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52 ALFRED STREET, MILSONS POINT

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1.1 PROJECT TEAM

Landowner Milsons Point 2 Pty Ltd

Architect Koichi Takada Architects

Town Planner Ethos Urban Landscape Architect Arcadia

Traffic Engineer Barker Ryan Stewart
Heritage Consultant Weir Phillips Heritage

1.2 INTRODUCTION

This Planning Proposal has been prepared on behalf of Milsons Point 2 Pty Ltd for the site at 52 Alfred Street, Milsons Point. The purpose of this report is to provide supporting information to facilitate assessment of proposed changes to the planning controls for 52 Alfred St, Milson's Point.

This report summarises initial design investigations undertaken for the future development of 52 Alfred St, Milson's Point. Urban and architectural investigations have been undertaken with consideration to a variety of documents including A Metropolis of Three Cities - The Greater Sydney Region Plan, North Sydney LEP and DCP 2013, the NSW Apartments Design Guide and recent approvals in the immediate vicinity of the subject site. The investigation aims to explore appropriate distribution of land uses, massing, building forms, context analysis and an overall building height and floor space ratio for the site for exploration and discussion with Council and the NSW Department of Planning and Environment.

The design provides a new active retail precinct fronting a landscaped through site link, joining Alfred Street to Glen Street and improving pedestrian and neighbouring connectivity through multiple ground floor through site links for a future vision connecting the east to west of the site and improvements to pedestrian permeability north to south.

1.3 DEVELOPMENT SUMMARY

TOTAL FLOOR SPACE	PROPOSED
Site Area	2,711.0m ²
Total GFA	17,944m²
Total Residential GFA	14,188m²
Total Retail GFA	867m²
Total Commercial GFA	2388m²
Total Amenities GFA	500m²
FSR	6.62:1

BUILDING HEIGHT 54.48m (BUILDING A) (RL83.75m)

69.17m (BUILDING B) (RL87.10m)

From Alfred Street

UNIT MIX

Total number of Units	125 Units
Studio	0 (0%)
1 bedroom	34 (27%)
2 bedroom	50 (40%)
3 bedroom	35 (28%)
4 bedroom	6 (5%)

LANDSCAPING

Communal Open Space TOTAL - 834² (31%)

Ground - 834m²

ADG COMPLIANCE

 Cross Ventilation
 62% (43 / 69)

 Solar (2hr)
 72% (90 / 125)



52 ALFRED STREET, MILSONS POINT

2.0 URBAN CONTEXT & SITE ANALYSIS

SITE DESCRIPTION

The site, located at 52 Alfred St, is located centrally in Milson's Point within the North Sydney Council LGA in a prominent location on the Lower North Shore. The site is positioned approximately 80m to the south-west of the Milson's Point railway station and is highly visible on approach from both the North and South, particularly along the Bradfield Highway and Cahill Expressway.

The subject site is bounded by Alfred St on the east and Glen St on the west. Bradfield Park, a locally significant green open space, is located diagonally opposite the subject site on Alfred St. Development to the immediate north of the site comprises a mixture of commercial and residential, typically 15-20 storeys in height. To the south-east of the site, 48-50 Alfred St is occupied by a 2-storey commercial building and Camden House, a 2-storey heritage-listed building. 3 residential towers of approximately 20-25 storeys are located to the west and further south. Development to the immediate west of the site on the other side of Glen St is comprised predominantly of small scale commercial buildings of less than 10 storeys in height.

The site falls gently from north to south along Alfred St, and sits in a shallow depression along the Glen St frontage on its western boundary. There is a significant difference in level between Alfred St and Glen St, currently serviced by way of a publicly accessible stair on Glen St that connects to the throughsite linkage along the southern boundary of the site.

The site is a 12 storey commercial building with 4 storeys of below ground car parking. Vehicular access to the site is provided from two access points: Glen St and Alfred St (through a private shareway to the podium level). The basement (Glen St frontage) and ground level (Alfred St) currently accommodate a total of 2 retail tenancies.

BUILT FORM

The design investigations for 52 Alfred St explore the benefits of increasing the height and residential density in Milson's Point. With access to a wide variety of transportation options, the development of the subject site has the potential to act as a catalyst for future growth in the area. The proposed design aims to revitalise and activate the streetscape by redesigning the through-site connection to Glen St, providing a sheltered and landscaped urban space, introducing a mixture of new retail and food and beverage tenancies. An additional ground floor through site link for a future vision connecting the north to south side of the site promoting high level of permeability on the ground floor. Ultimately, the intention is to provide a benchmark development that provides a significant contribution to the public domain and future character of Milson's Point.

OBJECTIVES

PUBLIC BENEFIT

The central location of the subject site at the heart of Milson's Point provides the opportunity to contribute to the future development and character of the area. The public domain strategy of the development is to retain and enhance the existing underutilised east-west through-site link via the introduction of a mixture of new retail and food and beverage tenancies and a variety of urban and landscaped spaces. An additional proposed ground floor through site link for a future vision connecting the north to south side of the site also promotes high level of permeability to the ground floor. In positioning the north south connection along the axis of Camden House, a strong focal point and visual connection to the hertiage item enhances it's significance.

Through the provision of these pedestrian connections, the site has the potential to become a new centre of activity on the western side of Milson's Point railway station. The improved public domain will also serve to generate pedestrian interest and traffic through to Glen St, paving the way for future development and increased residential density in this area. There is to be no vehicular access to the site via Alfred St, thus improving pedestrian amenity and acting as a pedestrian priority zone by reducing the volume of traffic entering the current existing shared access driveway along the southern boundary.

CONTEXT

The design investigations indicate that in order to protect the amenity of neighbouring buildings and public open space, the site would benefit from additional height allowance above the 40m LEP height limit. The built form would still be perceived as being of a consistent size and scale with adjacent buildings. The provision of generous public domain enhancements and introduction of new public open space has the potential to enliven and activate the mostly dormant streetscape in the area.

BUILT FORM STRATEGY

Additional height allowances above the 40m LEP height limit are proposed for the site given that many of the surrounding existing and future developments exceed this limit. Accordingly, the subject site should be afforded the same consideration in order to maintain a consistent street character and perceptible height to the surroundings.

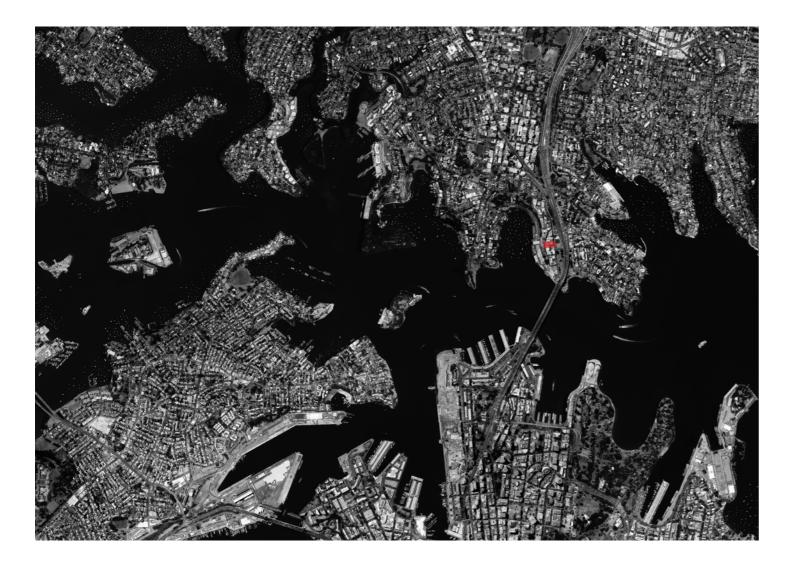
The built form of the building and articulation of the facade is designed to reduce its visible bulk and allow it to be perceived as fine-grained in scale.

The building form creates a strong delineation between podium and tower, aligning to the adjacent podium to 68 Alfred Street. The top of the tower steps down towards Alfred St to present a perceptible building height consistent with that of the adjacent building, minimising the adverse impact on the amenity of neighbouring buildings and zero overshadowing over Bradfield Park. At the rear of the site, the tower presents a setback between of 3 - 10.58 m to Glen St.



2.1 AERIAL VIEW - LOCATION PLAN

2.2 AERIAL VIEW - CONTEXT PLAN





SITE LOCATION

2.3 SITE ANALYSIS - TRANSPORT ACCESS

Numerous modes of public transport are located within 400m walking distance from the site including Milsons Point Railway Station and the buses along Alfred Street. The direct access to major transport links and pedestrian connections creates many opportunities for the site.

MILSONS POINT FERRY WHARF B ADDRESS FORT TRAIN STATION ADDRESS FORT TRAIN STATION

HARBOUR BRIDGE

MAIN ROAD

LANES

3 175 183 184 203 CYLE LANE
9 227 228 229 230
9 286 287 612X 622 PEDESTRIAN PATH

2.4 SITE ANALYSIS - PUBLIC DOMAIN

The subject site is served by a multitude of public green spaces and community facilities. The introduction of new retail and dining tenancies and a variety of landscaped spaces along the proposed through site link would activate the under utilised plaza next to the site hence generating pedestrian interest and traffic through to Glen St.



52 ALFRED STREET MILSONS POINT

TRAIN STATION

FERRY WHARF

BUS ROUTES

BUS ROUTE NUMBER

2.5 HEIGHT ANALYSIS - SURROUNDING DEVELOPMENTS

The building height of 54.43m (RL 87.10 - 18 storeys) proposed to the Glen St frontage is of similar scale to the majority of the residential towers along Glen St, including 70 Alfred Street (RL96.20), 37 Glen St (RL87.40) and 48 Alfred Street (RL 100.20).



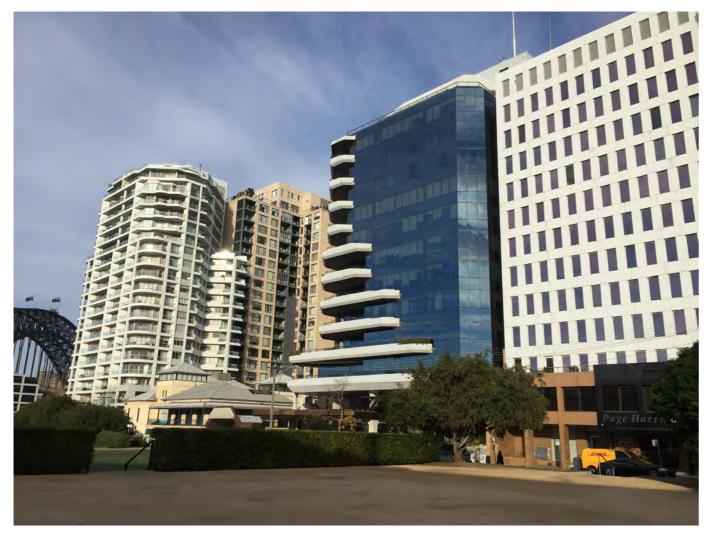
The tower form will be set back from the podium in order to reduce the bulk and scale of the building and minimise adverse impact on the views and amenity of residents of 37 Glen St.

SUBJECT	Γ SITE	RL (m)	EXCEEDANCE HEIGHT (m)	
A1	52 Alfred St	87.10 (Proposed	14.4 d)	
BUILDINGS EXCEEDING 26m LEP HEIGHT LIMIT				
C1	30 Glen St	86.3	26.9	
LEP HEIO	GS EXCEEDING 40m GHT LIMIT			
C2	80 Alfred St	91.5	21.1	
C3	70 Alfred St	96.2	26.4	
C4	37 Glen St	87.4	18.1	
C5	48 Alfred St	100.2	31.9	
C6	2 Dind St	95.6	30.5	
С7	38 Alfred St	91.7	27.1	
C8	88 Alfred St	88.6	14	





2.6 SITE PHOTOGRAPHS







2.6 SITE PHOTOGRAPHS







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2.7 VIEW ANALYSIS

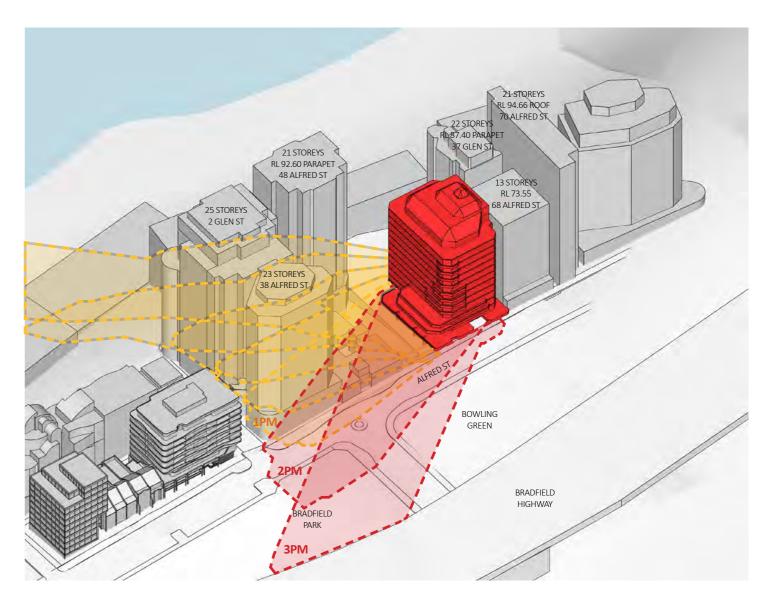


2.8 SOLAR ANALYSIS

The immediate surrounding cluster of tall buildings overshadows the site from 9am to 3pm during mid-winter and lends the proposal to an east west orientation due in order to maximise on direct solar access.

80 ALFRED ST 70 ALFRED ST 37 GLEN ST GLENST 3PM JUNE 21ST 68 ALFRED ST 9AM JUNE 21ST

2.9 EXISTING OVERSHADOWING BRADFIELD PARK



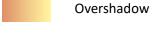
ALFRED STREET VIEW



No overshadow onto Bradfield Park (9am - 1:30pm)



Overshadow onto Bradfield Park (1:30pm-3pm)





52 ALFRED STREET, MILSONS POINT

2.10 SITE SETBACKS



52 ALFRED STREET MILSONS POINT



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3.0 COMPARISON BETWEEN
EXISTING BUILDING AND PLANNING PROPOSAL 06

3.1 ALFRED STREET PROPOSED BUILDING HEIGHTS

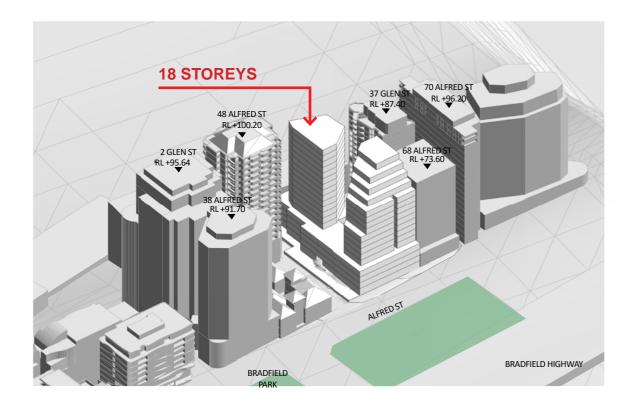


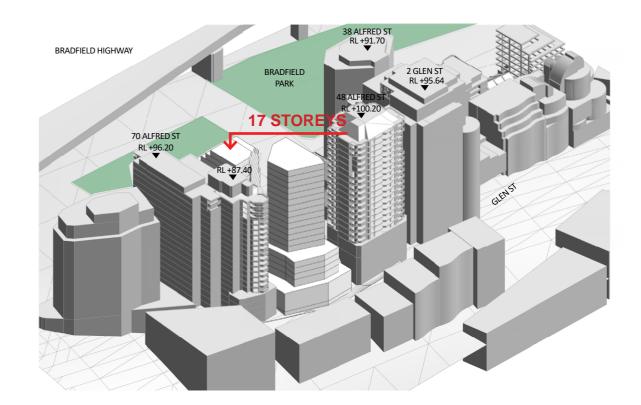


PROPOSED



3.1 PROPOSED BUILDING HEIGHTS

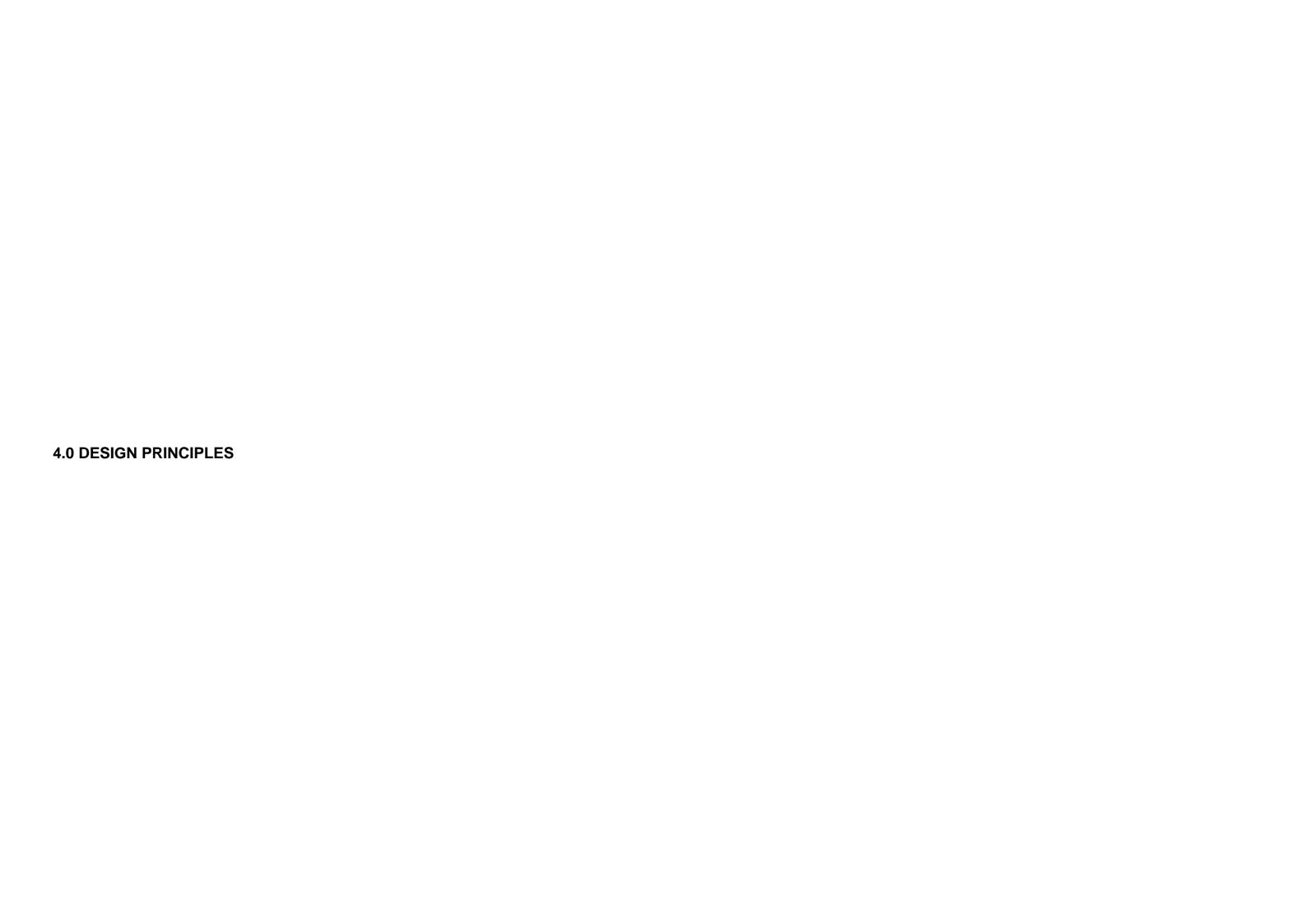




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3.2 VIEW SHARING WITH NEIGHBOURING GLEN ST





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4.1 DESIGN PRINCIPLES

The design process took into account detailed overshadowing impacts, view impacts and height and setback constraints to provide a proposed building that minimises any negative environmental impact but also enhances the public domain.

DESIGN DESCRIPTION

The proposed development is a mixed use tower in the heart of Milson's Point which includes an enhanced through-site link and new ground level public plaza. In summary, the proposed development is comprised of the following:

- New 18 storey residential tower (22 storeys including 4 basement levels fronting Glen Street)
- Provision of a publicly accessible civic square at ground level on Alfred St;
- Improved through- site link between Alfred Street and Glen Street
- Additional ground floor through site link for a future vision connecting the north to south side of the site.
- · Improvements to site activation
- · High level of permeability of ground floor.
- Provision of several new food and beverage and small retail outlets
- Provision of approximately 3255m2 of new commercial and retail space.
- Further setback to the Glen Street frontage to allow for view sharing to neighbouring 37 Glen street.
- Further shadow studies were conducted and it was discovered that balconies to 38 Alfred Street already had cast shadow to Bradfield Park. Further massing analysis conducted to unify the building through merging the slot proposed in the previous planning proposal submission. No additional overshadowing to Bradfield Park is proposed.

The development comprises of a 2 storey high podium with 2 tower components at differing heights. The proposed height of the podium on the Alfred St frontage adheres to the typical 2 storey podium heights of the surrounding developments in order to preserve a visually unified street frontage. Each proposed tower component built forms relate to the two differing scales of the existing Glen and Alfred Street frontages.

Fronting Alfred Street, the building form is 17 storeys (including the 2 storey podium) but due to the terraced form stepping away from Alfred Street, there is a streetscape perception of 14 storeys and alignment to the adjacent 68 Alfred Street in maintaining a continuous street wall. The built form to Glen Street reaches a maximum height of RL87.10 at 18 storeys (22 storeys including the 4 basement storeys fronting Glen Street). The height is consistent with the neighboring 37 Glen Street (RL87.40) to create a consistent streetscape and is significantly lower than the 48 Alfred Street RL100.20.

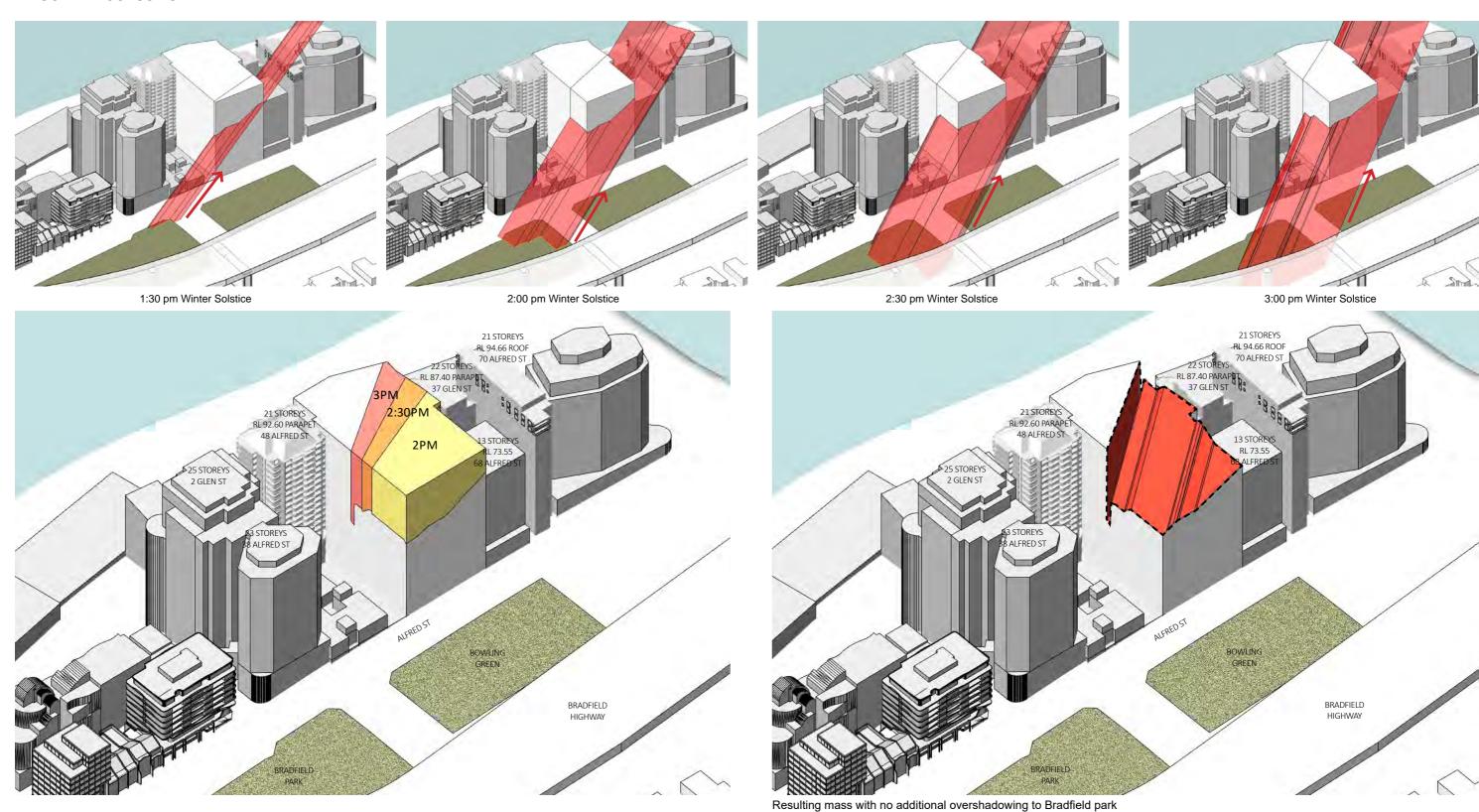
The existing pedestrian access through the site to Glen Street is via a series of winding staircases. The proposal seeks to improve this connection with the provision of an active through site link, landscaping to create visual interest and a series of retail tenancies with outdoor seating to promote activation. An additional ground floor through site link for a future vision connecting the north to south side of the site will also provide a high level of permeability on the ground floor. Pedestrian amenity will be improved by removing the existing vehicular basement access to the site via Alfred St and thus reducing the volume of traffic, access would continue to be provided along the western boundary via Glen St.





