3	3253m²
Level 4	3253m²
Level 5	2388m²
Level 6	2388m²
Level 7	1347m²
Level 8	994m²
Level 9	994m²
Level 10	994m²
TOTAL GFA	26348m²
SITE AREA	10958m²
Allowable FSR	2.5:1
Proposed FSR	2.44:1



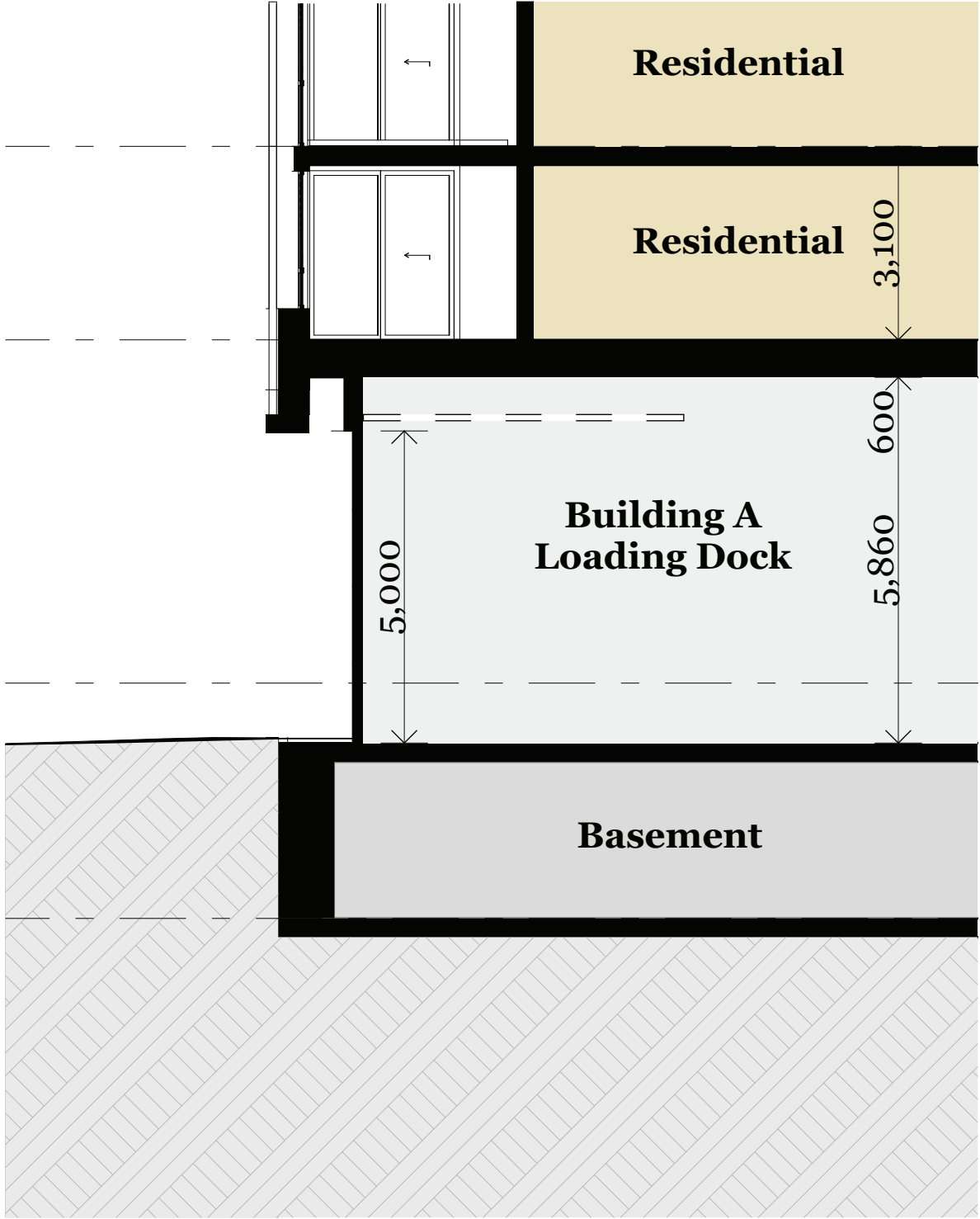
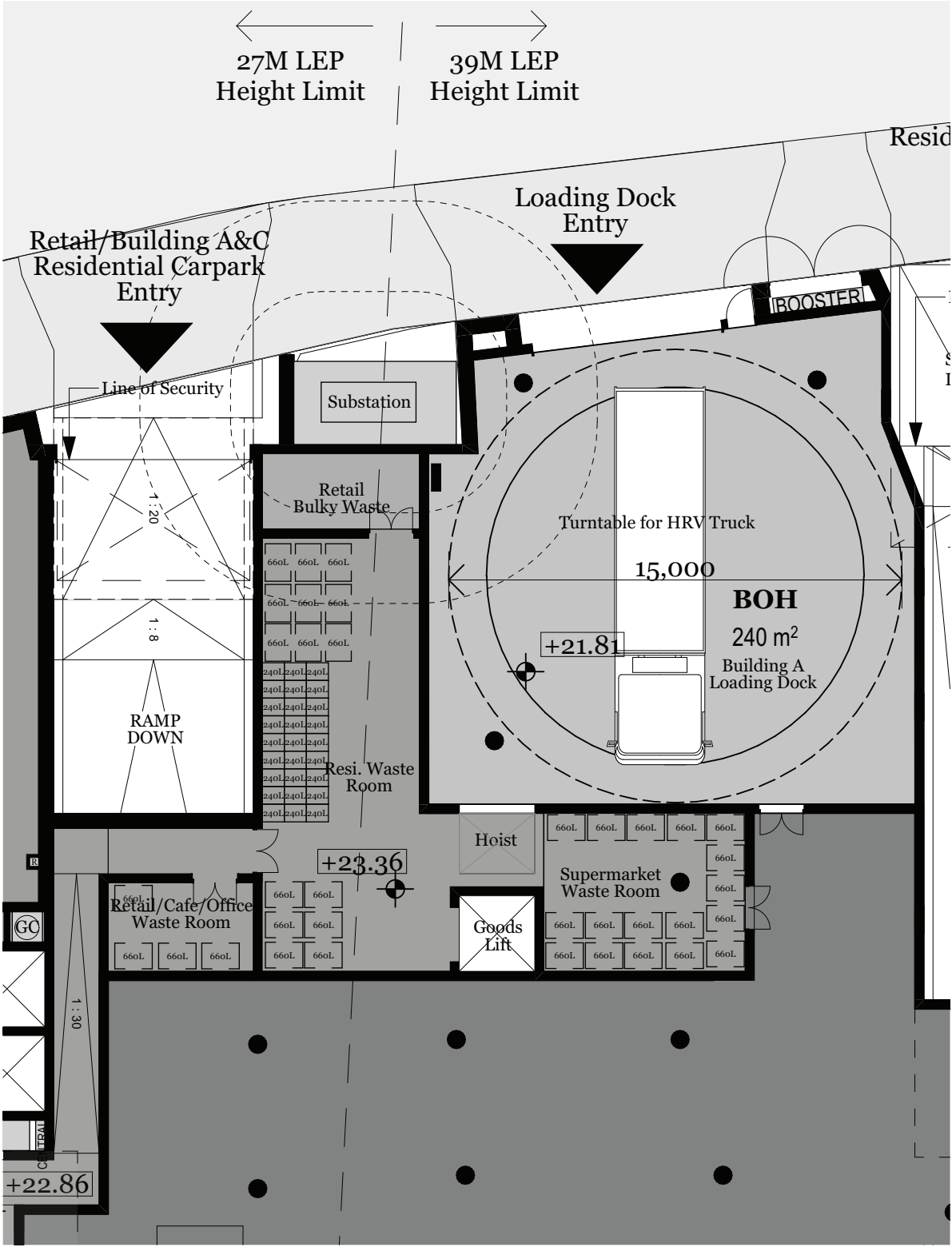