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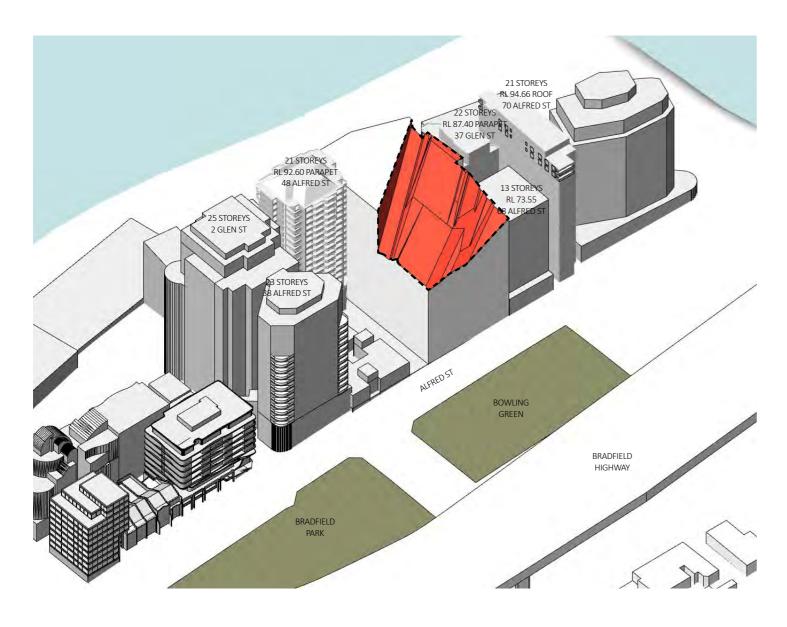
4.2 SOLAR ACCESS TO BRADFIELD PARK

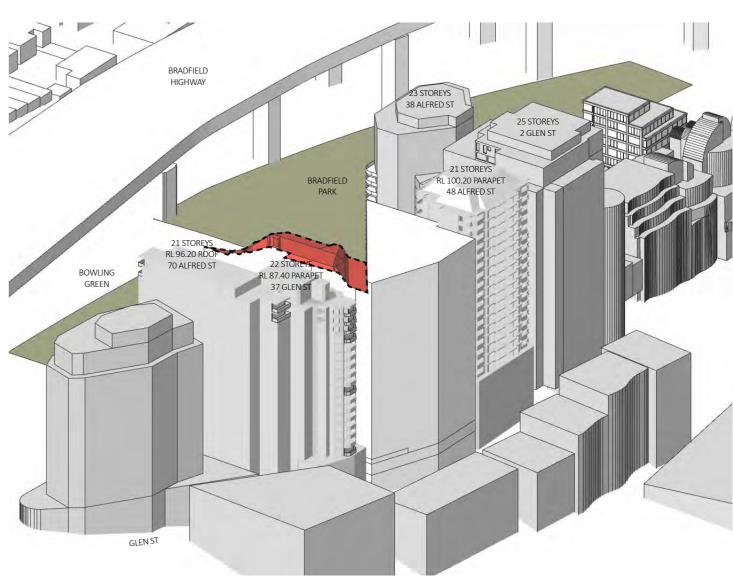


52 ALFRED STREET MILSONS POINT

52 ALFRED STREET, MILSONS POINT

4.3 NO ADDITIONAL OVERSHADOWING MASS



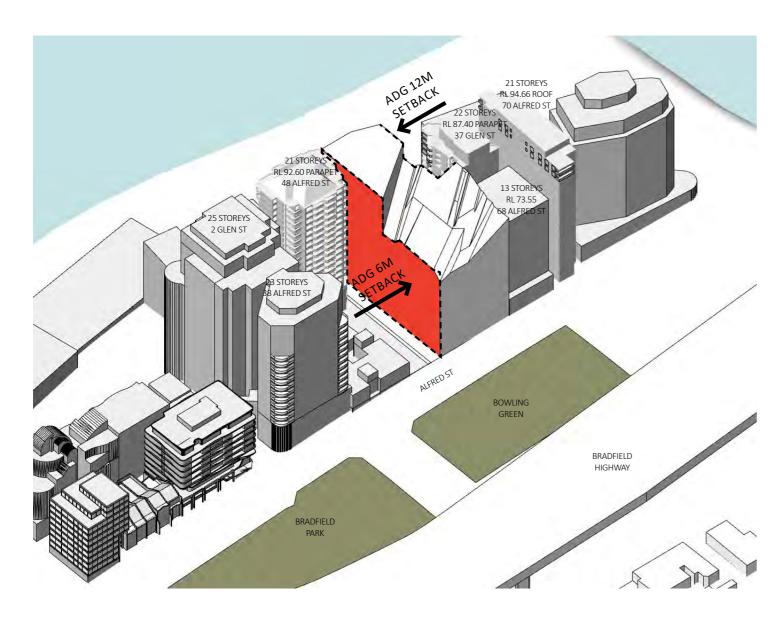


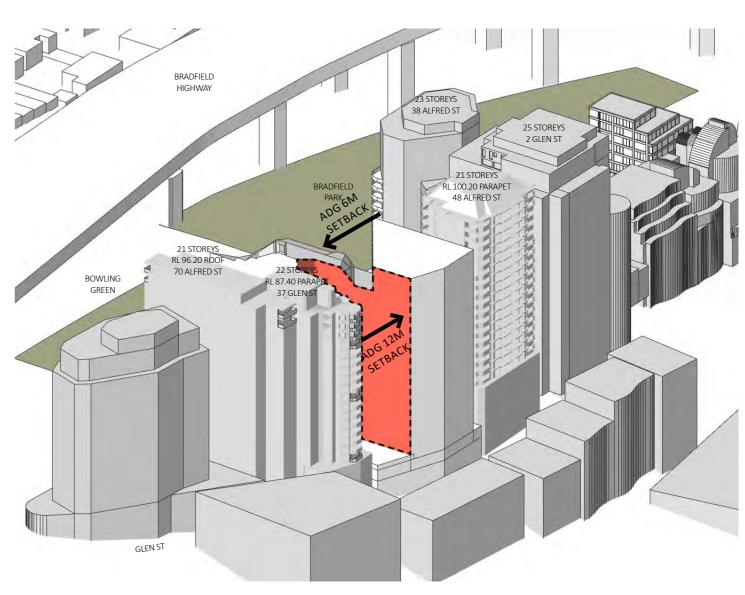
ALFRED STREET VIEW GLEN STREET VIEW

52 ALFRED STREET MILSONS POINT

52 ALFRED STREET, MILSONS POINT

4.4 ADG SETBACKS



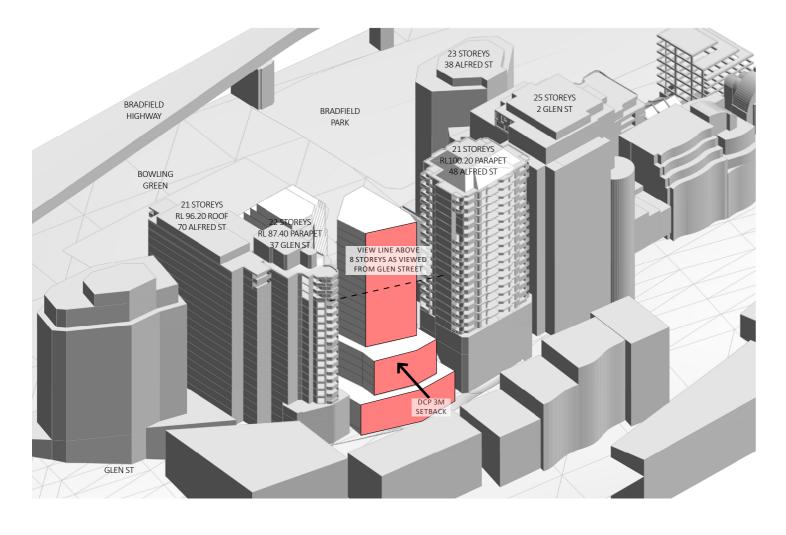


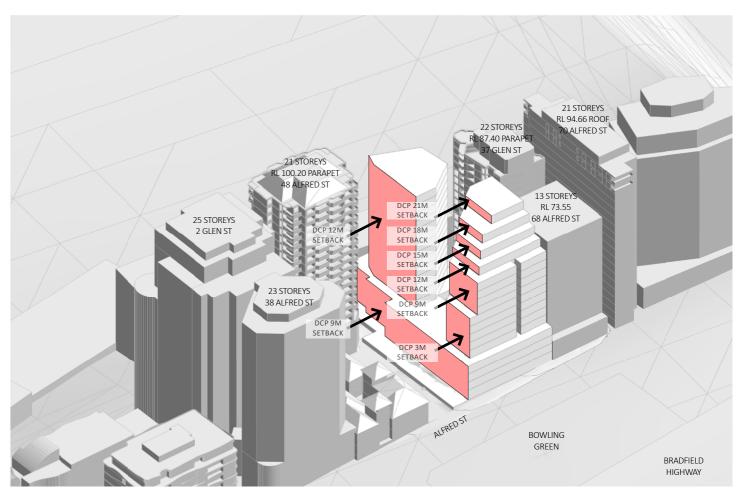
ALFRED STREET VIEW GLEN STREET VIEW

52 ALFRED STREET MILSONS POINT

52 ALFRED STREET, MILSONS POINT

4.5 SITE-SPECIFIC SECTION 9.1.4 DCP SETBACKS



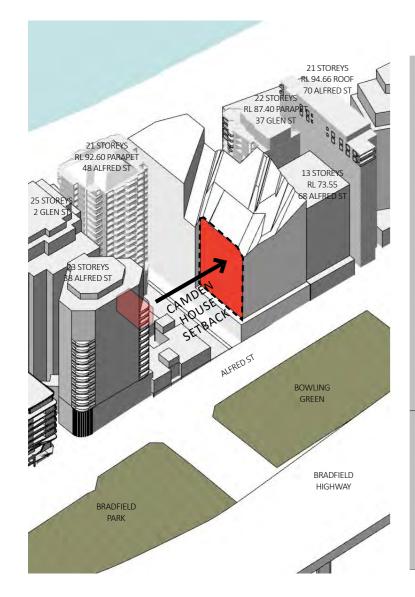


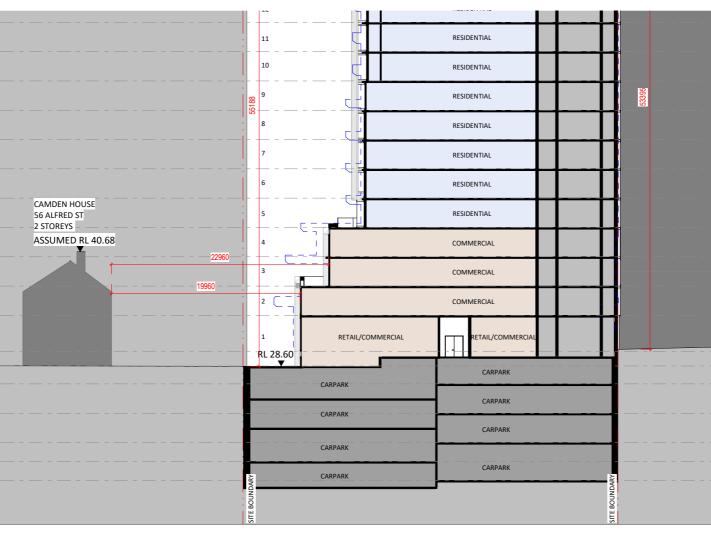
GLEN STREET VIEW ALFRED STREET VIEW

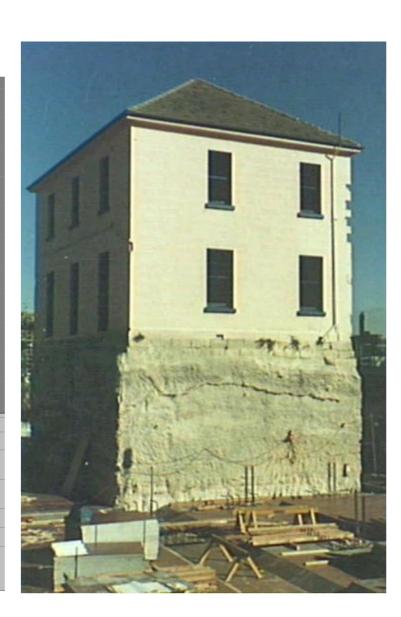
52 ALFRED STREET MILSONS POINT

52 ALFRED STREET, MILSONS POINT

4.6 SETBACK TO CAMDEN HOUSE





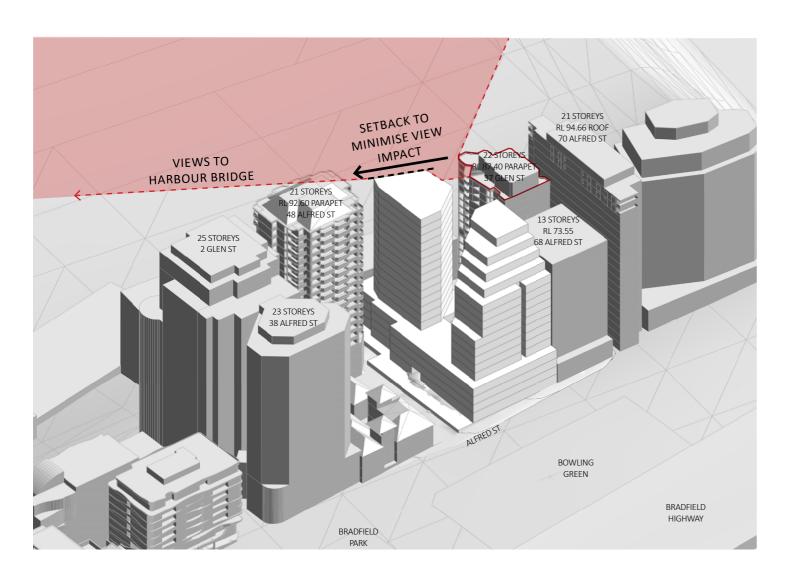


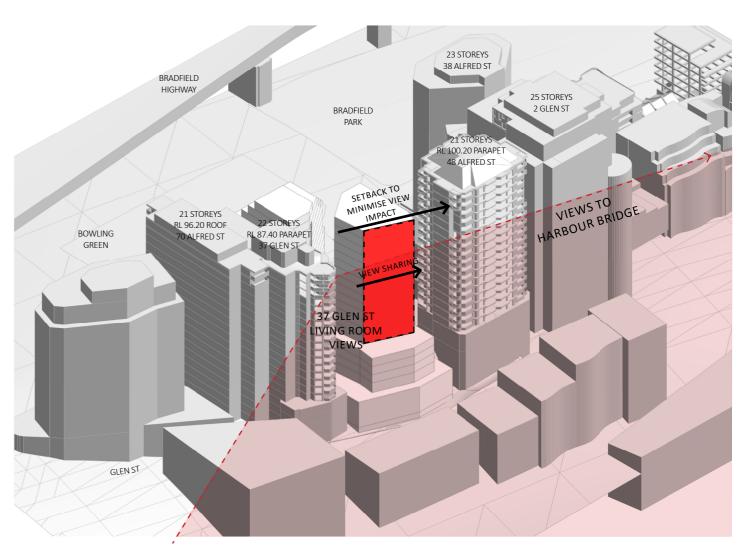
ALFRED STREET VIEW SECTION CAMDEN HOUSE 1987

4.7 CUTTING MASS FOR NEIGHBOURS VIEWS

A setback ranging from 3 - 10.58 m is proposed to ensure that views from the adjacent residential tower located at 37 Glen St are preserved, resulting in a significant volumetric reduction of the building envelope.

This design gesture provides the further benefit of creating a clearer delineation between the podium and tower built mass, allowing the height of the proposed podium to be in keeping with many of the adjacent buildings along the Glen St frontage.





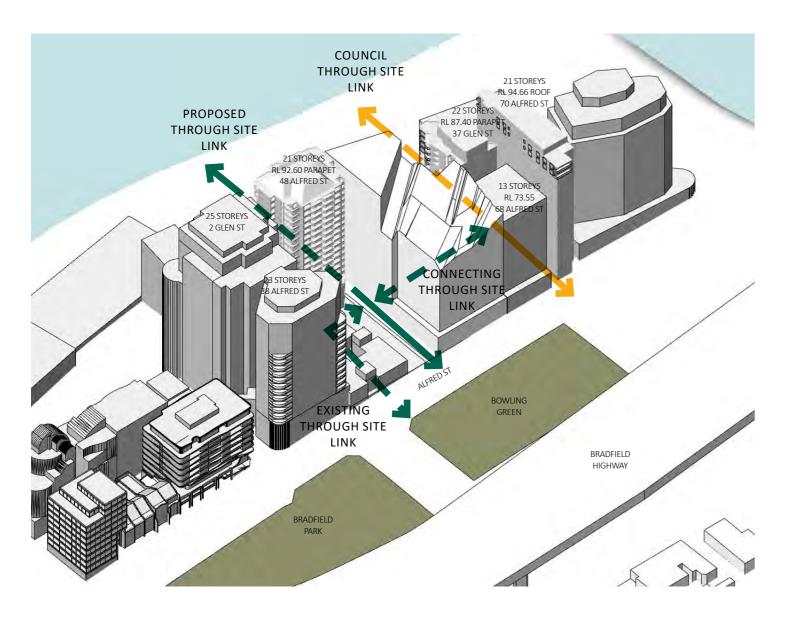
ALFRED STREET VIEW GLEN STREET VIEW



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4.8 THROUGH SITE LINK

The central location and dual frontage of the site allows for a unique opportunity to increase public amenity and provide a through-site link from Alfred St to Glen St at the rear. The existing underutilised through-site link can be improved by introducing a mixture of new retail and food and beverage tenancies to create a more active frontage.

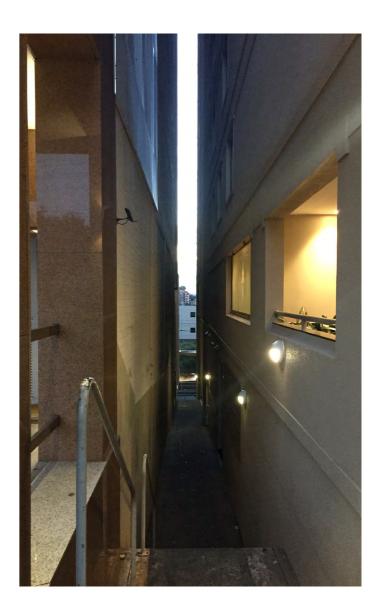






PROPOSED THROUGH SITE LINK

A wider through-site link with landscaping and a permeable retail space will allow weather protection and a more pedestrian friendly link to Glen Street.



EXISTING THROUGH SITE LINK

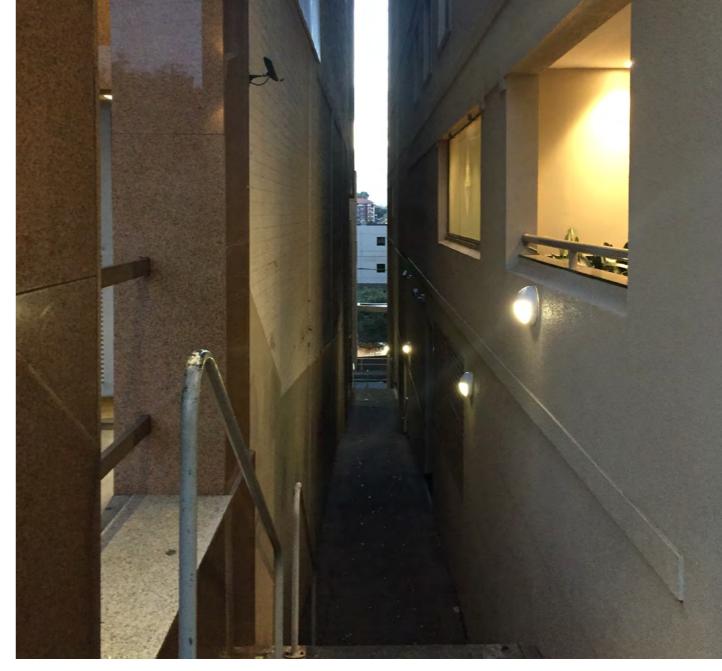
The poorly lit and narrow through site link is uninviting and discourages pedestrian activity.

52 ALFRED STREET MILSONS POINT

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4.9 EXISTING THROUGH SITE LINK





EXISTING SHAREWAY EXISTING COUNCIL THROUGH SITE LINK BETWEEN 68 AND 70 ALFRED STREET

4.10 PROPOSED THROUGH SITE LINK - PERSPECTIVE



52 ALFRED STREET, MILSONS POINT

4.10 THROUGH SITE LINK -PUBLIC BENEFIT, SITE ACTIVATION AND PRIORITISING THE PEDESTRIAN

- The proposed enhanced through site link and new ground level public plaza will revitalise and connect Alfred Street and Glen Street into the broader pedestrian network.
- Additional ground floor through site link for a future vision connecting the north to south

 side of the site.
- Re-establishes the heritage relationship as a focal point of the north and south connection.
- Combine open space, retail activation and landscape to create a destination for locals.
 Provision of several new food and beverage and small retail outlets.
- Provision of approximately 2642m² of new commercial and retail space.



Shopfront Reference



Steam Mill Lane, Sydney



Pedestrian Walkways



Arc by Crown, Sydney

4.11 LANDSCAPE SITE PLAN



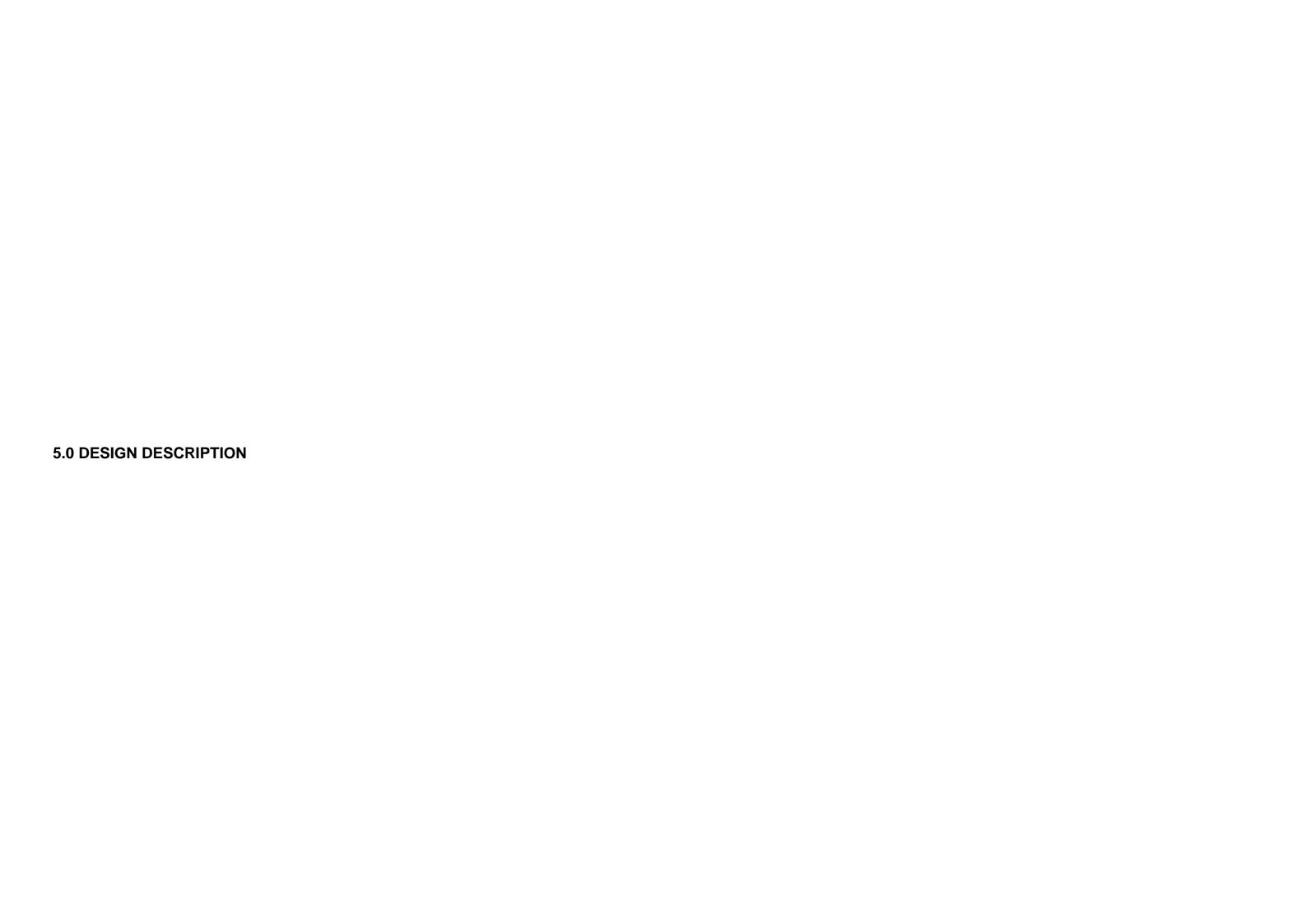
52 ALFRED STREET MILSONS POINT

52 ALFRED STREET, MILSONS POINT

4.11 LANDSCAPE MASTER PLAN

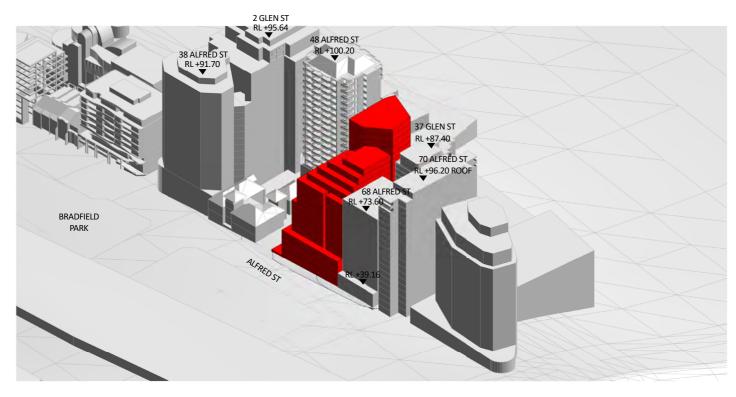


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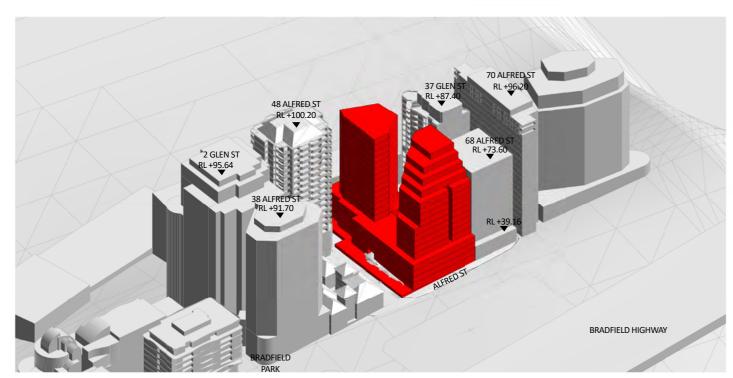


52 ALFRED STREET, MILSONS POINT

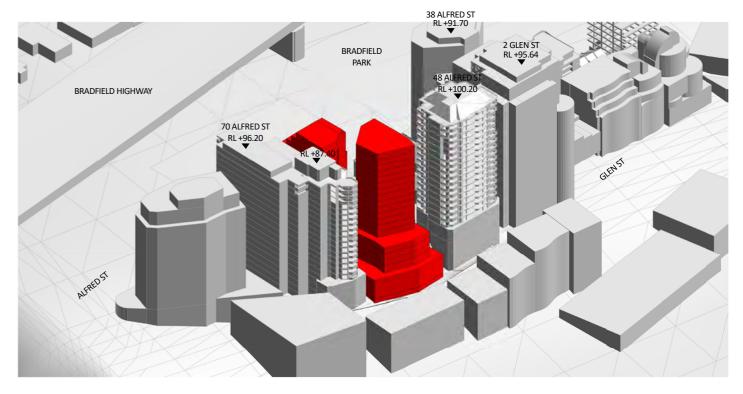
5.1 PROPOSED ENVELOPE



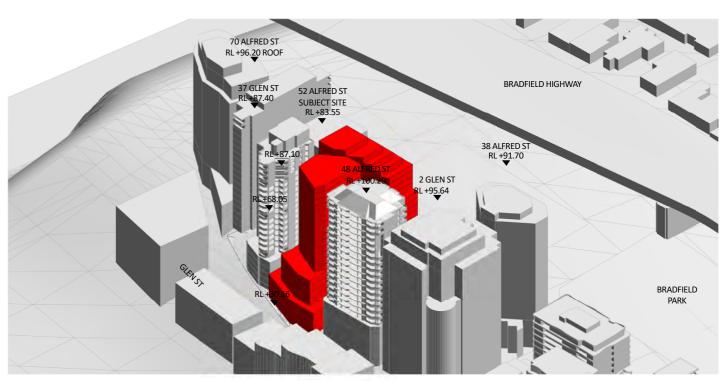
PROPOSED ENVELOPE
Northeast View from Alfred Street



PROPOSED ENVELOPE
Southeast View from Alfred Street



PROPOSED ENVELOPE
Northwest View from Glen Street



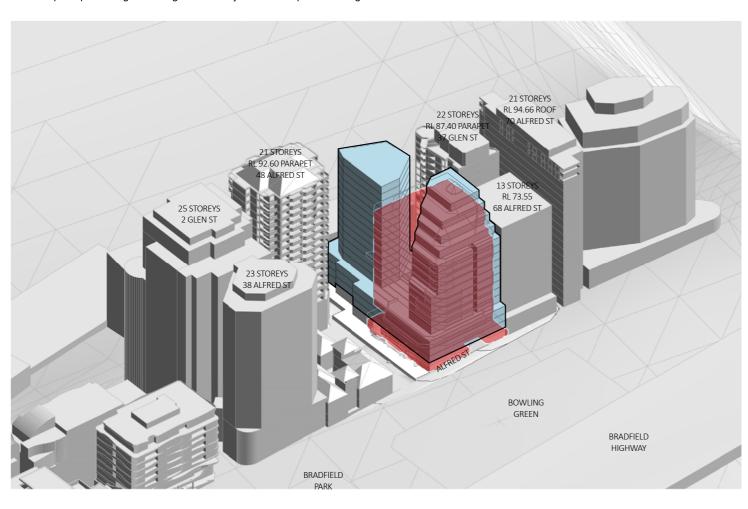
PROPOSED ENVELOPE
Southwest View from Glen Street

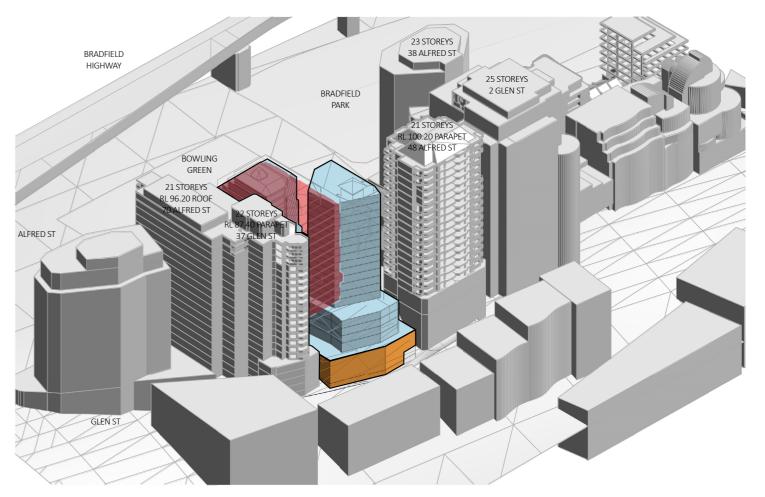
52 ALFRED STREET MILSONS POINT Koichi Takada Architects 35

5.2 DESIGN DESCRIPTION

The building is comprised of 3 predominant forms, a part 2 and part 4 storey high podium, 17-storey terraced tower form fronting Alfred Street and 22 storeys (inclusive of the 4 storey podium) tower component fronting Glen Street. The 2 storey podium to Alfred Street assists in defining the street edge, creating a continuous active frontage to the through site link. The stepped tower form terraces away from Alfred Street from 14 to 17 stories, reducing the bulk and perceptible height and aligns to the adjacent developments along Alfred Street.

The tower fronting Glen Street extends to an effective height of 22 storeys, aiding the abrupt transition in height between 37 Glen St and 48 Alfred St. The proposed tower chamfered setbacks reduces adverse impacts of amenity to the neighbouring residents.





ALFRED STREET VIEW

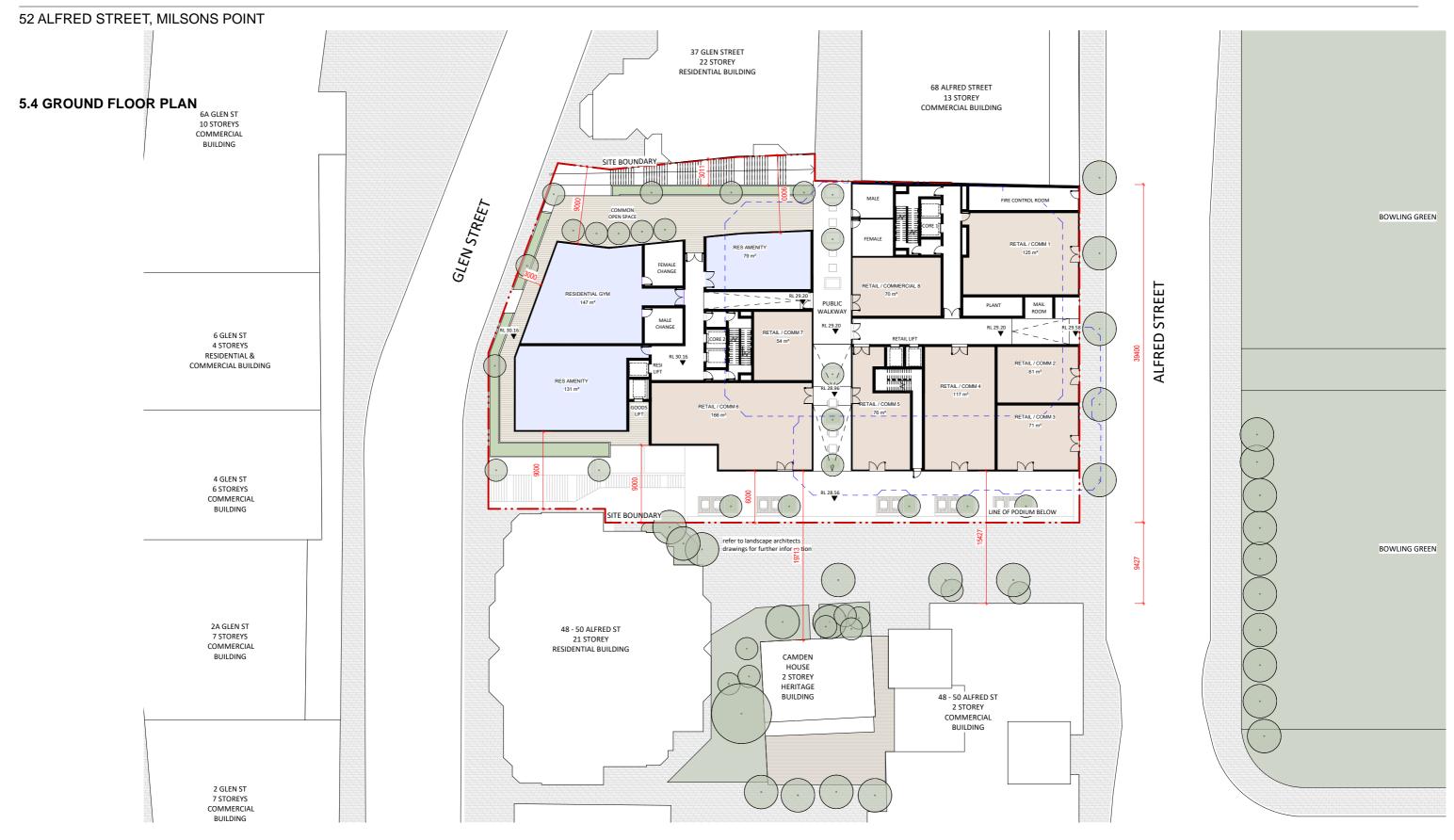


GLEN STREET VIEW

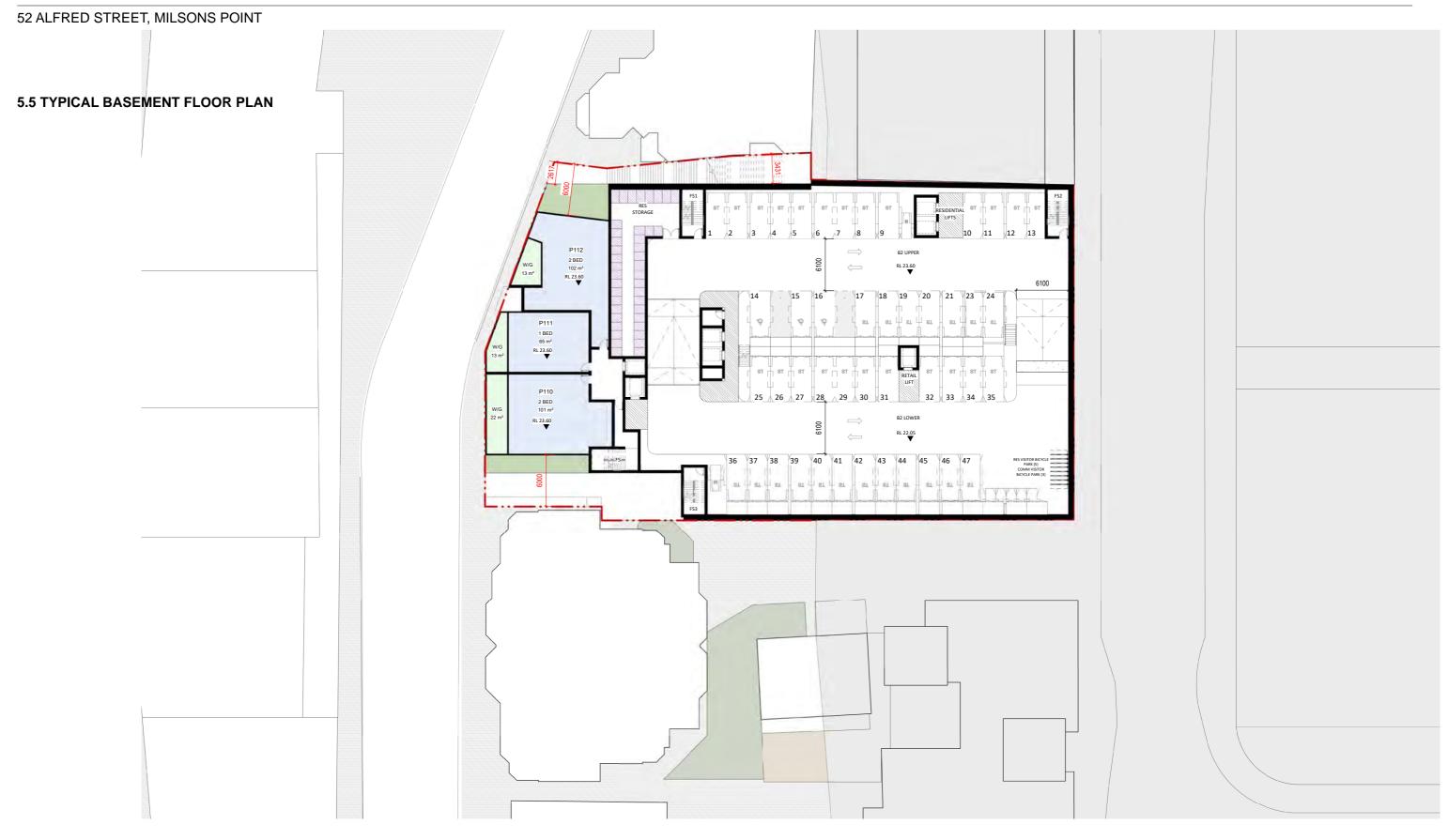
52 ALFRED STREET MILSONS POINT



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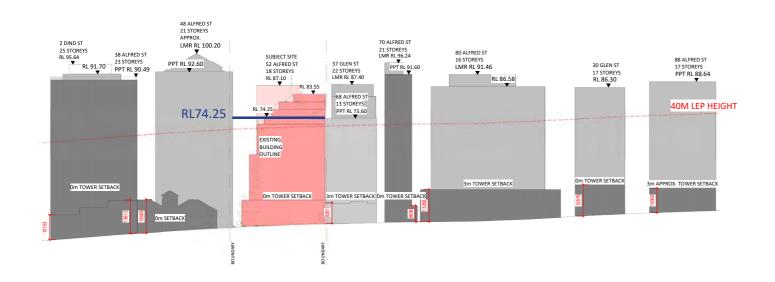
5.11 ELEVATION DIAGRAMS

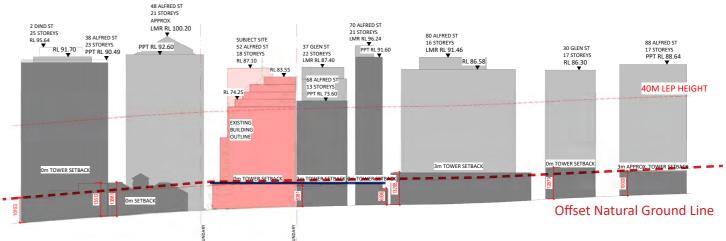
FAÇADE FRONT HEIGHT ALIGNMENT

The predominant visual bulk of the building presented to Alfred St has a perceptible height of RL 74.25 before beginning to step back at higher levels. This height aligns with the neighbouring development at 68 Alfred St (RL 73.60).

PODIUM HEIGHT ALIGNMENT

Podium heights along Alfred St vary slightly but typically sit approximately 10m/3 storeys above the natural ground line. The proposed height of the podium on the Alfred St frontage of the development adheres to this principle and is consistent with that of the surrounding developments in order to preserve a visually unified street frontage. Neighbouring developments currently present tower setbacks of 0-3m from Alfred St. The proposed development sits comfortably within this range - with a setback of 2m, the strong articulation of the sandstone podium provides depth and variety to the mass.