# WASTE

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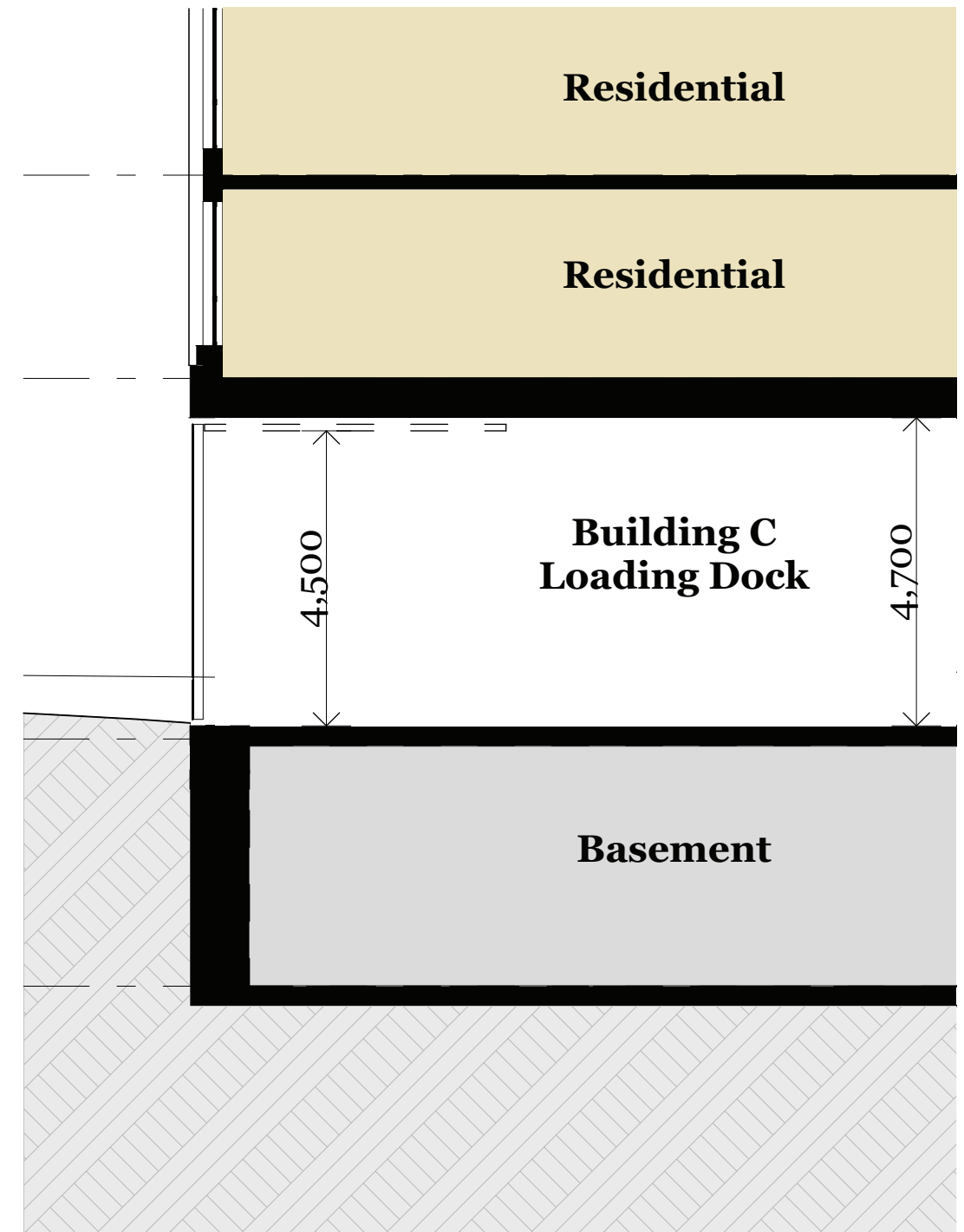
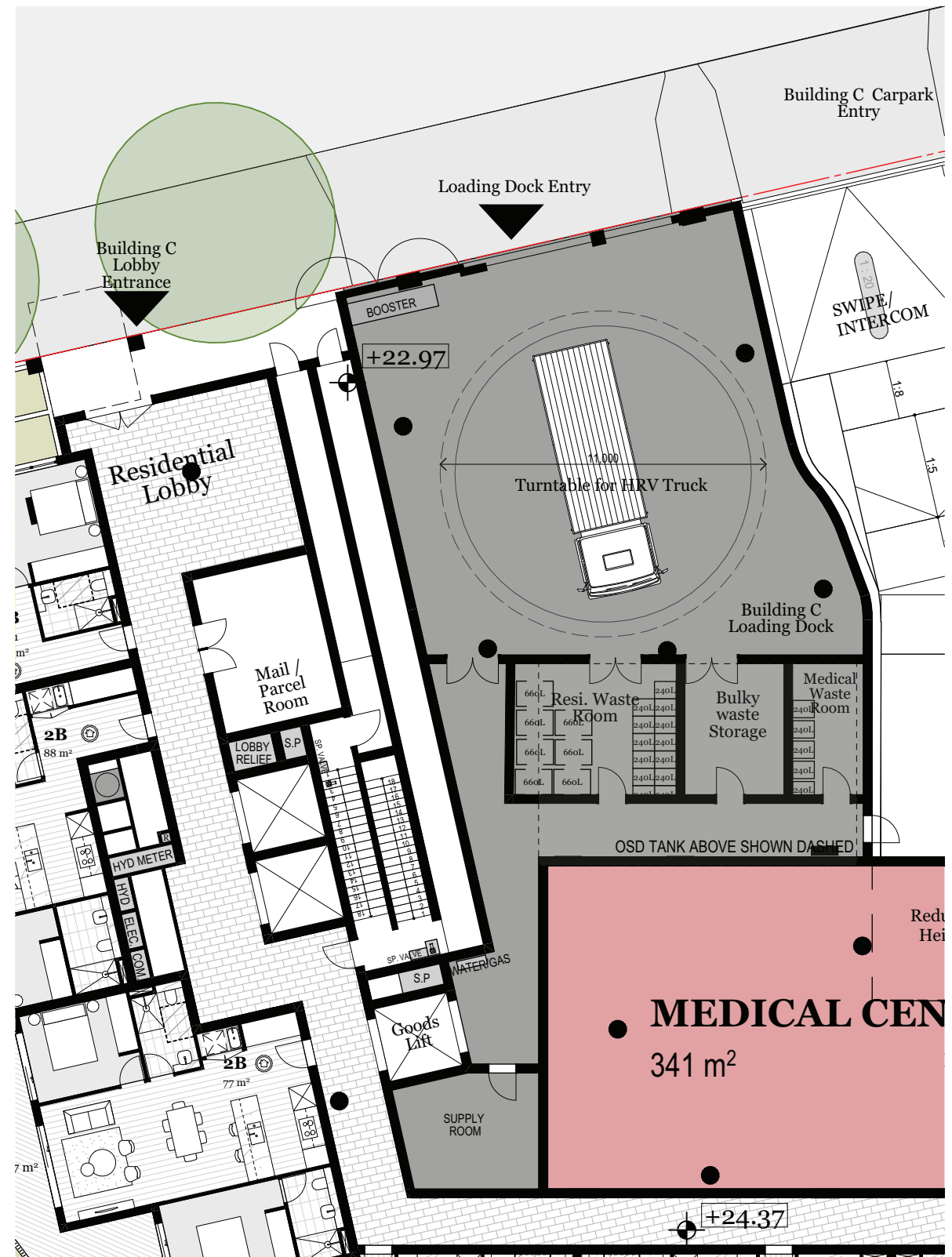
KAMIRA AVENUE  
VILLAWOOD

WASTE  
LOADING AREAS AND WASTE BINS





WASTE  
LOADING AREAS AND WASTE BINS





DKO  
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