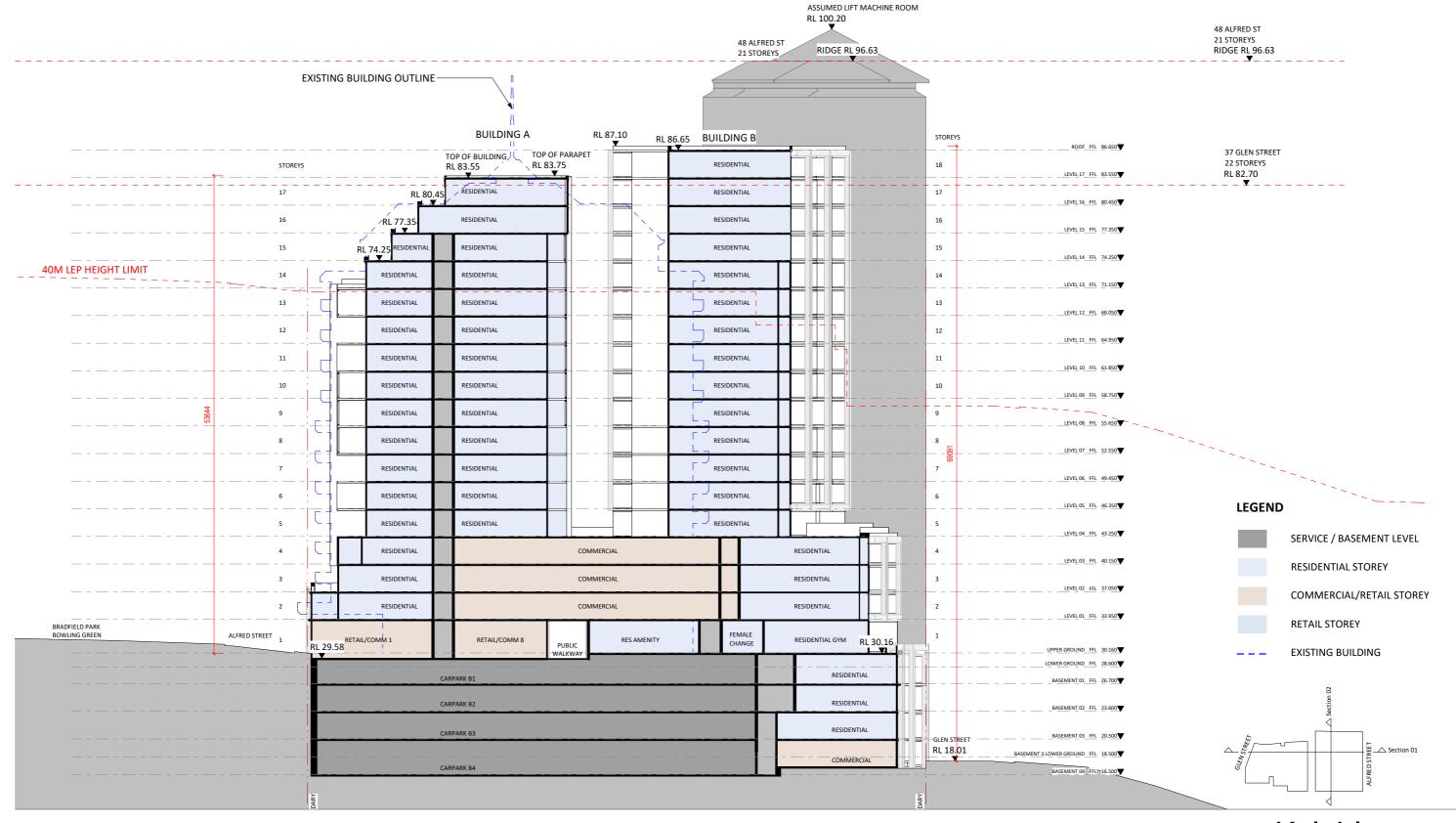




52 ALFRED STREET, MILSONS POINT

5.12 SECTIONS

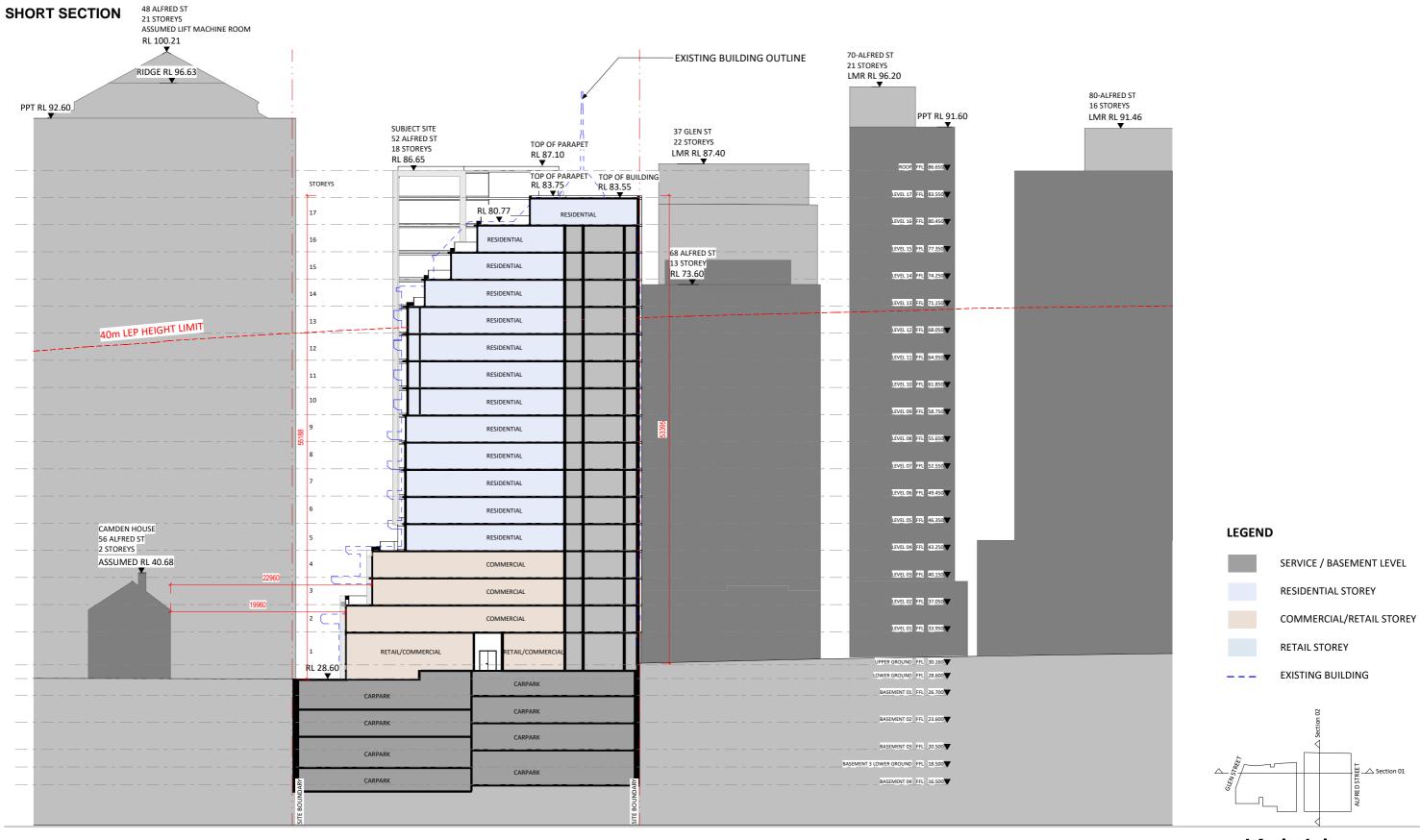
LONG SECTION



52 ALFRED STREET MILSONS POINT

52 ALFRED STREET, MILSONS POINT

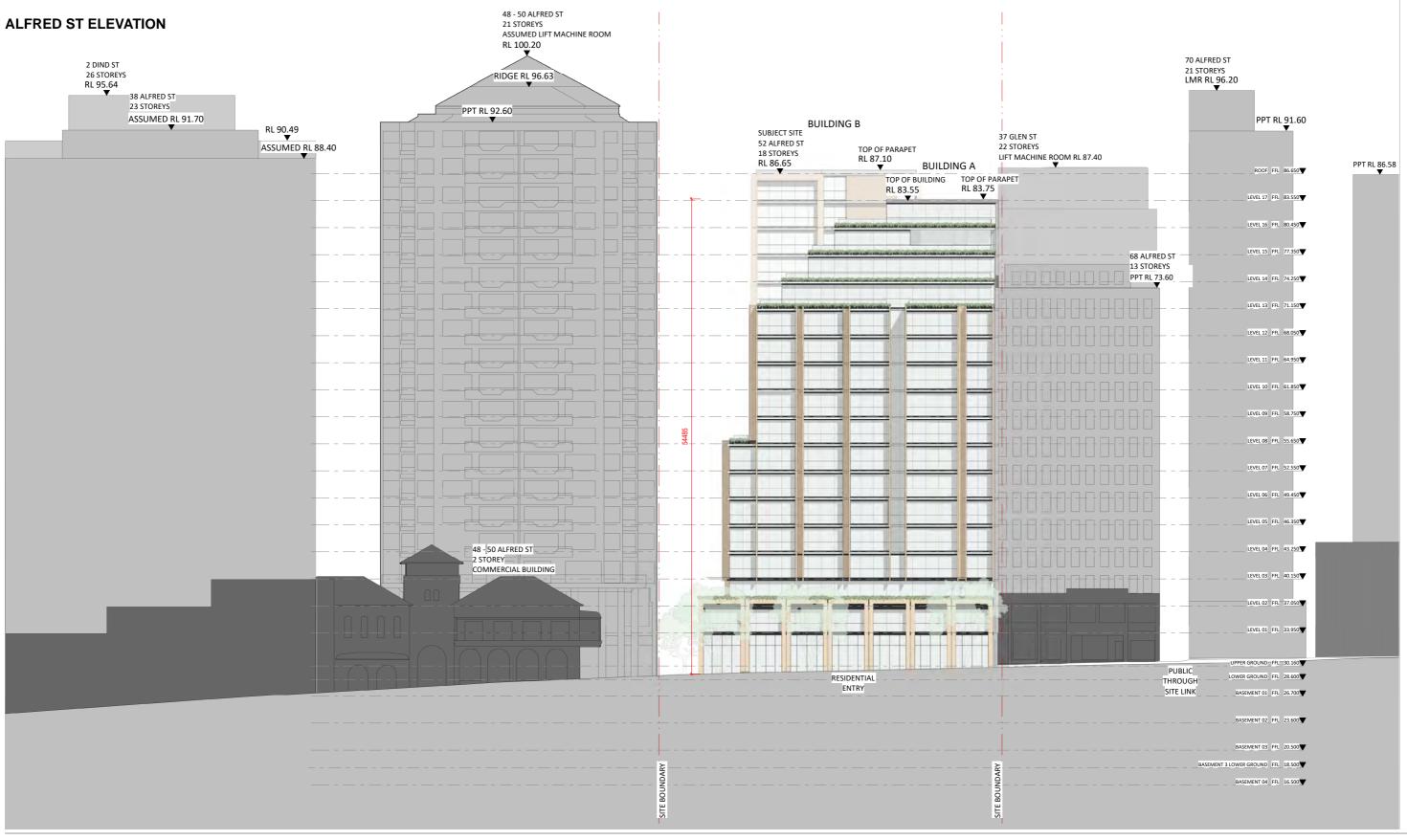
5.12 SECTIONS



52 ALFRED STREET MILSONS POINT

52 ALFRED STREET, MILSONS POINT

5.13 ELEVATIONS

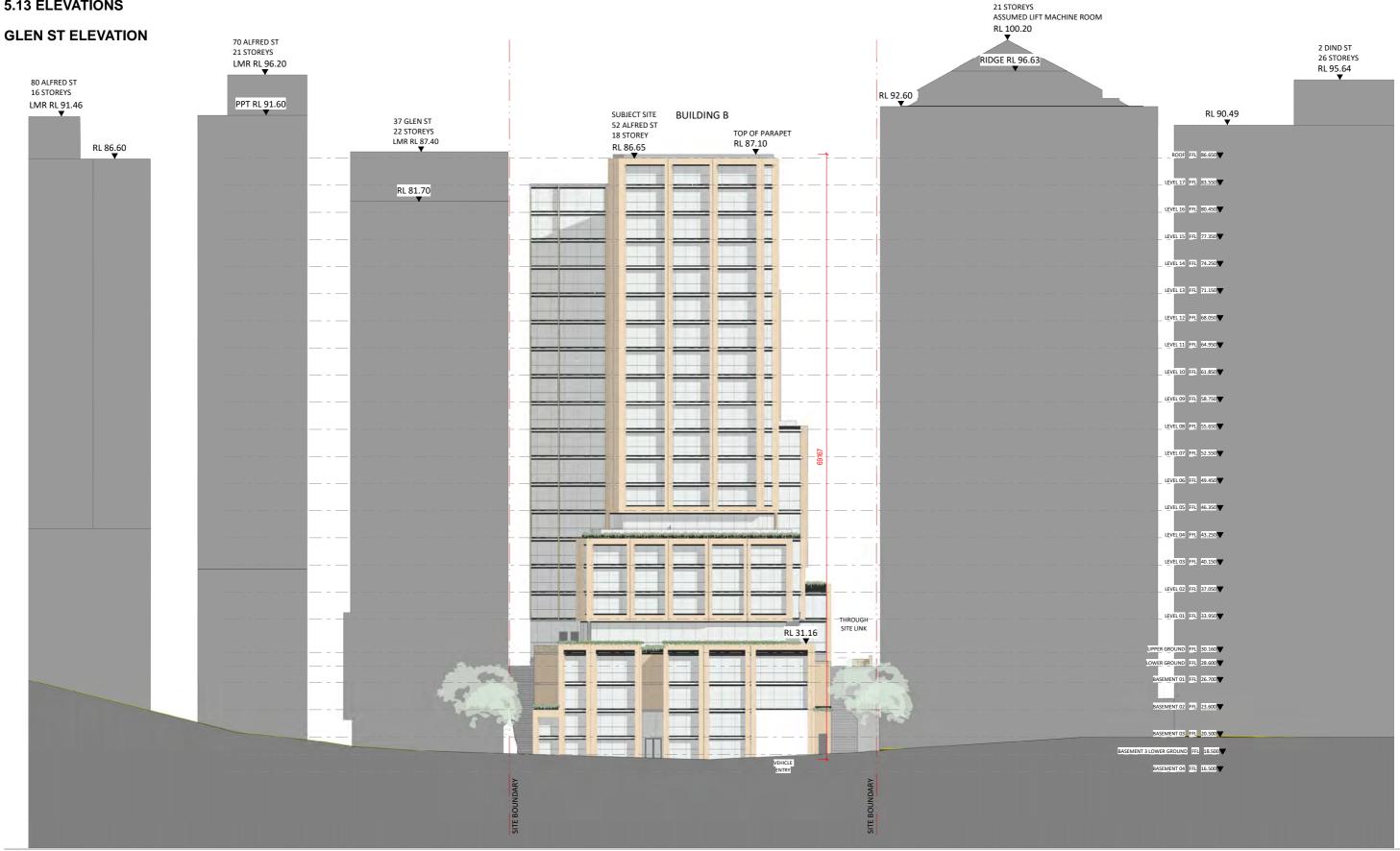


52 ALFRED STREET MILSONS POINT Koichi Takada Architects 48

48 ALFRED ST

52 ALFRED STREET, MILSONS POINT

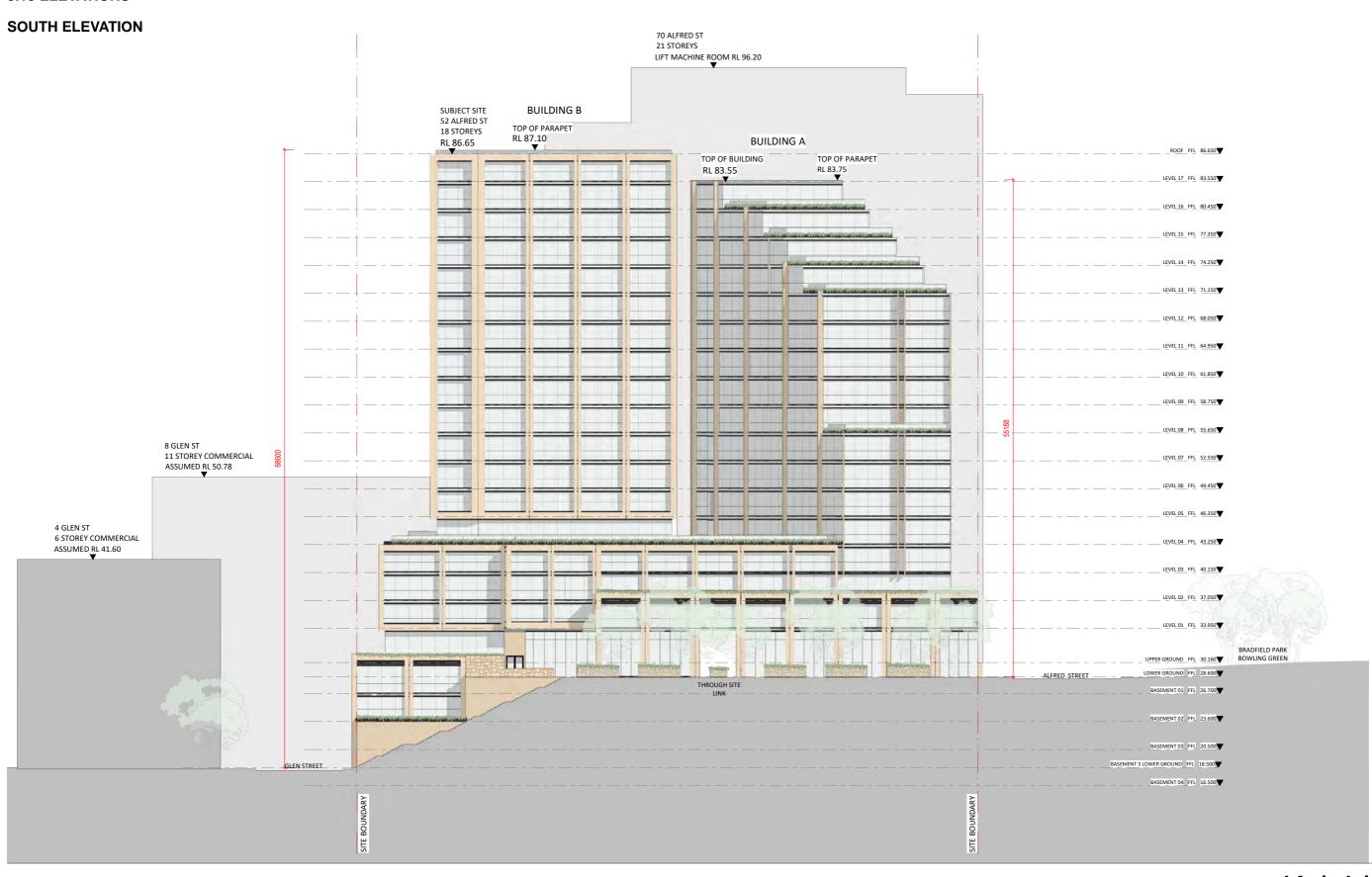
5.13 ELEVATIONS



52 ALFRED STREET MILSONS POINT

52 ALFRED STREET, MILSONS POINT

5.13 ELEVATIONS



52 ALFRED STREET MILSONS POINT



52 ALFRED STREET, MILSONS POINT

6.1 AREA SCHEDULE

	LEVEL	GFA RESIDENTIAL	GFA AMENITIES	GFA COMMERCIAL	GFA RETAIL	TOTAL GFA	PARKING COUNT				UNIT MIX					TOTAL APT.
							СОММ	RETAIL	RESI	MOTORBIKE	Studio	1B	2B	3B	4B	
BASEMENT	BASEMENT 4 BASEMENT 3 BASEMENT 3 Upper BASEMENT 2 BASEMENT 1 GROUND LEVEL 1 LEVEL 2 LEVEL 3	0 0 266 352 352 352 0 953 803 803	0 0 0 0 0 0 500 0	0 269 0 0 0 0 771 674 674	867	269 266 352 352 1367 1724 1477	4	11	33 47 47 49	1 3 1 7 6	0 0 0 0	1 1 0 2 2 2	1 2 2 0 2 2 2	1 0 0 0 0 0	0 0 0 0 2 2 2	2 3 3 0 6 6 5
TOWER	LEVEL 4 LEVEL 5 LEVEL 6 LEVEL 7 LEVEL 8 LEVEL 10 LEVEL 11 LEVEL 12 LEVEL 13 LEVEL 14 LEVEL 15 LEVEL 15 LEVEL 15 LEVEL 16 LEVEL 16 LEVEL 17	908 908 908 908 858 858 858 858 745 640 556 492 304	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0		908 908 908 908 858 858 858 858 858 745 640 556 492 304					0 0 0 0 0 0 0 0	3 3 3 2 2 2 2 2 2 1 1 1 1	3 3 3 3 3 4 4 5 5 3 1 1	3 3 3 3 3 3 2 2 2 1 2 3 1	0 0 0 0 0 0 0 0 0 0	9 9 9 8 8 8 8 8 7 6 5 3
	TOTALS	14,188	500	2388	867	17,943	4	11 191	176	18	0	34	50	35 28%	6	125
							151			18	0%	21%	40%	28%	5%	100%

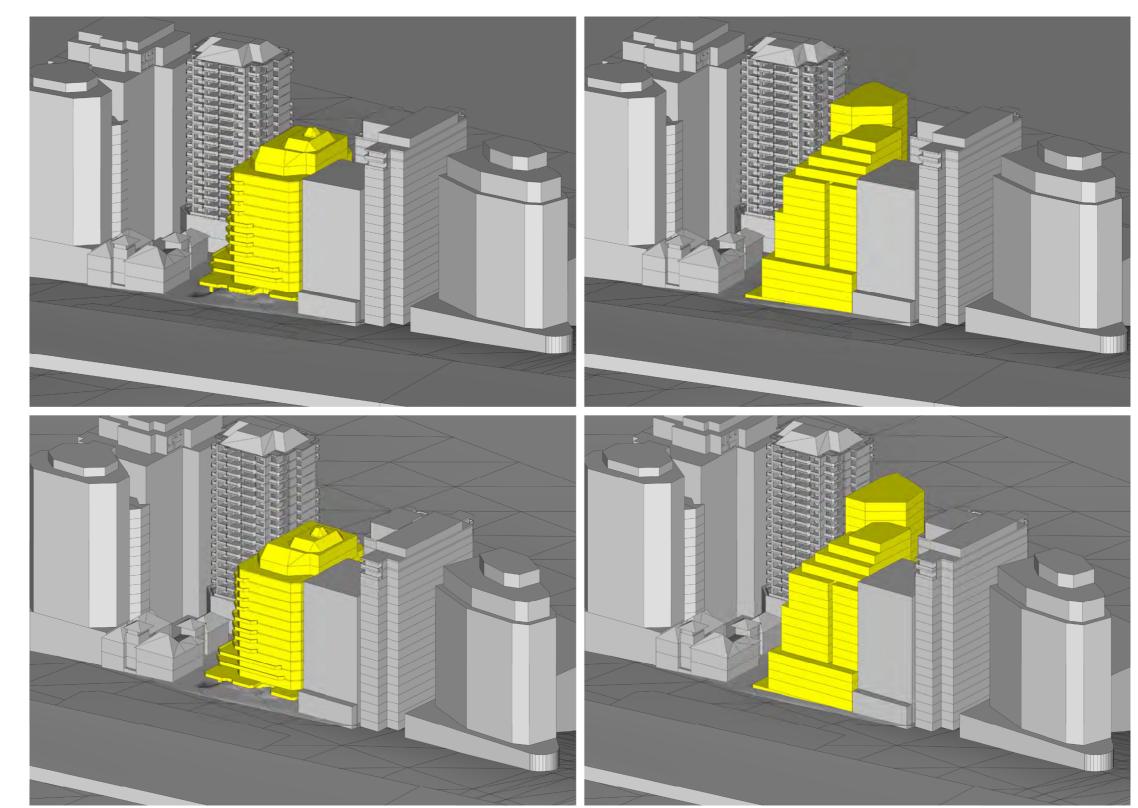
6.2 SUN EYE DIAGRAM

MID WINTER 21ST JUNE

9 AM

9:30 AM



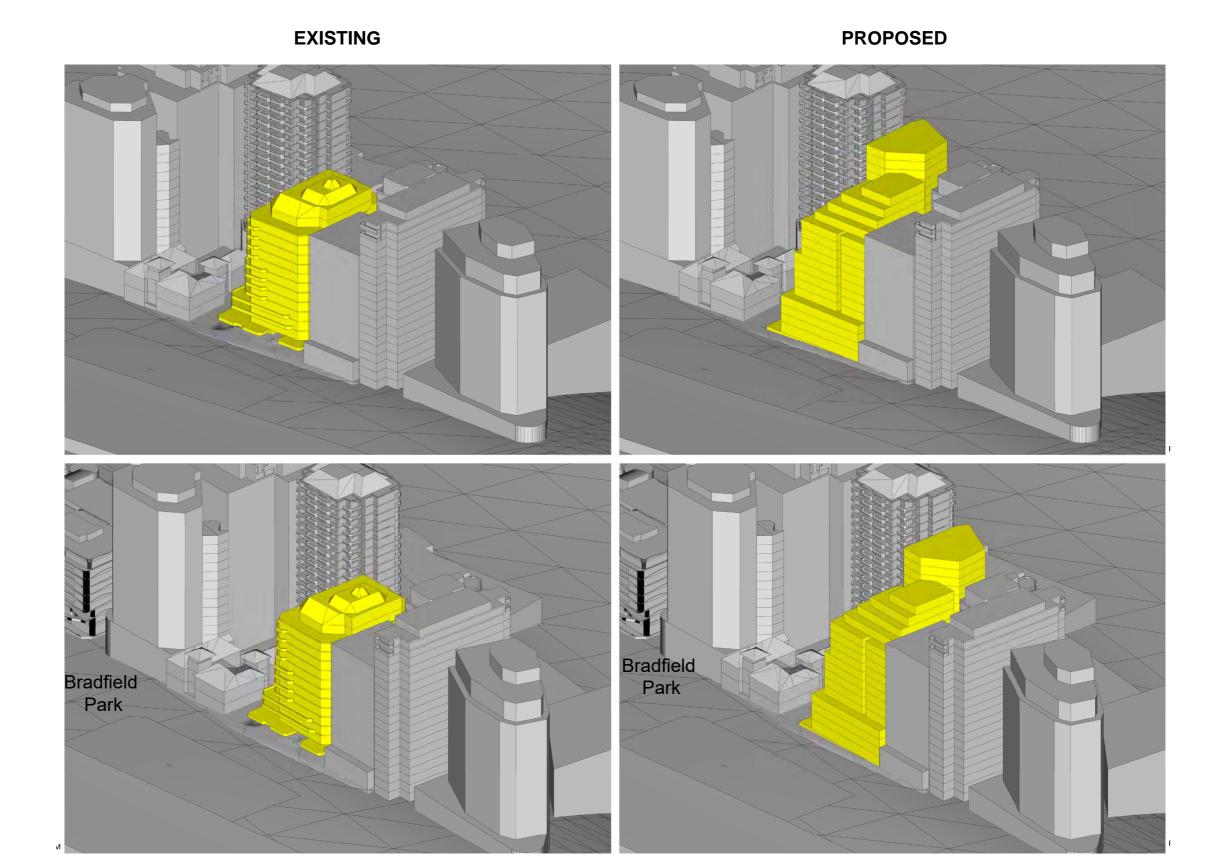


6.2 SUN EYE DIAGRAM

MID WINTER 21ST JUNE

10 AM

10:30 AM



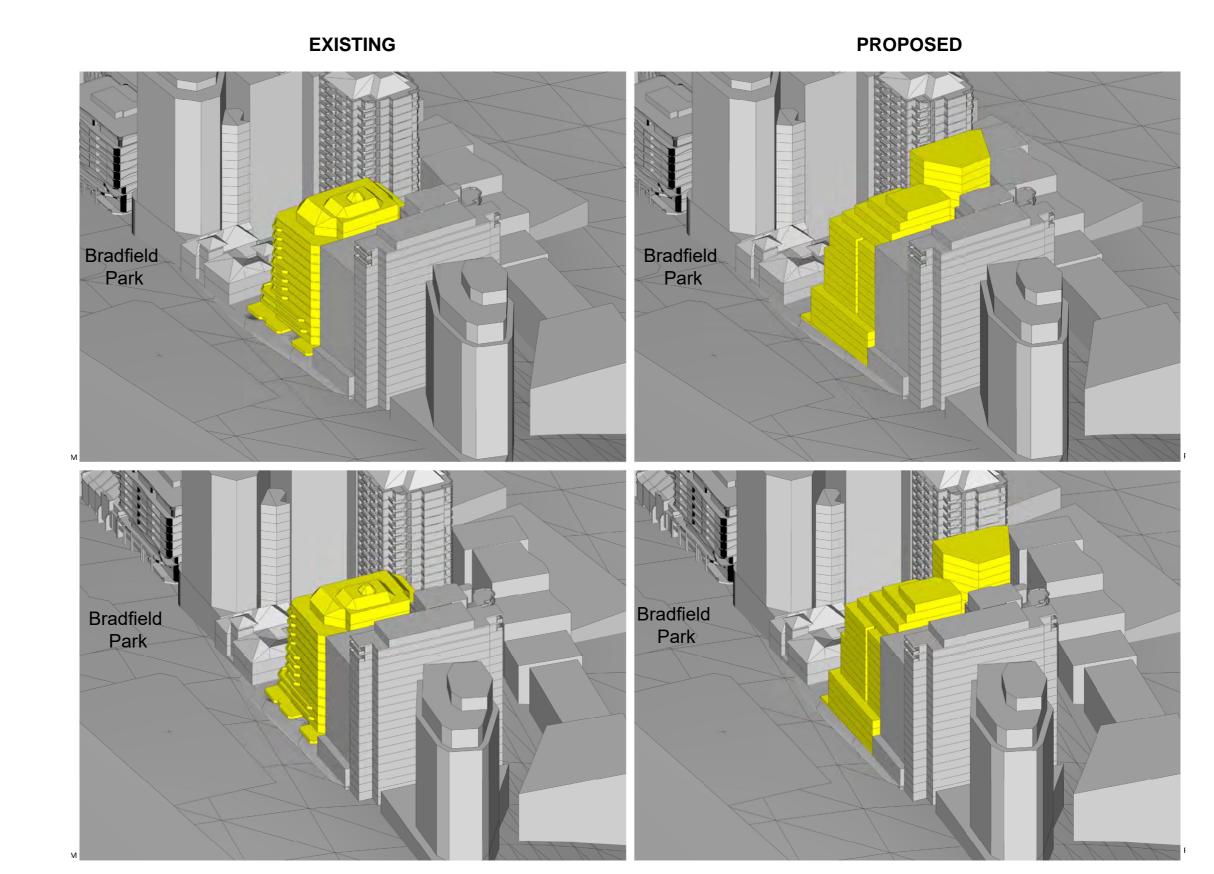
52 ALFRED STREET MILSONS POINT

6.2 SUN EYE DIAGRAM

MID WINTER 21ST JUNE

11 AM

11:30 AM



52 ALFRED STREET MILSONS POINT

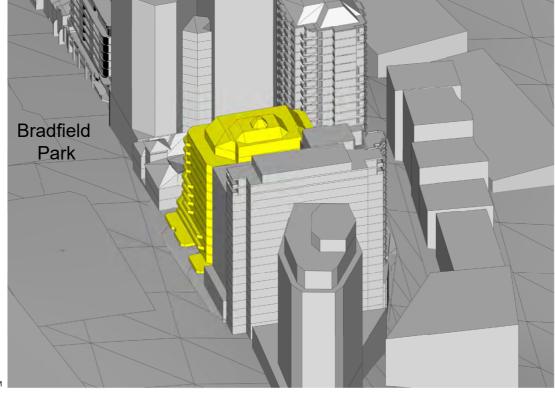
6.2 SUN EYE DIAGRAM

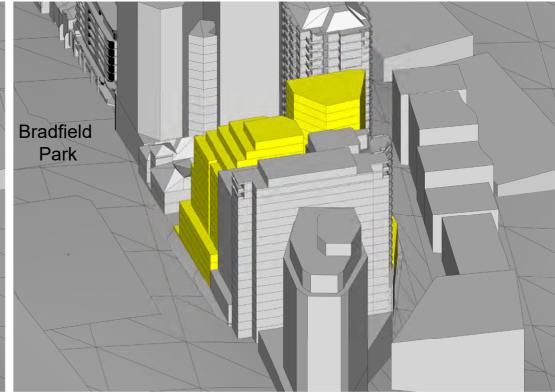
MID WINTER 21ST JUNE

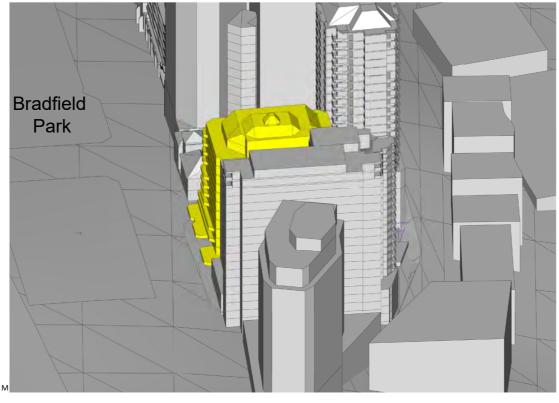
12 PM

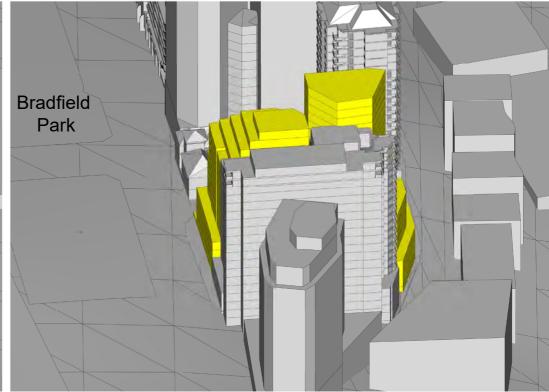
12:30 PM









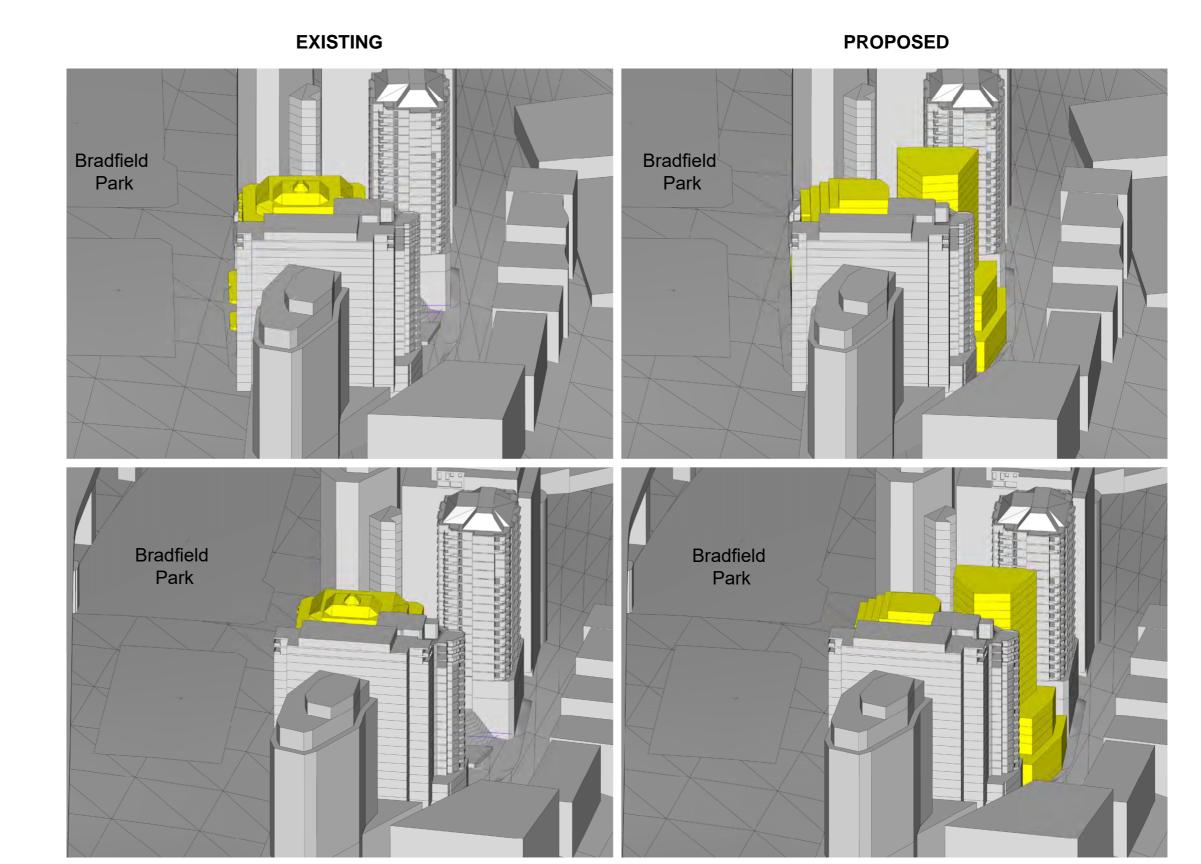


6.2 SUN EYE DIAGRAM

MID WINTER 21ST JUNE

1 PM

1:30 PM



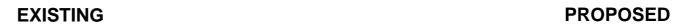
52 ALFRED STREET MILSONS POINT

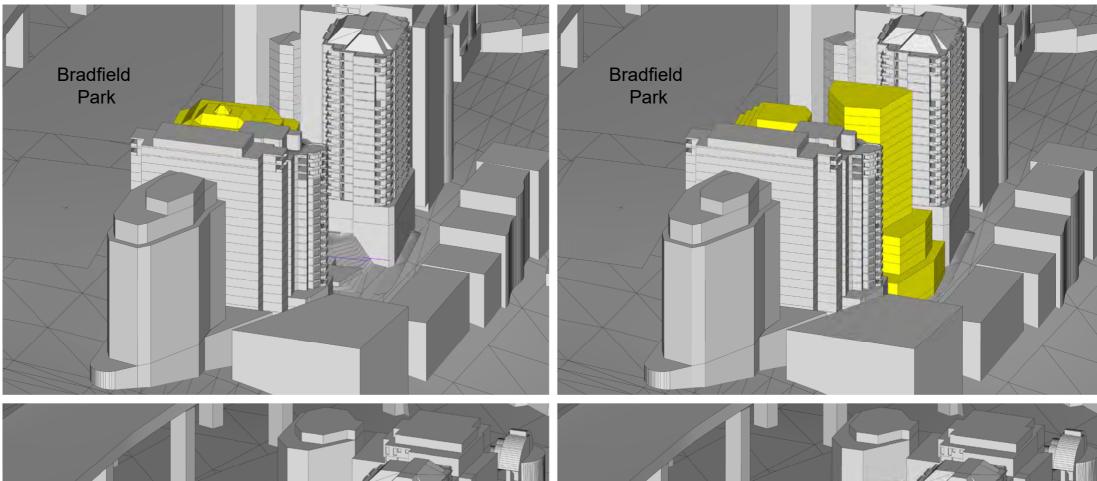
6.2 SUN EYE DIAGRAM

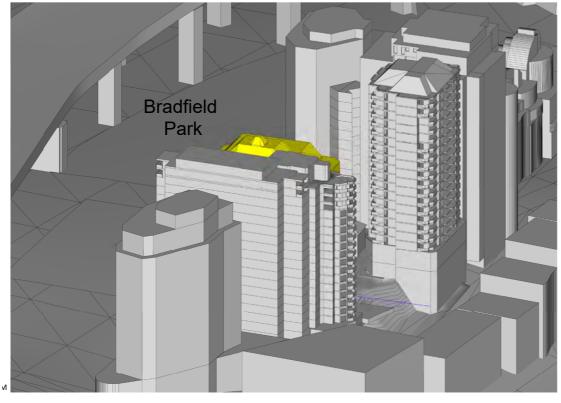
MID WINTER 21ST JUNE

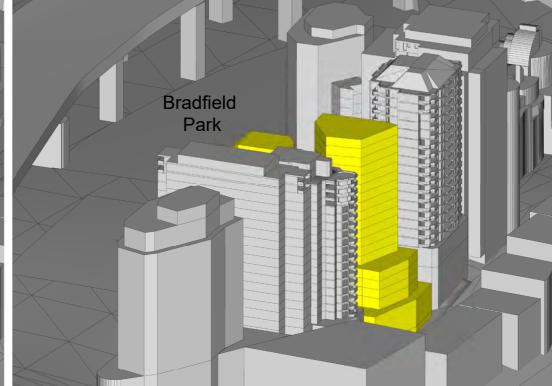
2 PM

2:30 PM







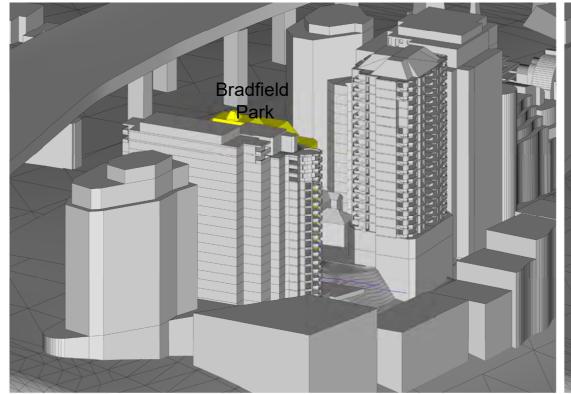


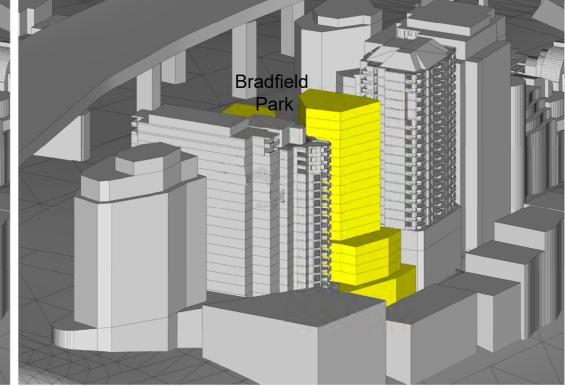
6.2 SUN EYE DIAGRAM

MID WINTER 21ST JUNE

3 PM

EXISTING PROPOSED



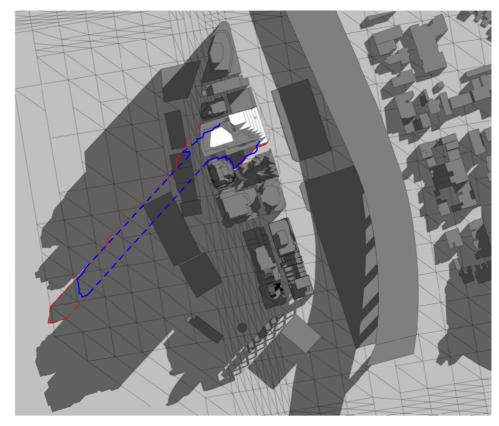


52 ALFRED STREET, MILSONS POINT

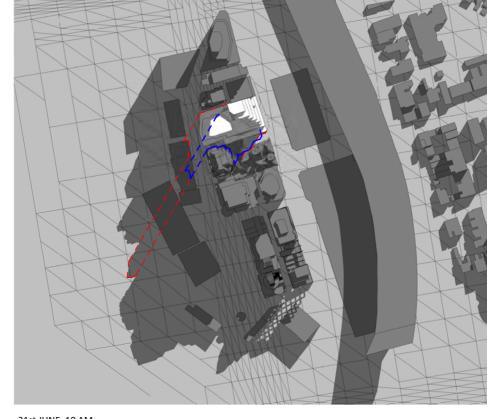
6.3 SHADOW STUDIES

MID WINTER 21st JUNE

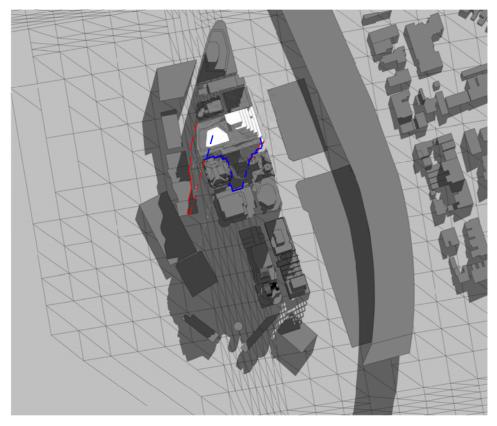
There is zero additional overshadowing from 9am - 3pm on 21 June to the surrounding context and the prominent Bradfield Park. Furthermore, there is reduced overshadowing in the range of $14m^2$ to $25m^2$ from 1:30pm to 2:30pm.



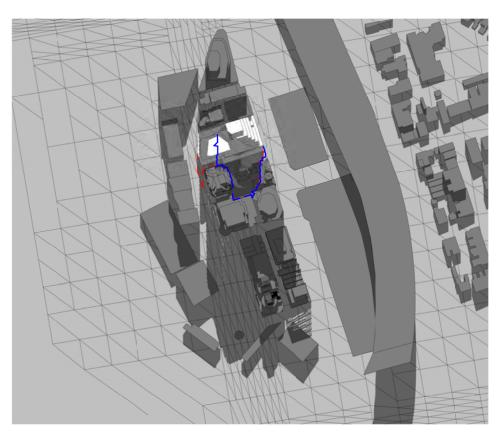
21st JUNE, 9 AM



21st JUNE, 10 AM



21st JUNE, 11 AM



21st JUNE, 12 PM

Existing Building Shadow Proposed Building Shadow North Neighbouring

Shadow

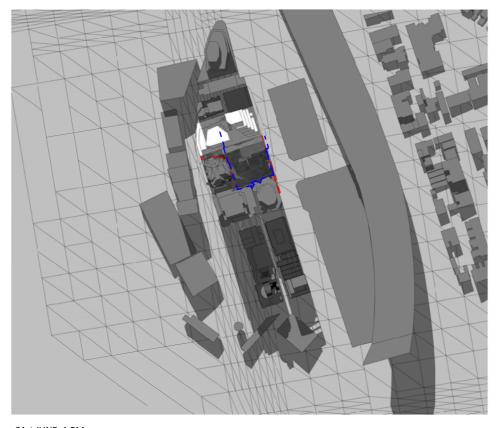
52 ALFRED STREET MILSONS POINT

52 ALFRED STREET, MILSONS POINT

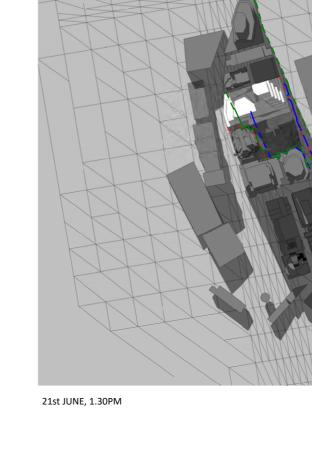
6.3 SHADOW STUDIES

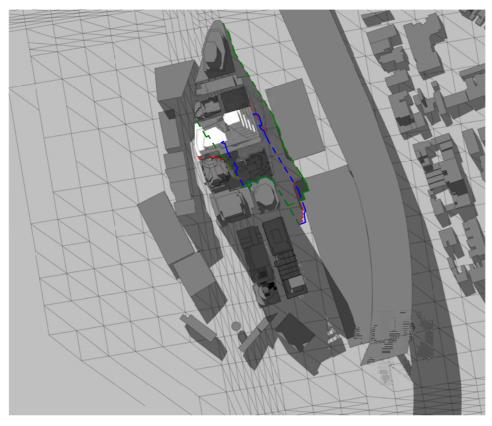
MID WINTER 21st JUNE

There is zero additional overshadowing from 9am - 3pm on 21 June to the surrounding context and the prominent Bradfield Park. Furthermore, there is reduced overshadowing in the range of $14m^2$ to $25m^2$ from 1:30pm to 2:30pm.

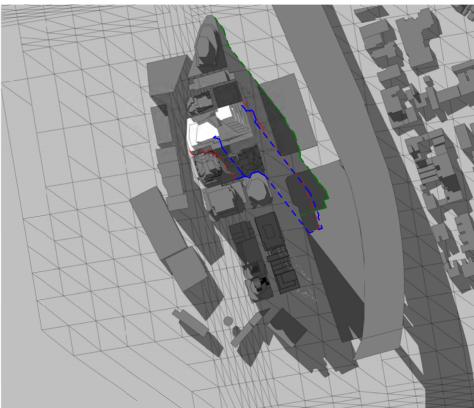


21st JUNE, 1 PM





21st JUNE, 2 PM



21st JUNE, 2.30 PM

Existing Building Shadow

Proposed Building Shadow

North Neighbouring Shadow

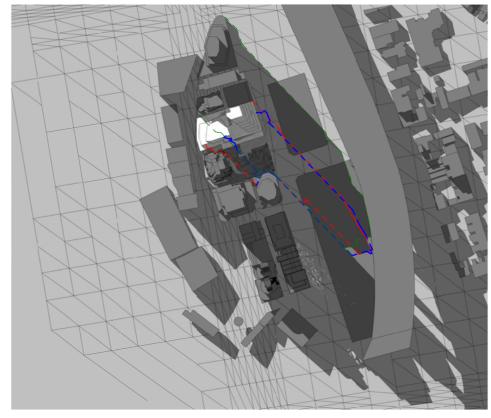
52 ALFRED STREET MILSONS POINT

52 ALFRED STREET, MILSONS POINT

6.3 SHADOW STUDIES

MID WINTER 21st JUNE

There is zero additional overshadowing from 9am - 3pm on 21 June to the surrounding context and the prominent Bradfield Park. Furthermore, there is reduced overshadowing in the range of $14m^2$ to $25m^2$ from 1:30pm to 2:30pm.



21st JUNE, 3.00 PM

Existing Building Shadow

Proposed Building Shadow

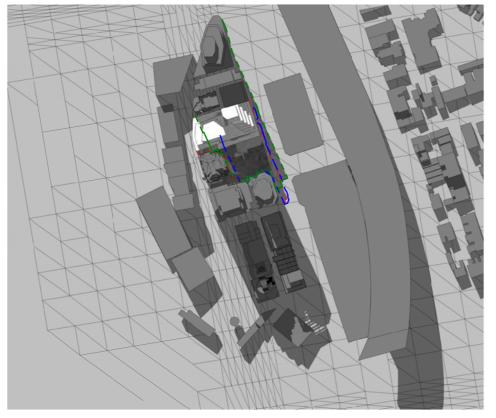
North Neighbouring Shadow

52 ALFRED STREET MILSONS POINT

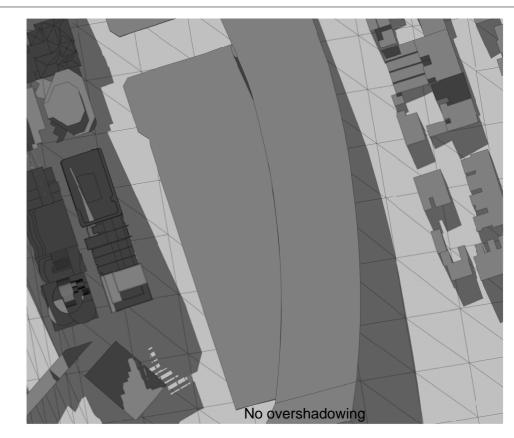
52 ALFRED STREET, MILSONS POINT

6.4 DETAILED OVERSHADOWING ANALYSIS (1-3PM)

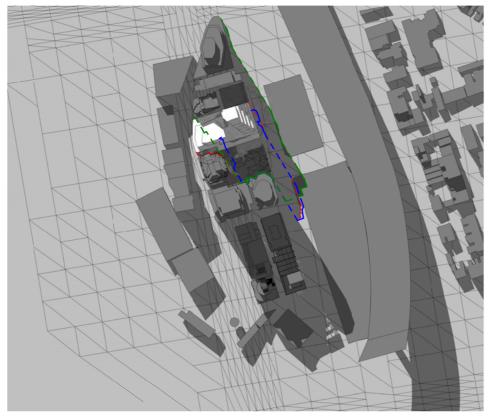
MID WINTER 21st JUNE



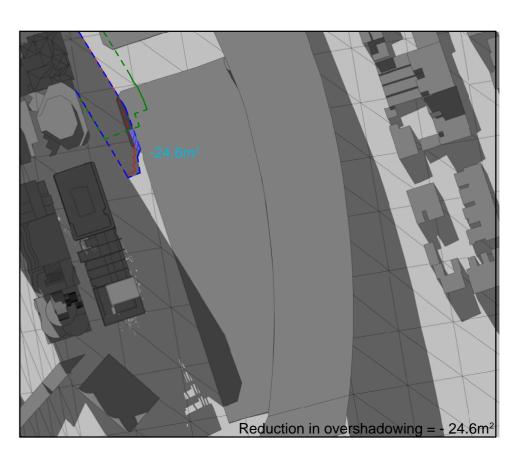
21st JUNE, 1.30 PM DETAILED SHADOW STUDY



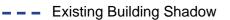
21st JUNE, 1.30 PM DETAILED SHADOW STUDY IN DETAIL



21st JUNE, 2PM DETAILED SHADOW STUDY



21st JUNE, 2PM DETAILED SHADOW STUDY IN DETAIL



_ _ _ Proposed Building Shadow

_ _ _ North Neighbouring Shadow



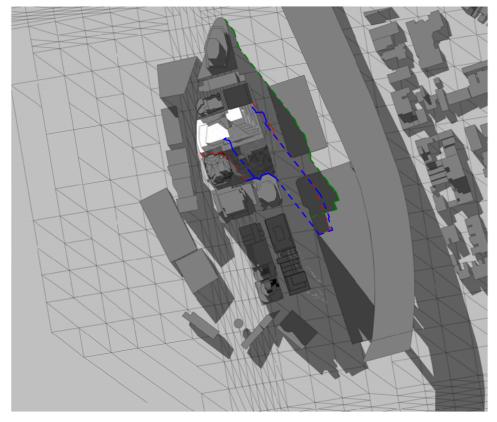
Reduction in overshadowing

52 ALFRED STREET MILSONS POINT

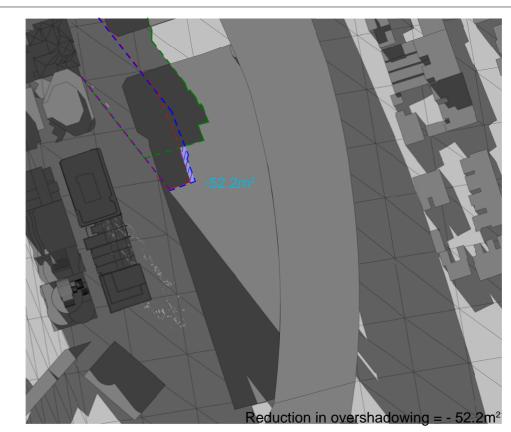
52 ALFRED STREET, MILSONS POINT

6.4 DETAILED OVERSHADOWING ANALYSIS (1-3PM)

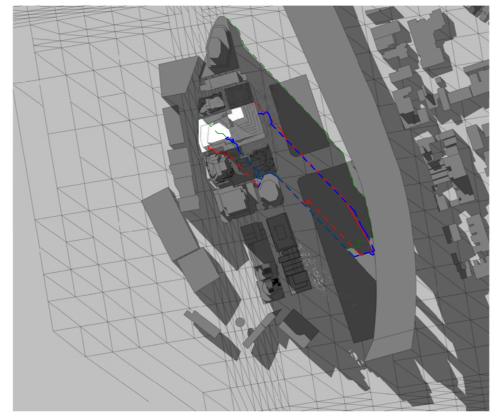
MID WINTER 21st JUNE



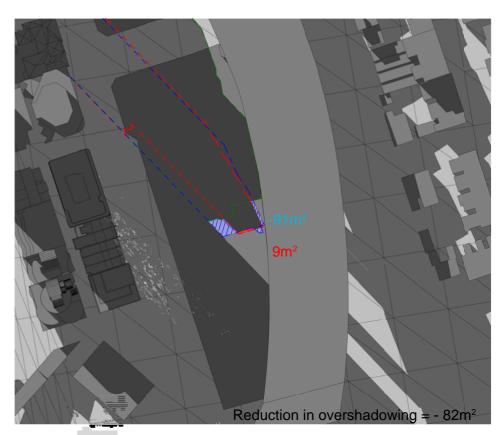
21st JUNE, 2.30 PM DETAILED SHADOW STUDY



21st JUNE, 2.30 PM DETAILED SHADOW STUDY IN DETAIL



21st JUNE, 3 PM DETAILED SHADOW STUDY



21st JUNE, 3 PM DETAILED SHADOW STUDY IN DETAIL

- - Existing Building Shadow

_ _ _ Proposed Building Shadow

_ _ North Neighbouring Shadow

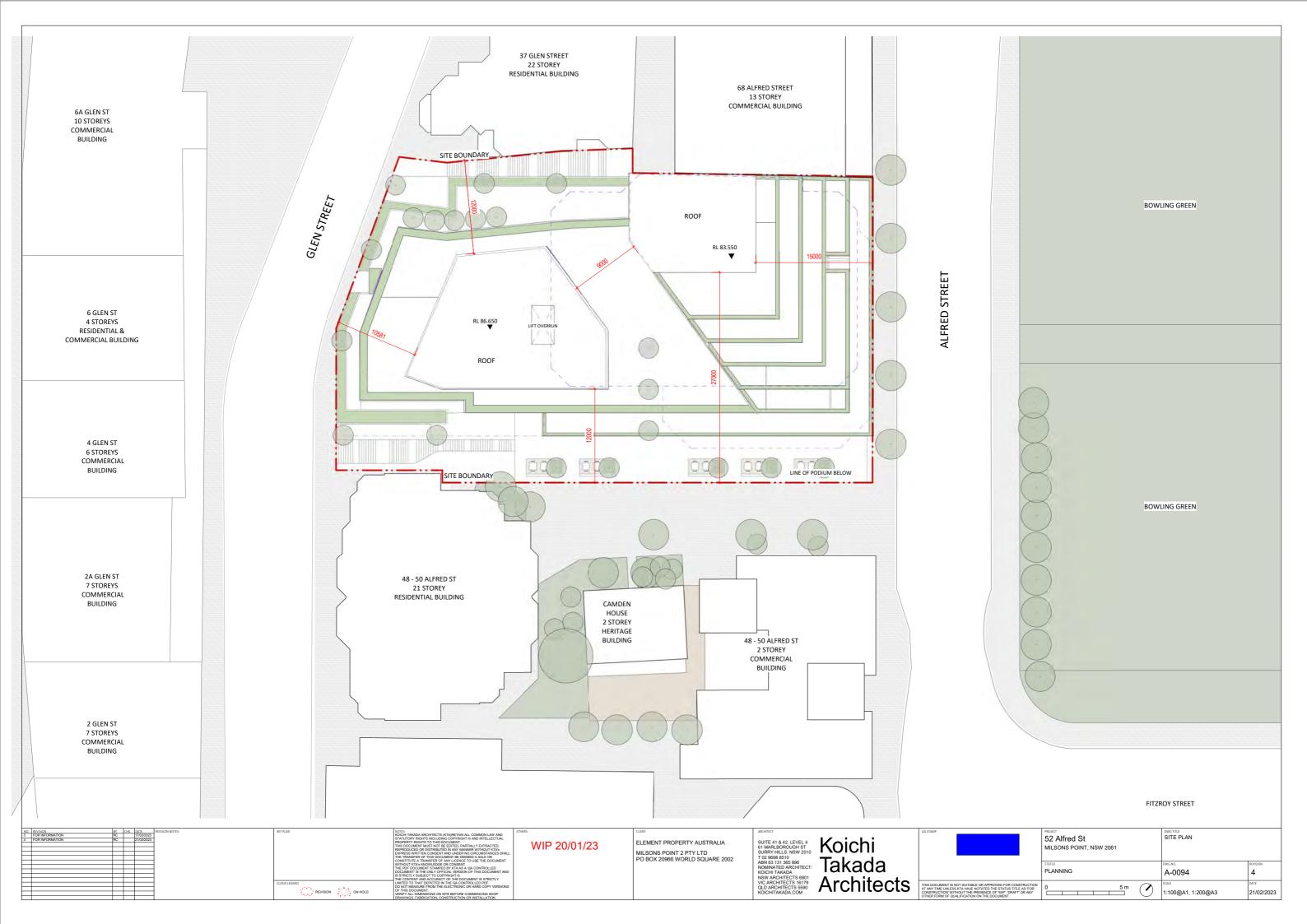


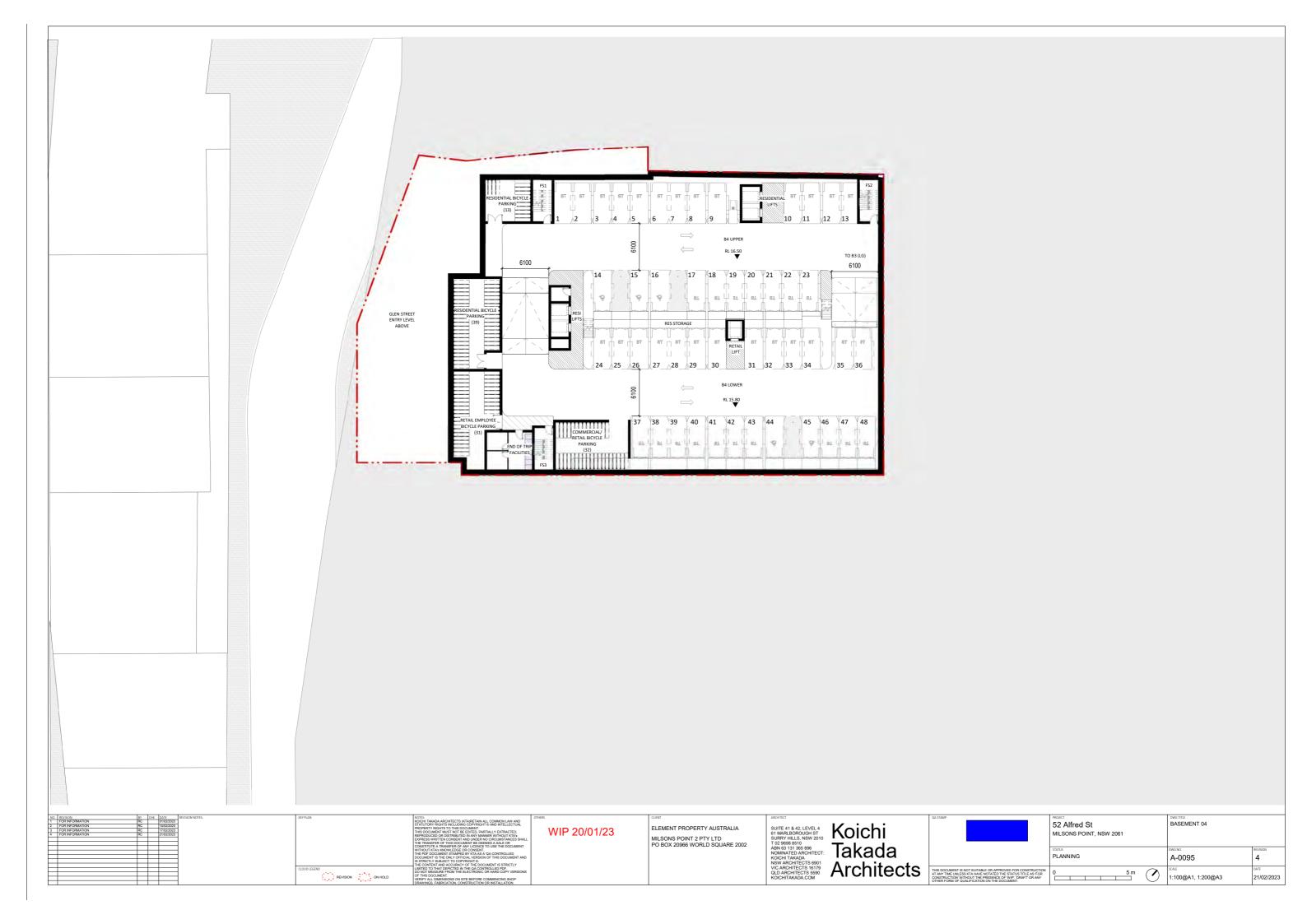
Reduction in overshadowing

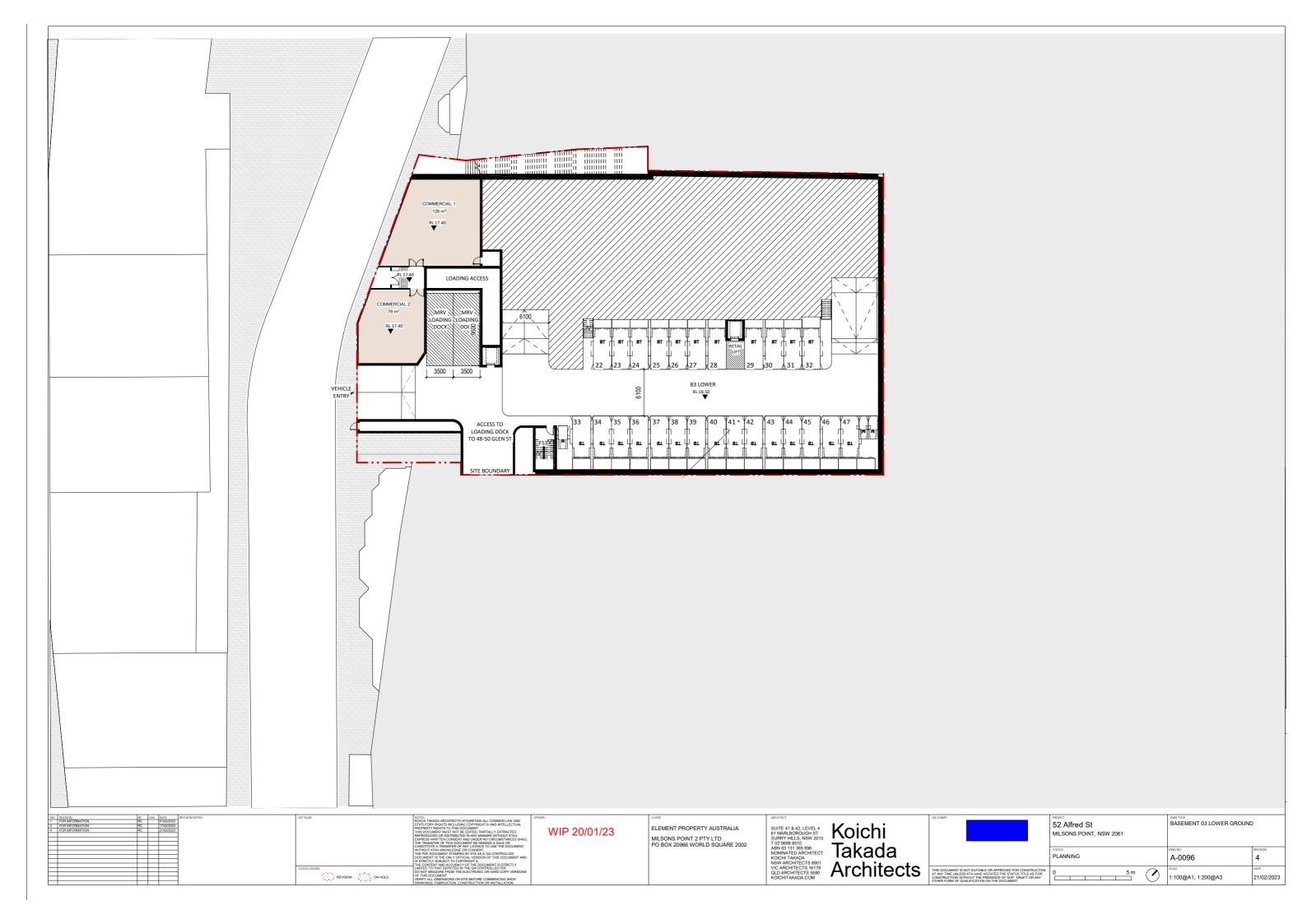
52 ALFRED STREET MILSONS POINT

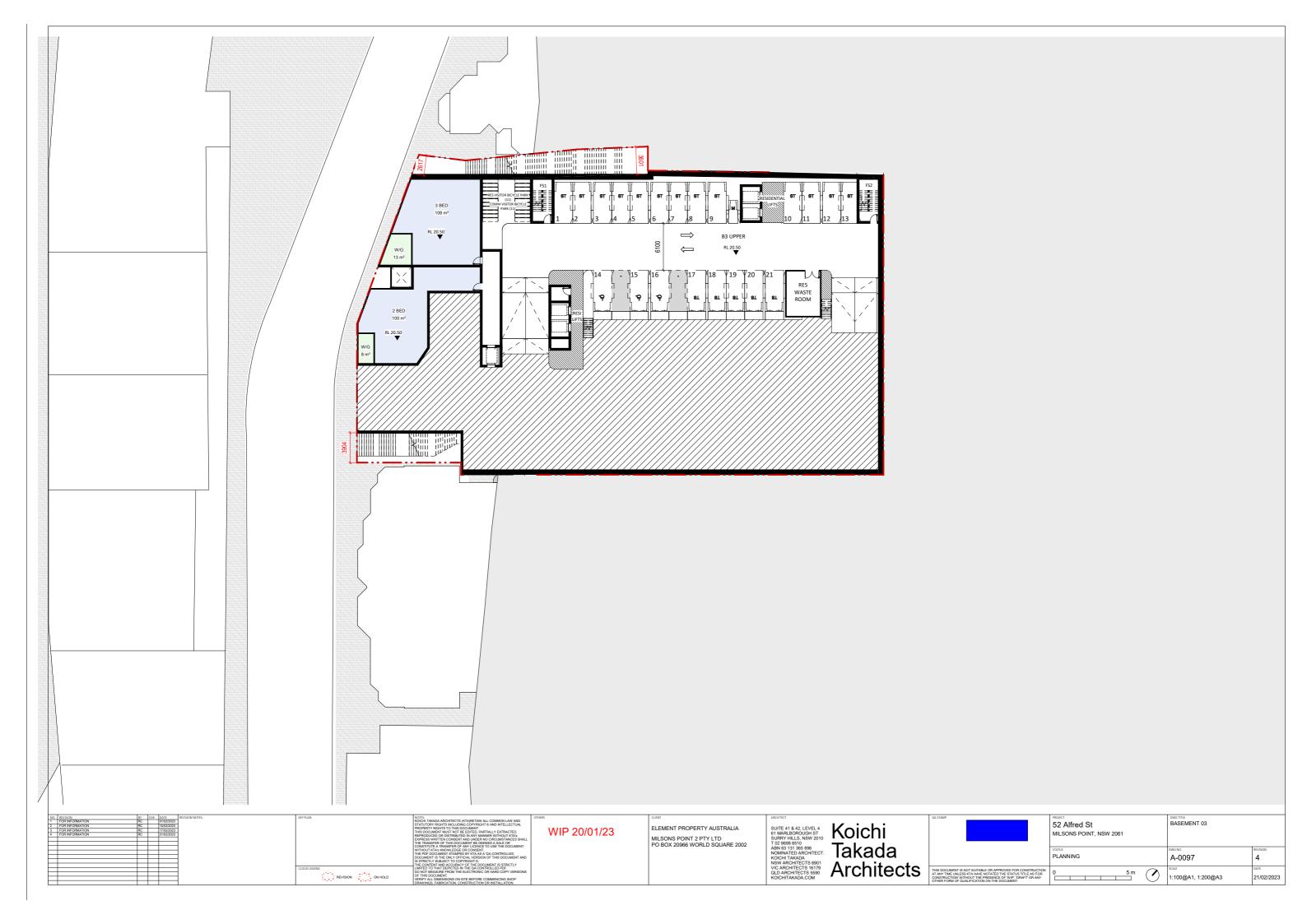


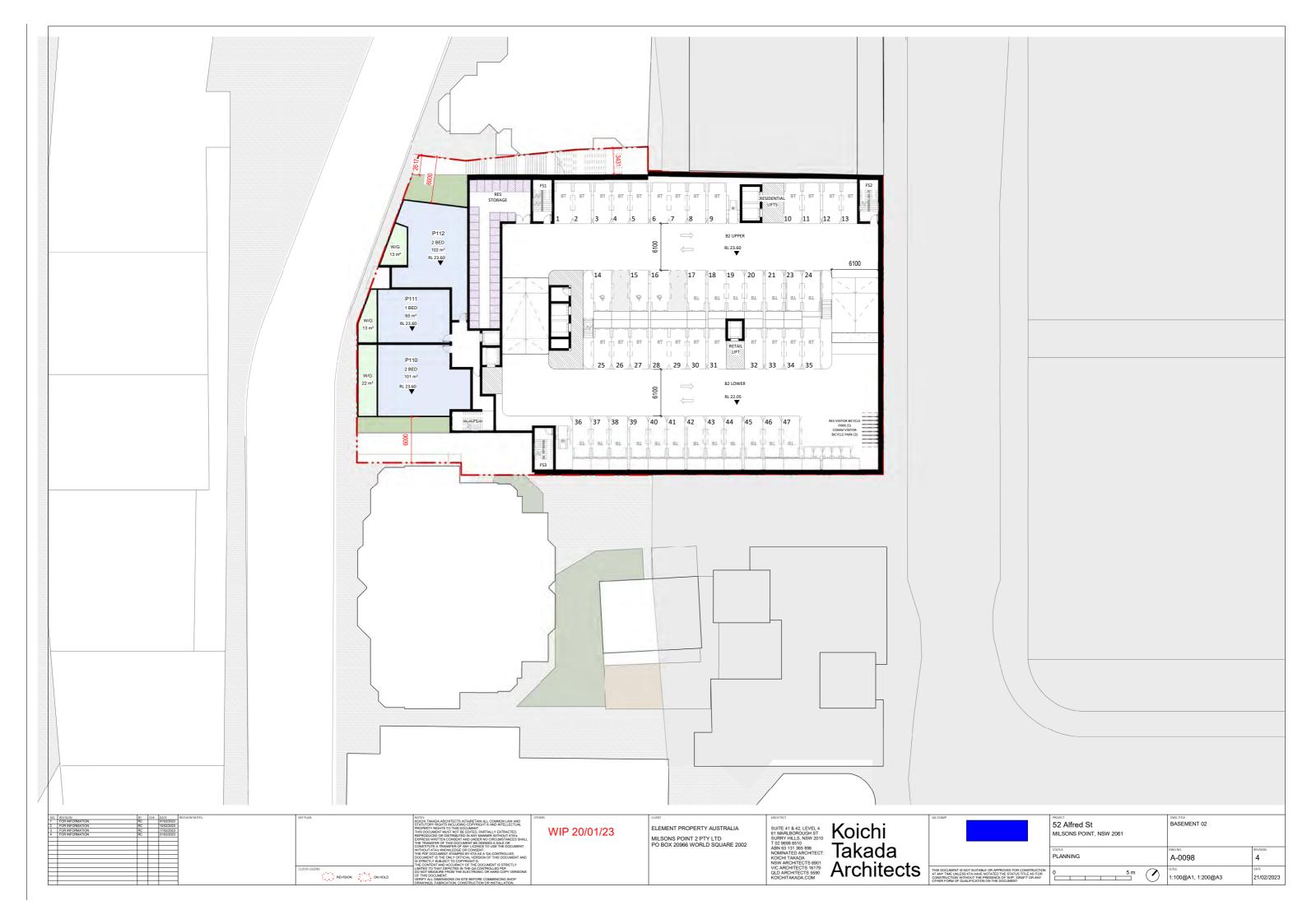
ARCHITECTURAL DRAWINGS

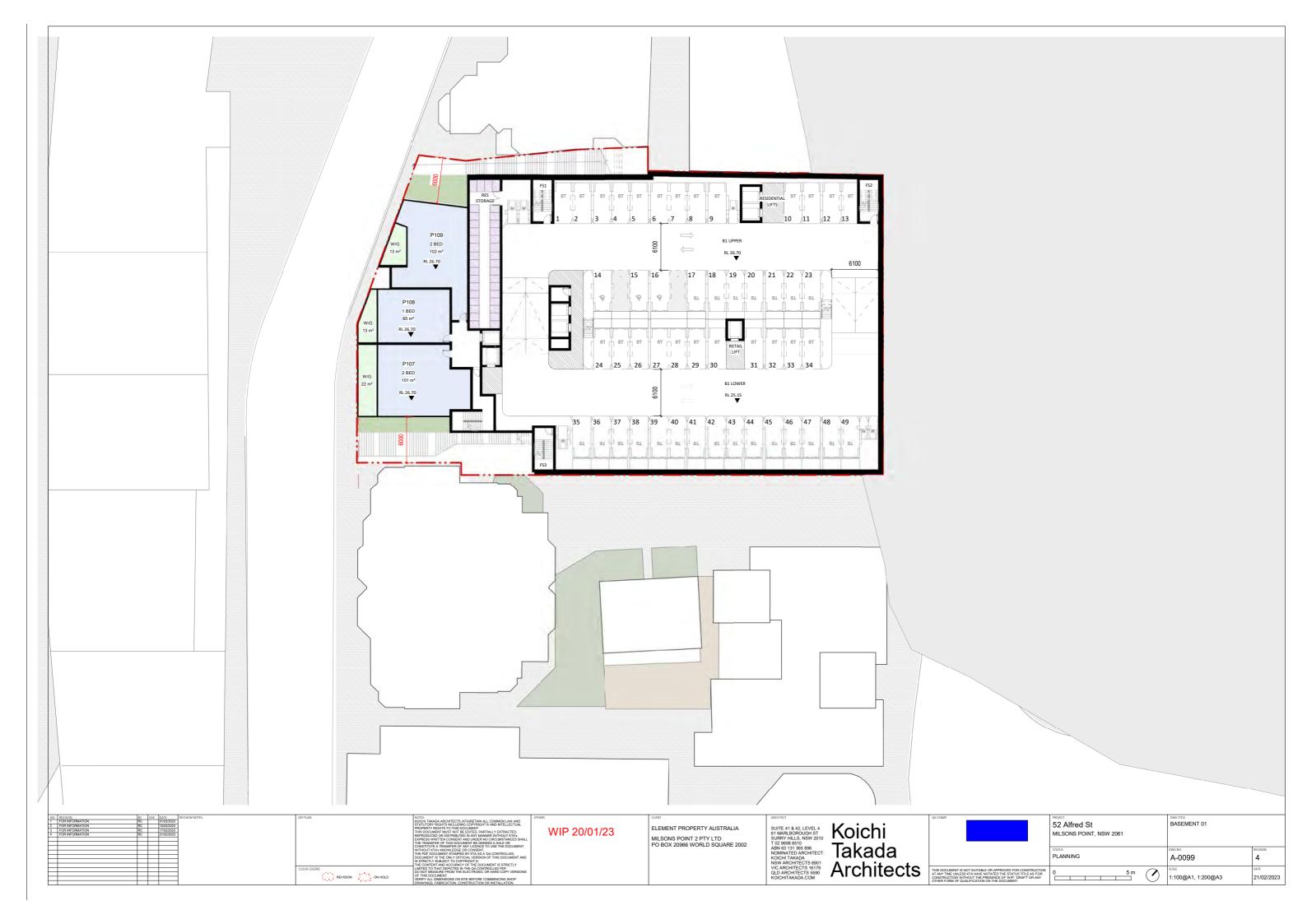


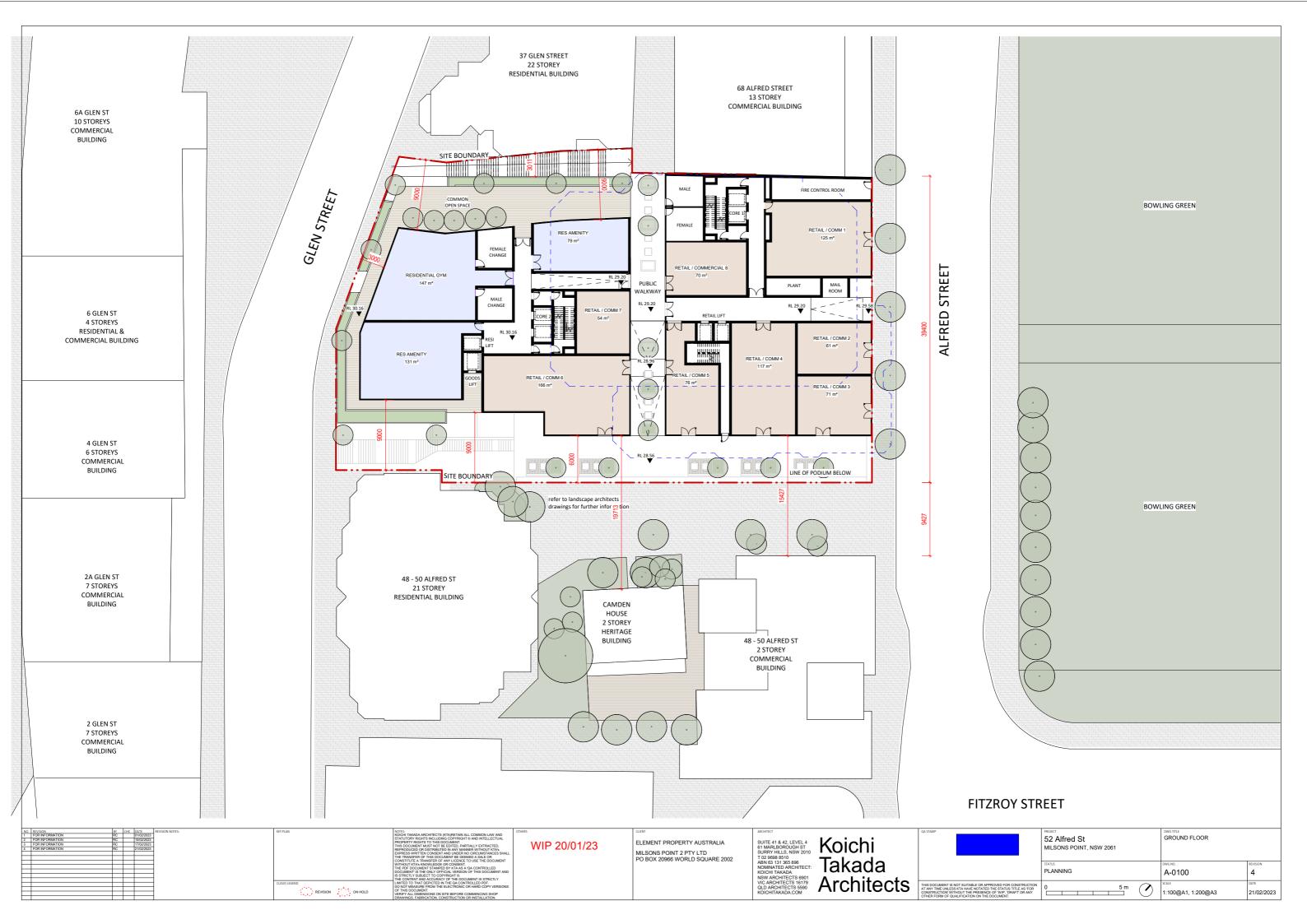


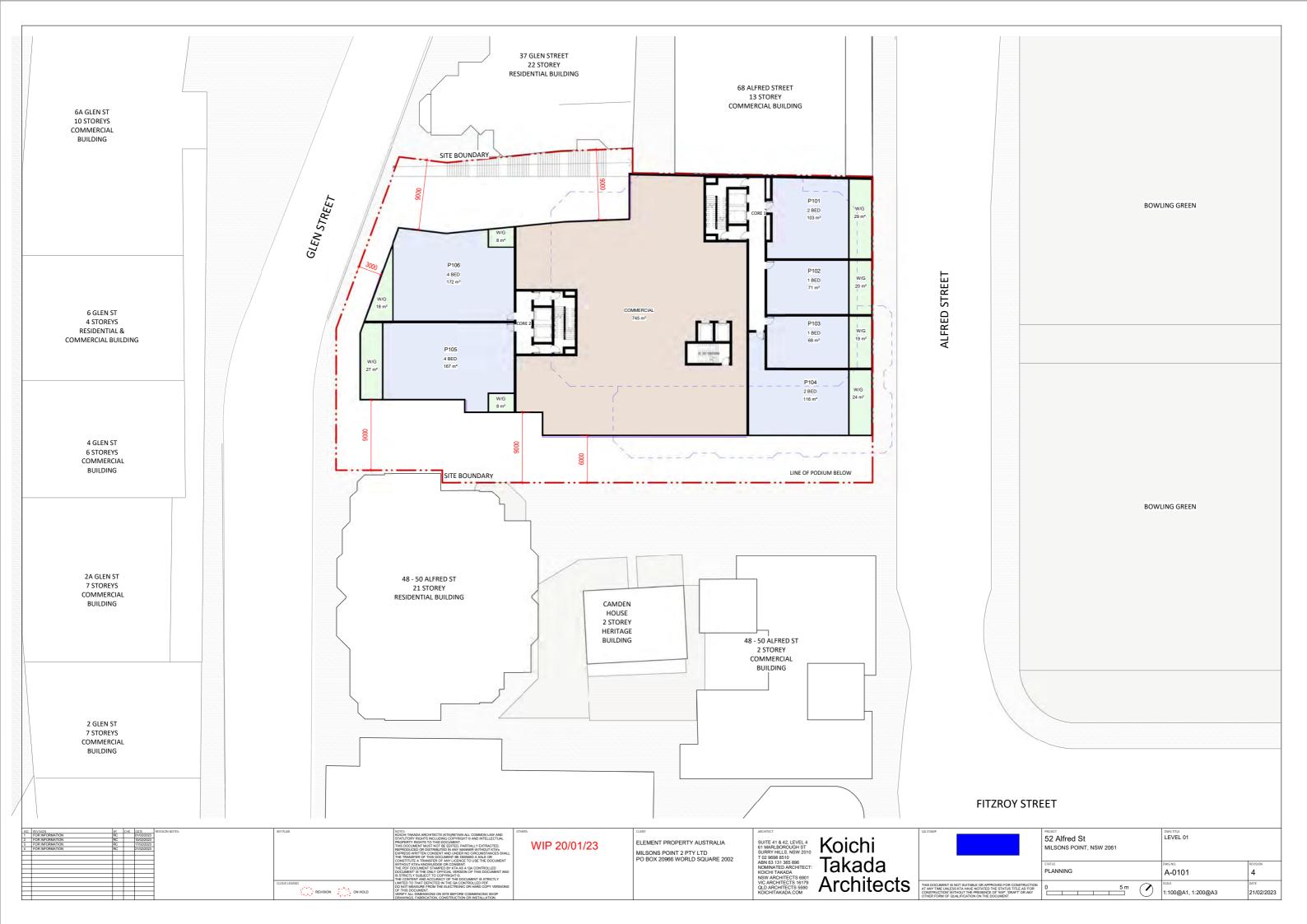


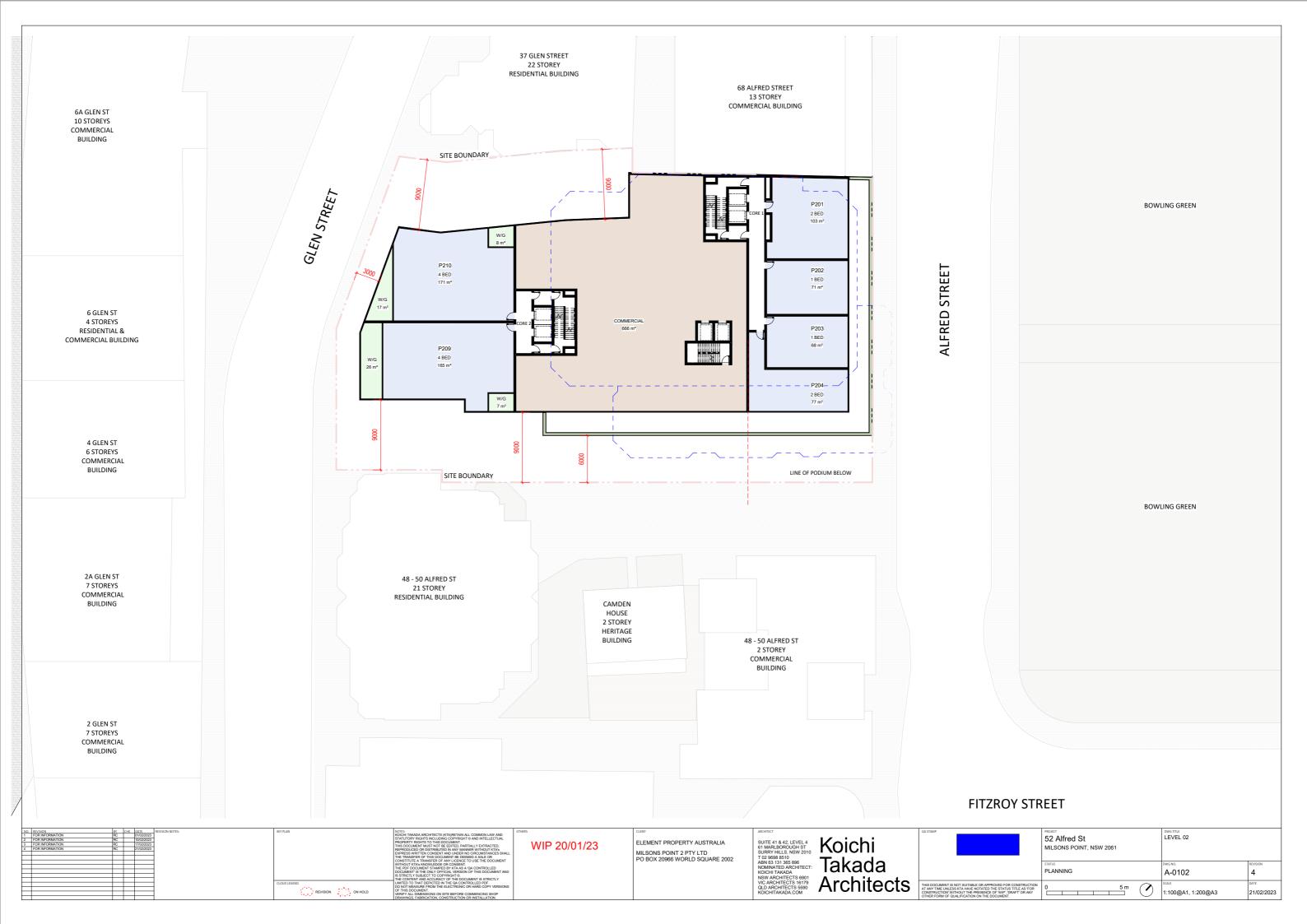


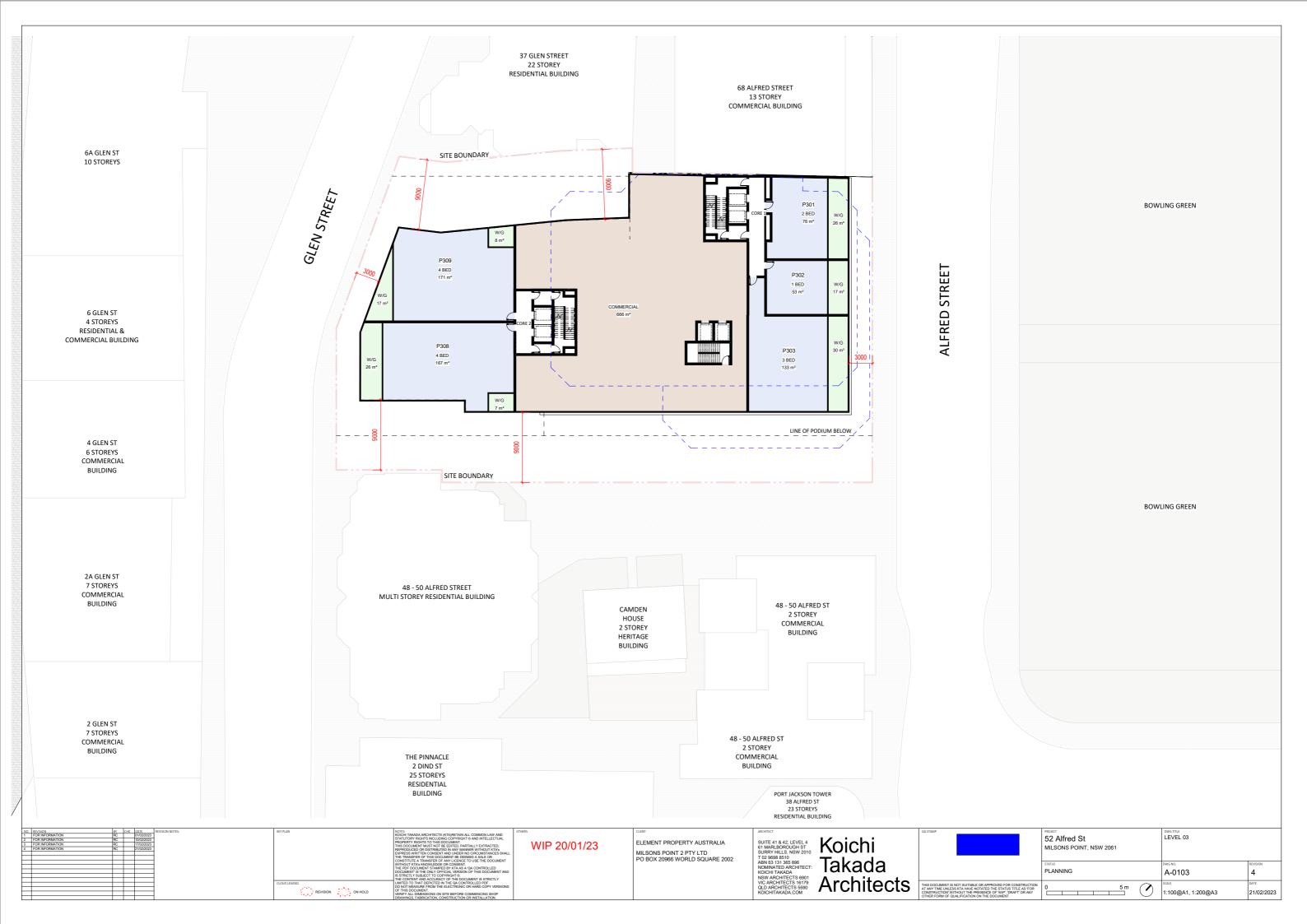


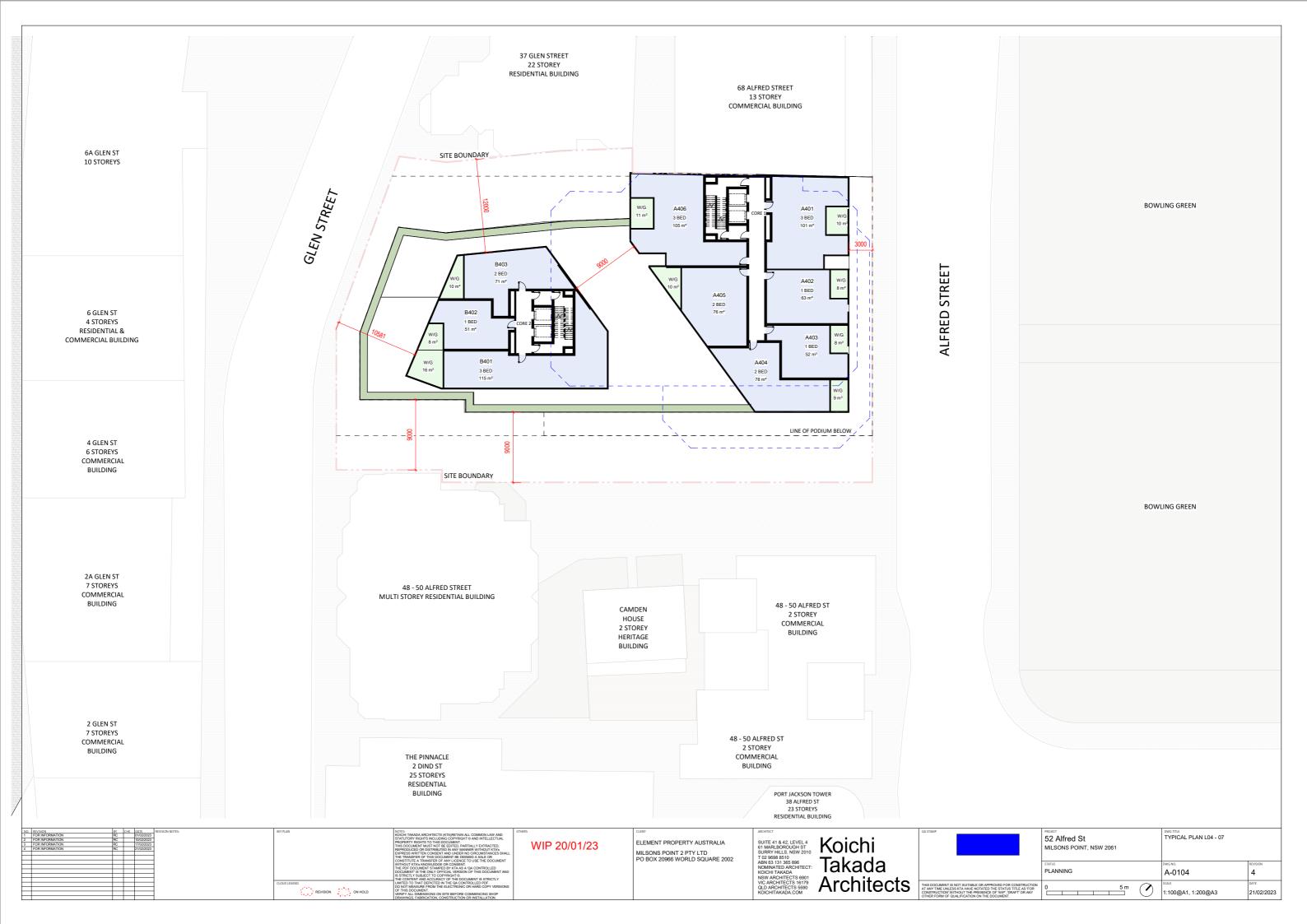


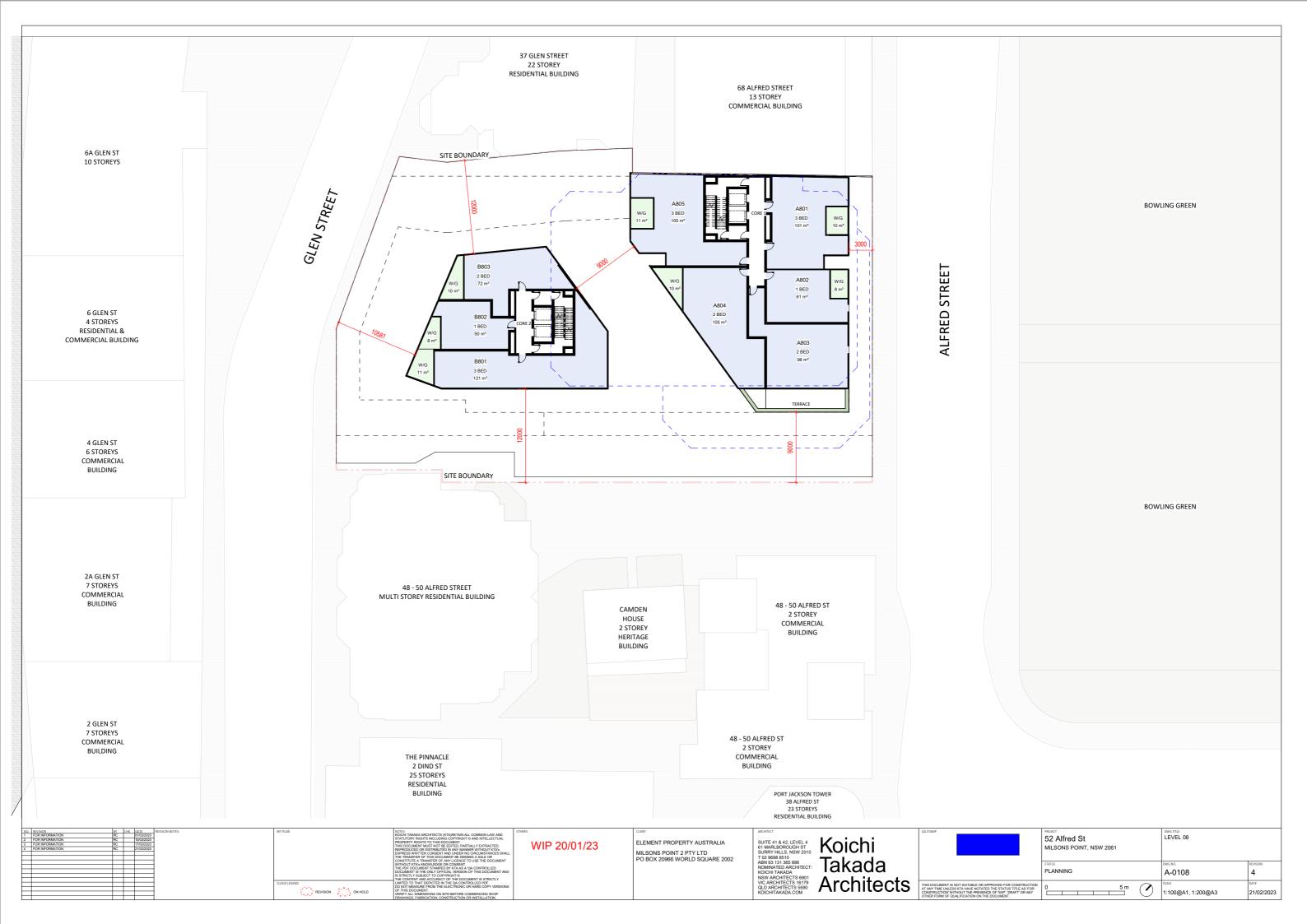








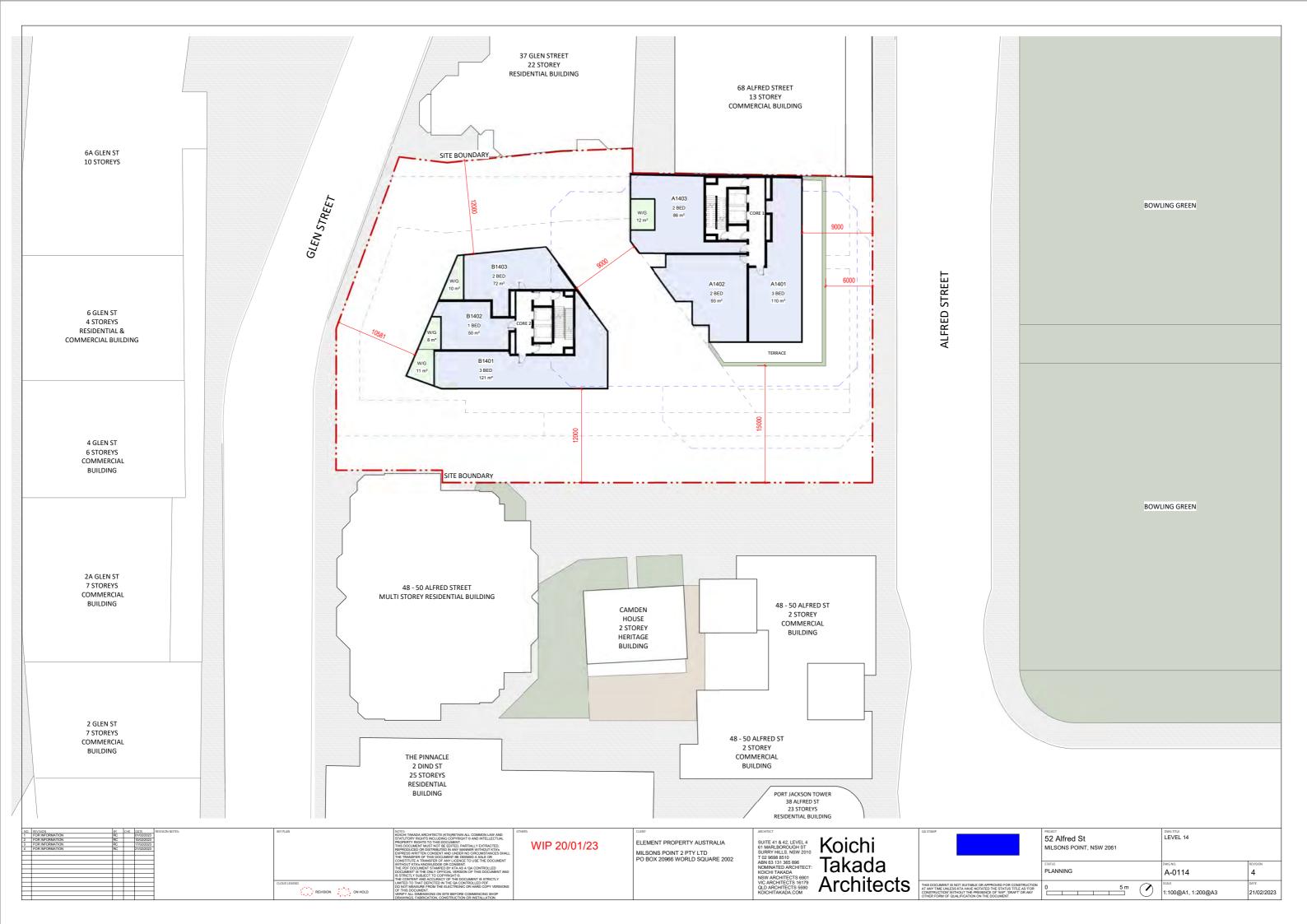


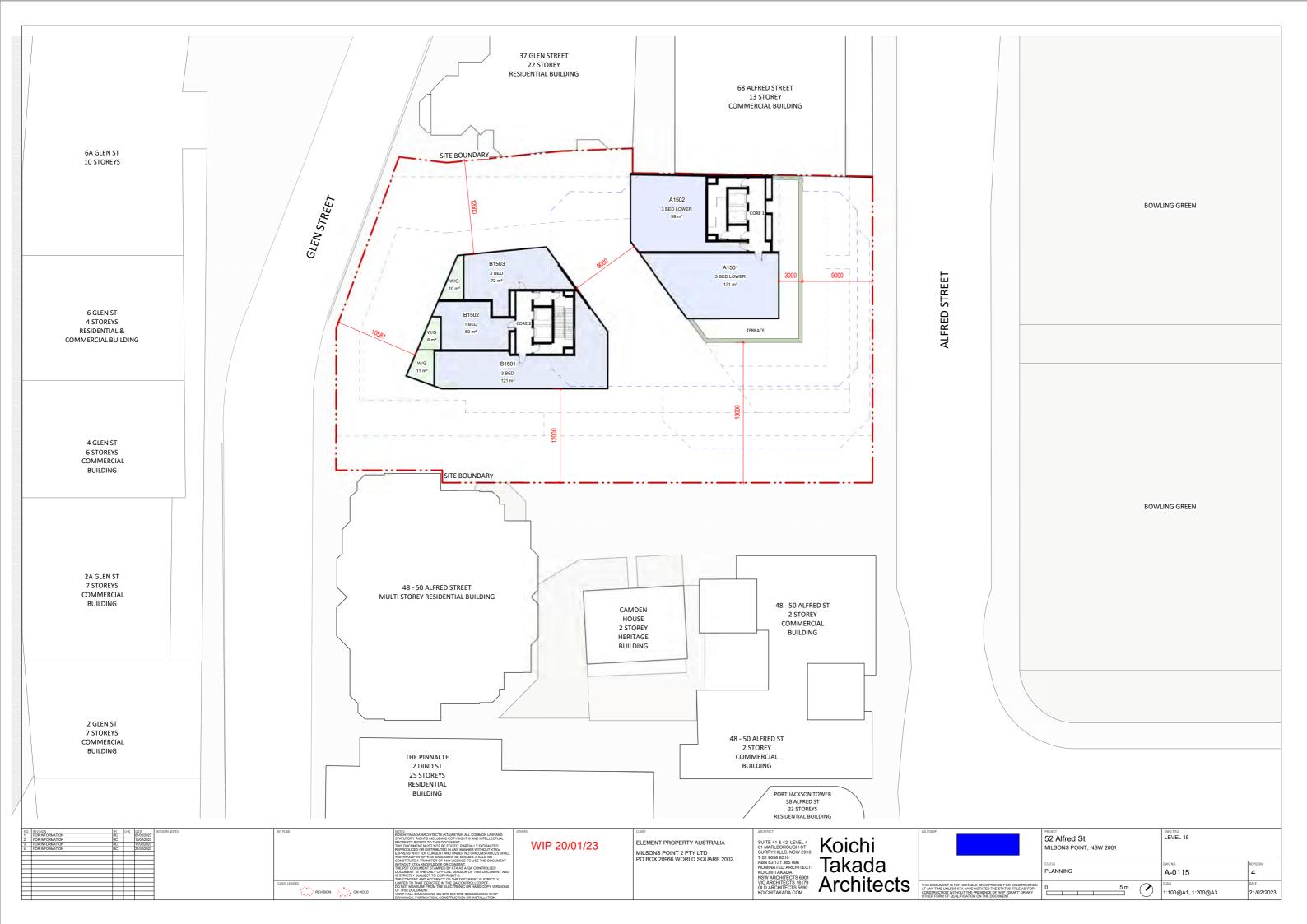


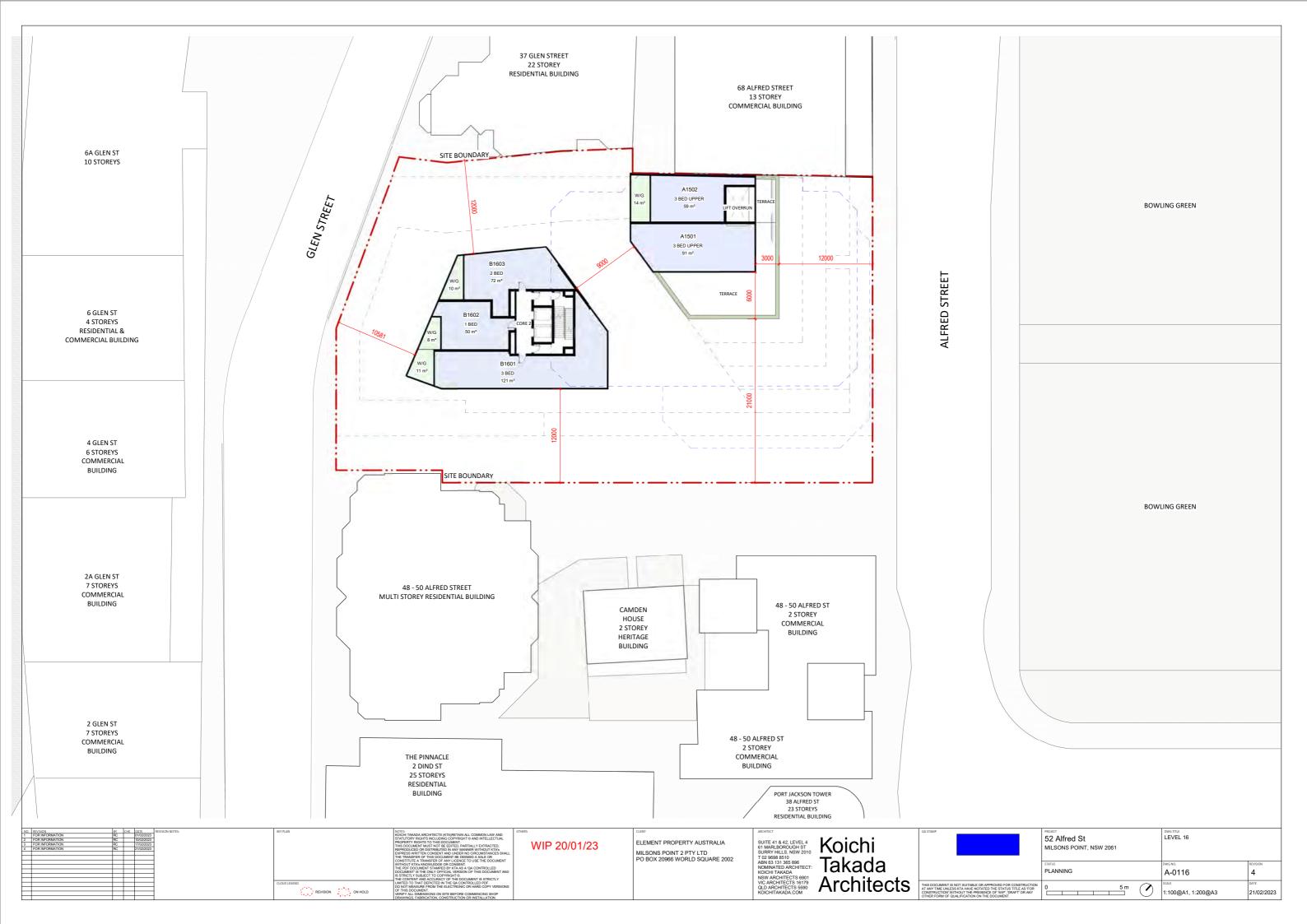


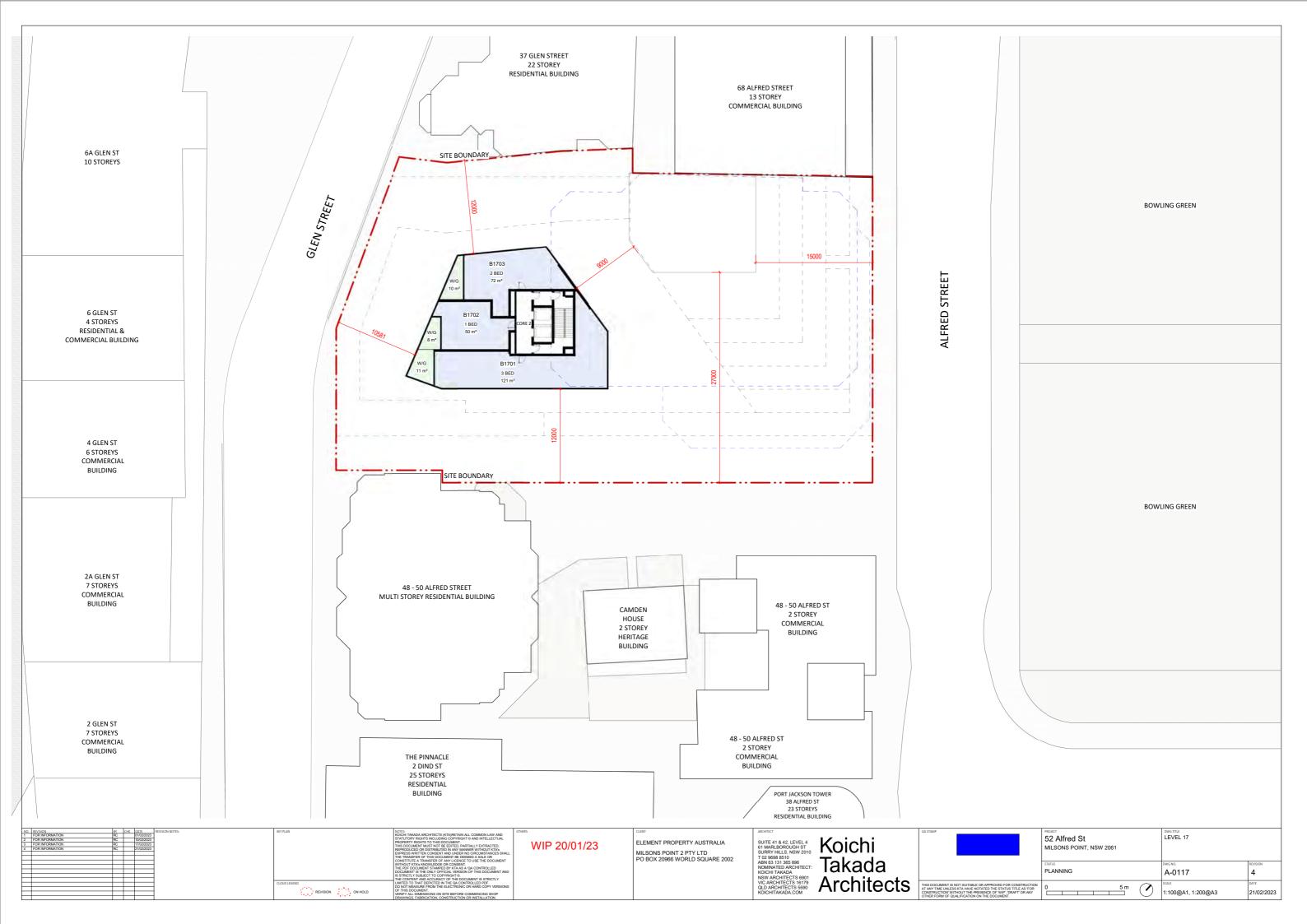


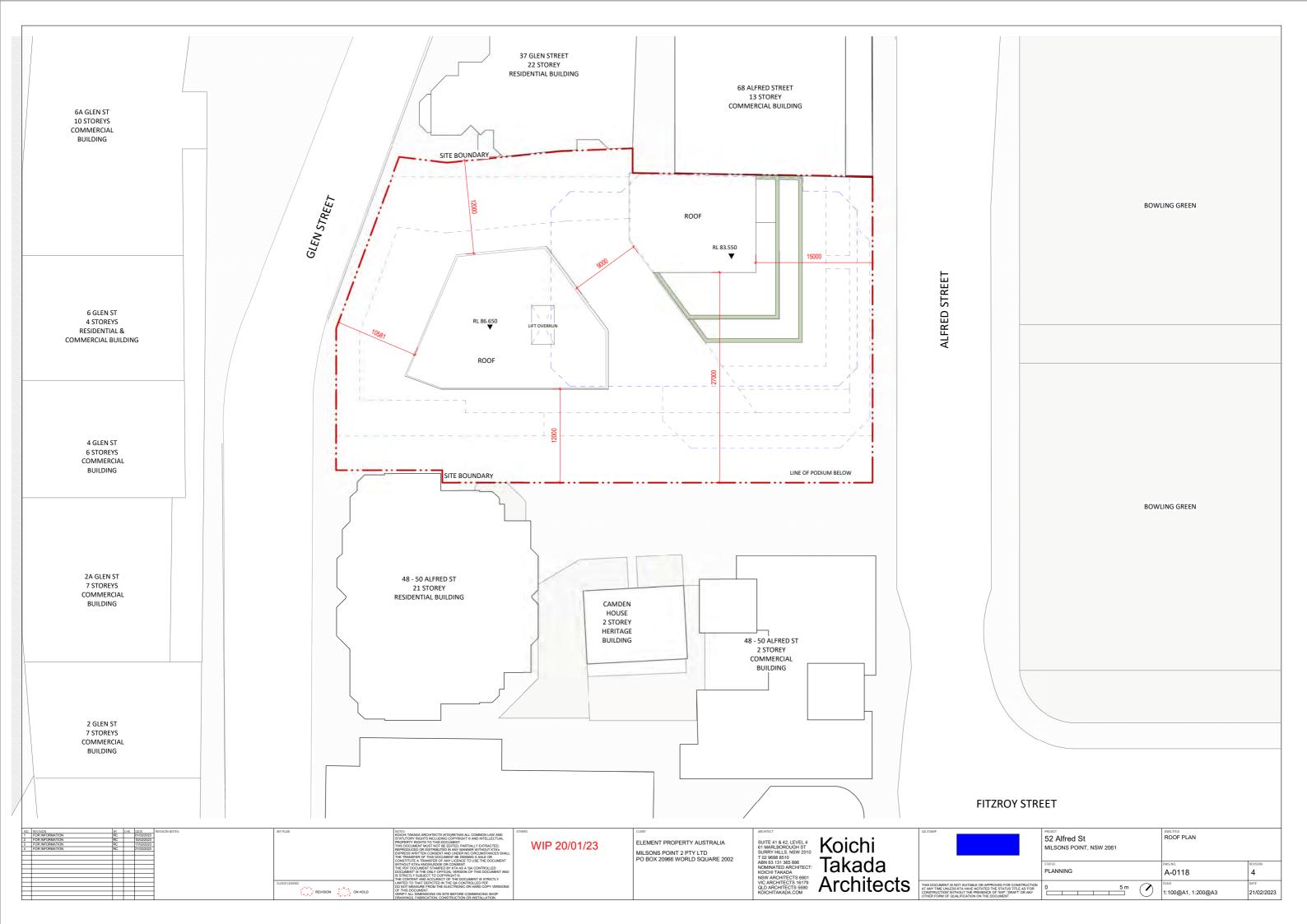


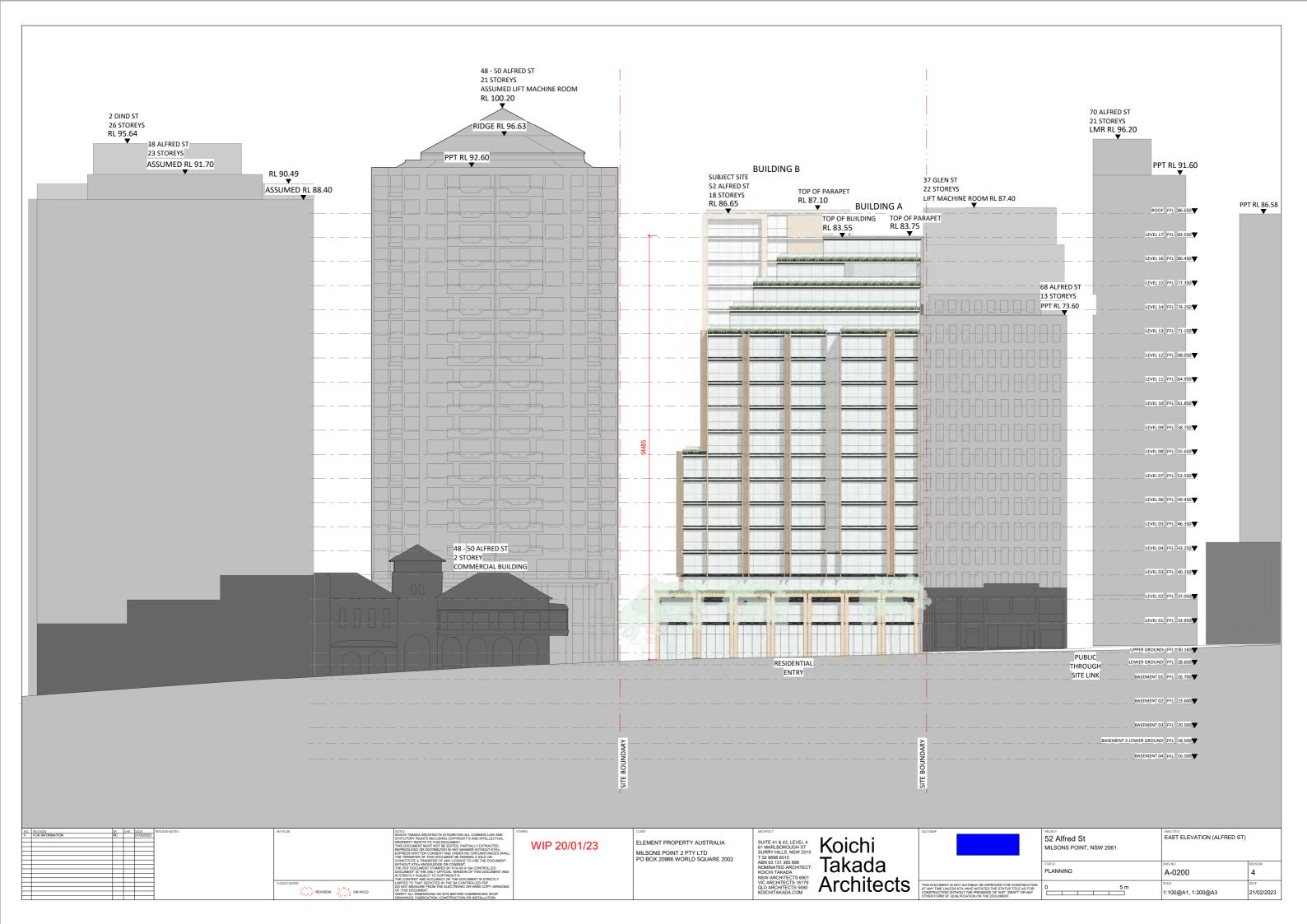


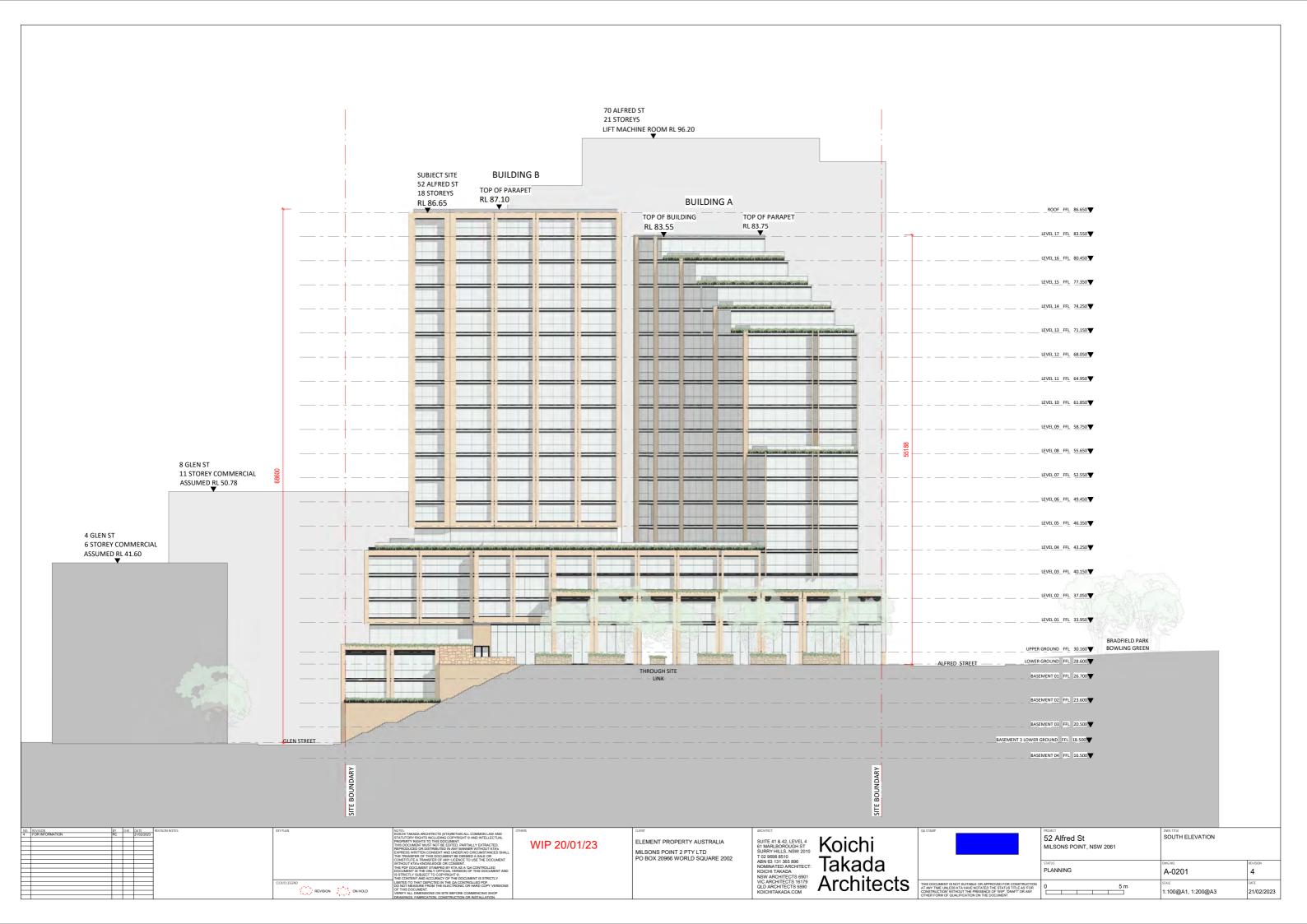


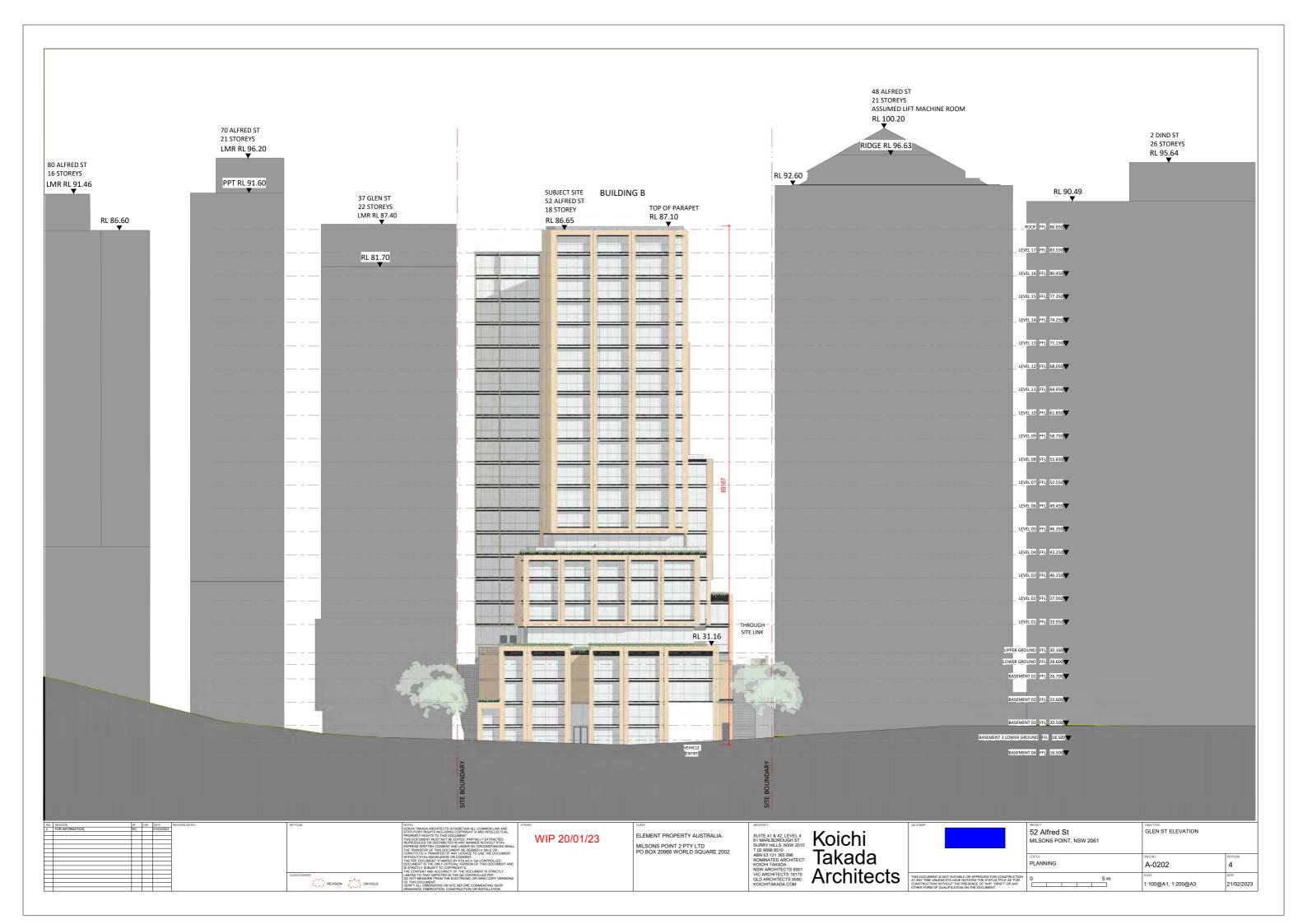


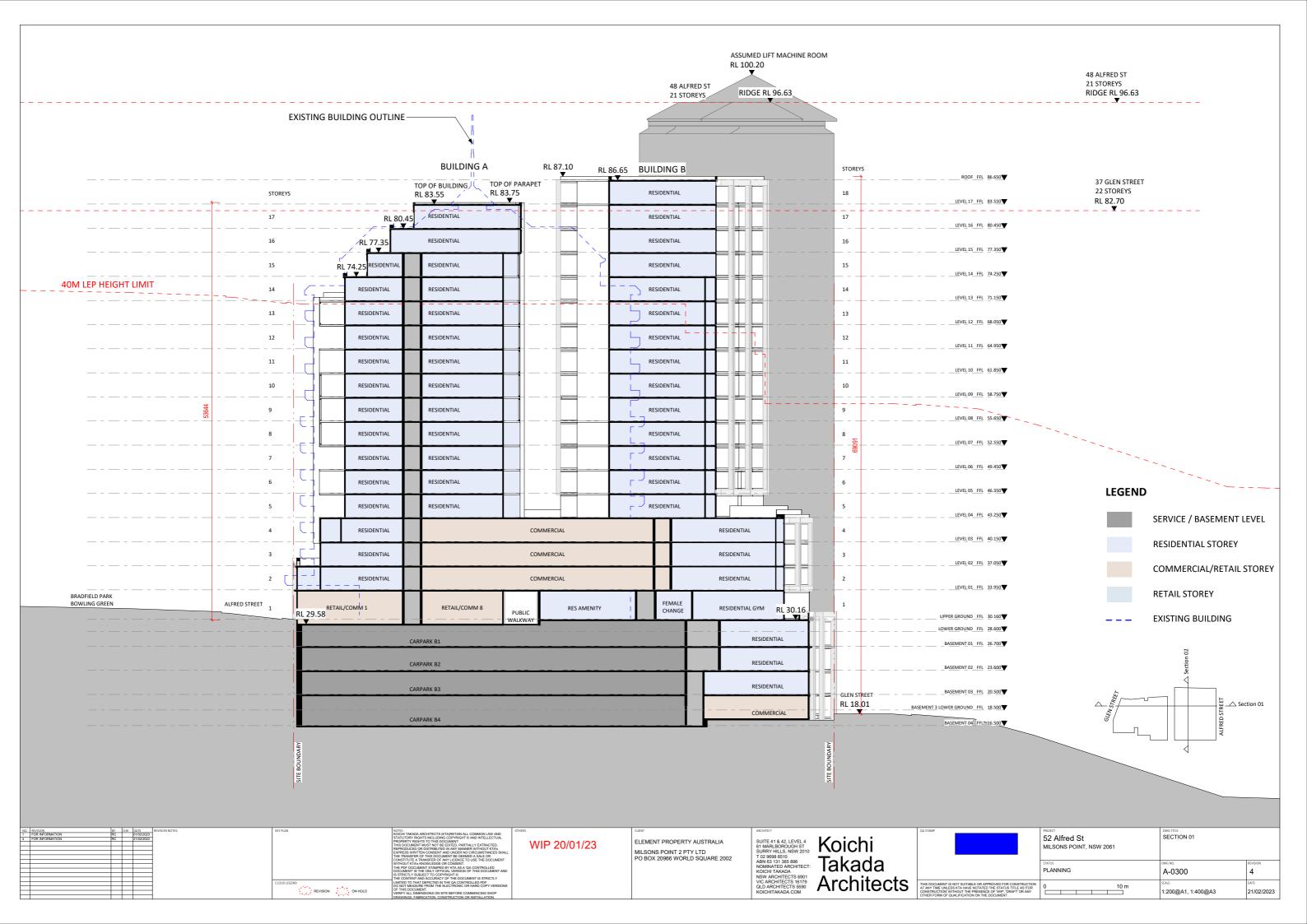


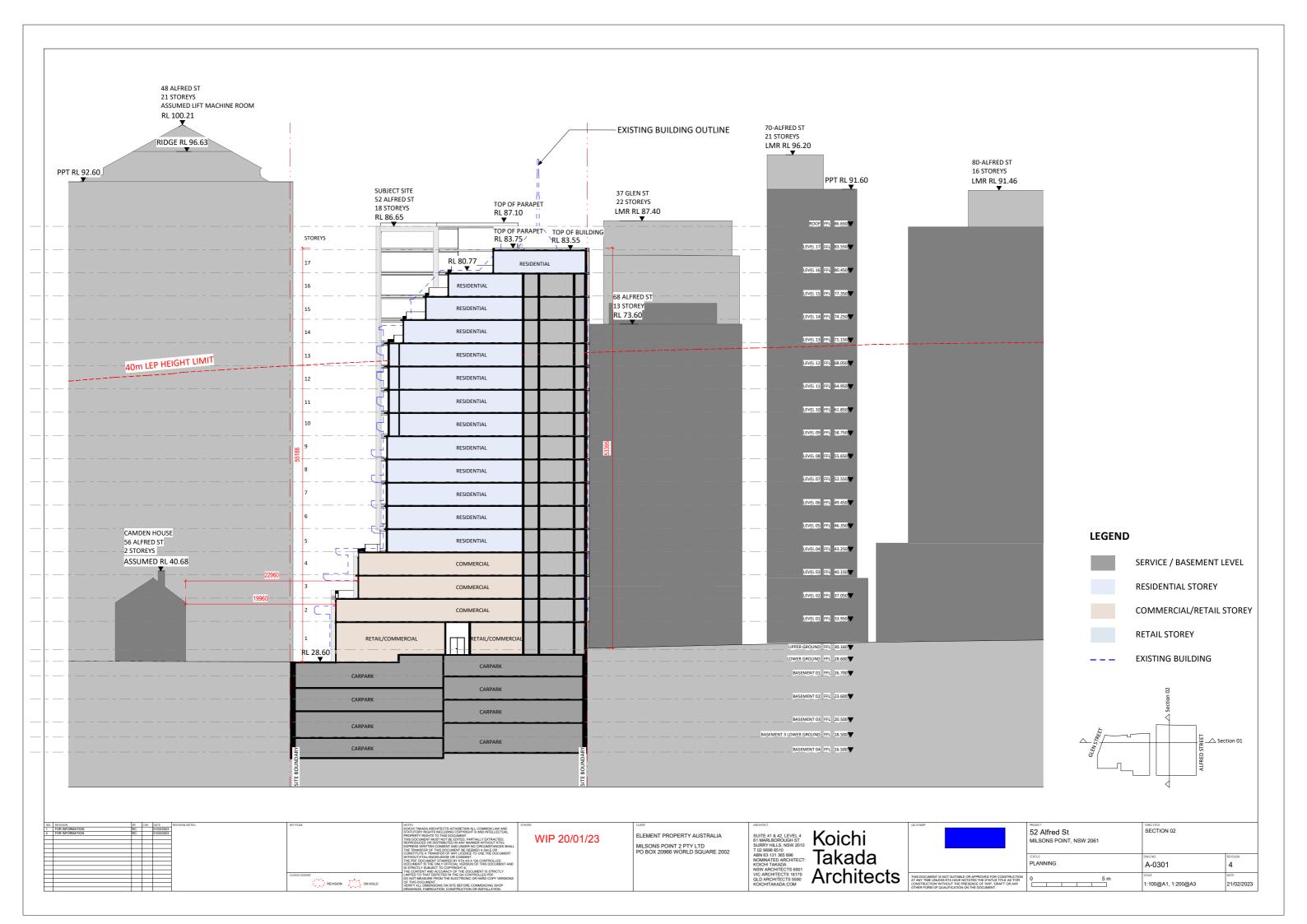


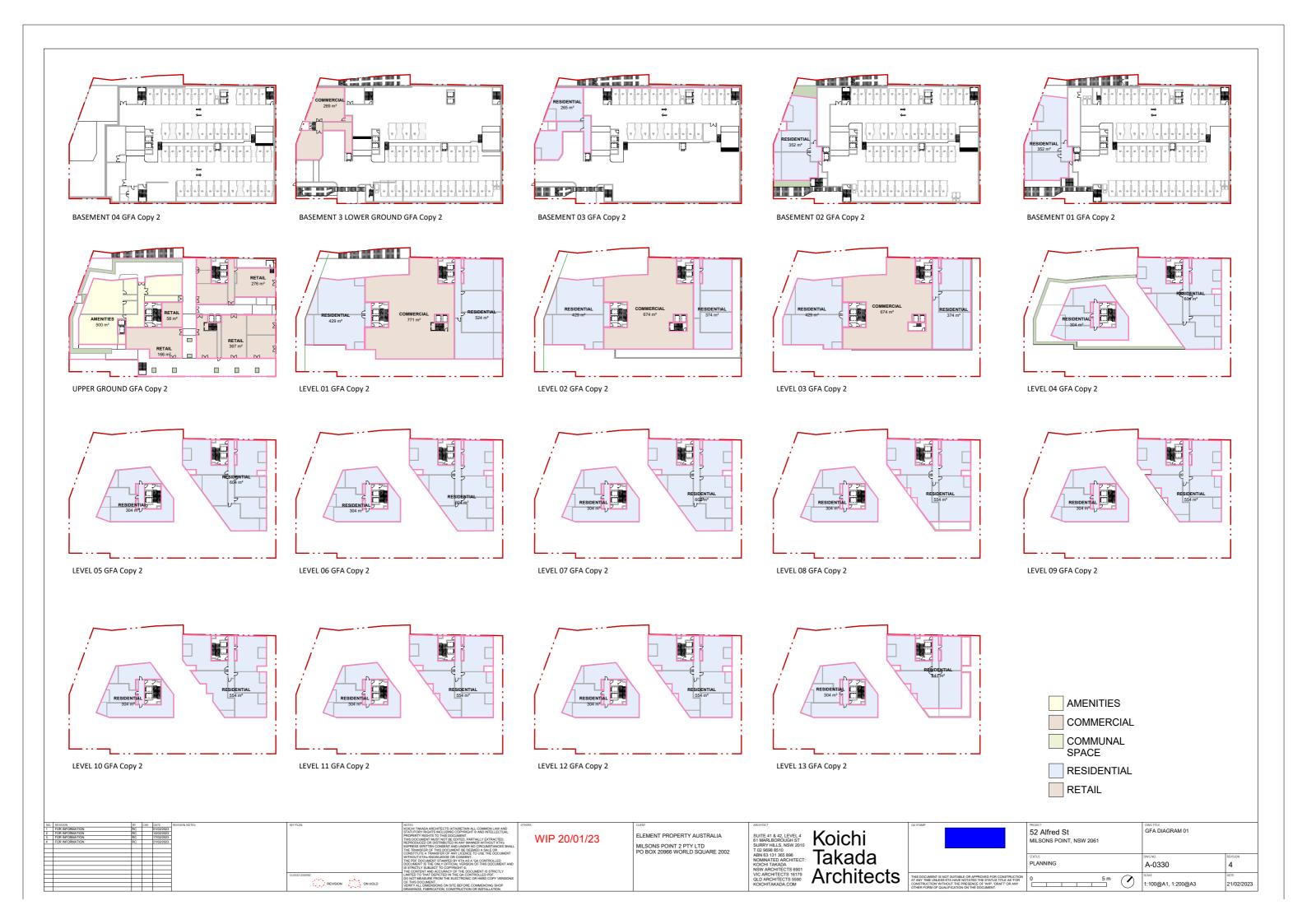


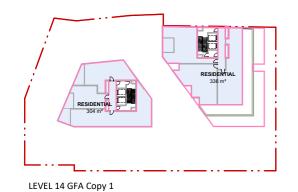


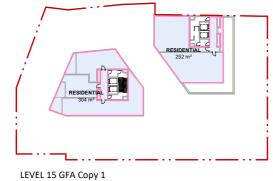


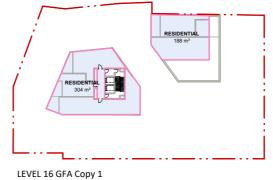


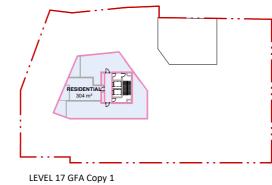








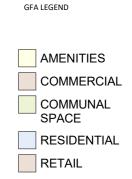




LEVEL 17 GFA Cop

Area Schedule (GFA)		
Level	Area	
AMENITIES		
UPPER GROUND	500 m ²	
	500 m ²	
COMMERCIAL		
BASEMENT 3 LOWER GROUND	269 m²	
LEVEL 01	771 m²	
LEVEL 02	674 m²	
LEVEL 03	674 m²	
	2388 m²	
RESIDENTIAL		
BASEMENT 03	265 m²	
BASEMENT 02	352 m²	
BASEMENT 01	352 m²	
LEVEL 01	524 m²	
LEVEL 01	429 m²	
LEVEL 02	429 m²	
LEVEL 02	374 m²	
LEVEL 03	429 m²	
LEVEL 03	374 m²	
LEVEL 04	304 m²	
LEVEL 04	604 m²	
LEVEL 05	304 m²	

Area Schedule (GFA)		
Level	Area	
LEVEL 05	604 m²	
LEVEL 05	304 m²	
LEVEL 06		
	604 m²	
LEVEL 07	304 m²	
LEVEL 07	604 m²	
LEVEL 08	304 m²	
LEVEL 08	554 m²	
LEVEL 09	304 m²	
LEVEL 09	554 m²	
LEVEL 10	304 m²	
LEVEL 10	554 m²	
LEVEL 11	304 m²	
LEVEL 11	554 m²	
LEVEL 12	304 m²	
LEVEL 12	554 m²	
LEVEL 13	304 m²	
LEVEL 13	441 m²	
LEVEL 14	304 m²	
LEVEL 14	336 m²	
LEVEL 15	304 m²	
LEVEL 15	252 m²	
LEVEL 16	304 m²	
LEVEL 16	188 m²	
LEVEL 17	304 m²	
	14188 m²	
RETAIL		
UPPER GROUND	367 m²	
UPPER GROUND	166 m²	
UPPER GROUND	58 m²	
UPPER GROUND	276 m²	
	867 m²	
Grand total	17944 m²	







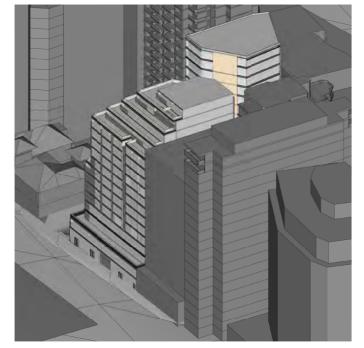
CROSS VENT COMPLIANCE

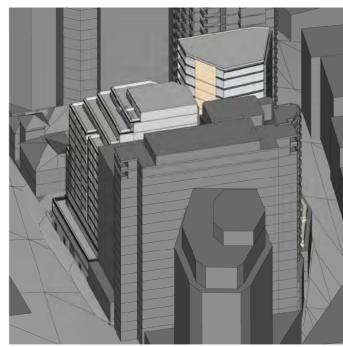
43 / 69 APARMENTS 62 %

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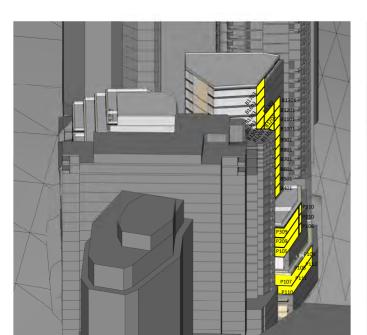




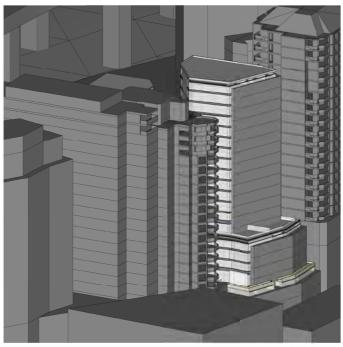




12PM Copy 1 11AM Copy 1







2PM Copy 1 3PM Copy 1 SOLAR COMPLIANCE

90 / 125 APARMENTS 72 %

NO.	REVISION	BY	CHK	DATE	Τ
2	FOR INFORMATION	RC		10/02/2023	1
3	FOR INFORMATION	RC		17/02/2023	1
4	FOR INFORMATION	RC		21/02/2023	1
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REVISION ON HOLD

WIP 20/01/23

ELEMENT PROPERTY AUSTRALIA MILSONS POINT 2 PTY LTD PO BOX 20966 WORLD SQUARE 2002 Koichi
Takada

Architects

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	52 Alfred St MILSONS POINT, NSW 2061	SUN EYE VIEW	
	STATUS PLANNING	DWG NO. A-0337	REVISION 4
ION IR	0 25 m	SCALE 4.500@A4 4.4000@A3	DATE

52 ALFRED STREET, MILSONS POINT

SEPP 65 CROSS VENTILATION

CALCULATION METHOD

Consistent with Steve King's Sepp 65 report which considers:

- All corner and 'through' apartments with openings in 2 principal facades as simply cross ventilated.
- The significant difference in level between the two street facades where a number of apartments within the lowest nine storeys as counted from the Alfred St facade, but which have increased exposure due to their greater height above Glen St are deemed cross ventilated in accordance with the ADG.

ACHIEVED NATURAL VENTILATION ADG COMPLIANCE

There are 43 out of a total 125 apartments that are cross-ventilated within the scheme.

35 units are simply cross ventilated and another 8 deemed ventilated in accrodance with the ADG Design Criterion by virtue of their height above Glen St.

Overall, a total of 43 of the 69 apartments (62%) within the lowest nine storeys are cross ventilated.

This complies with the ADG Design Criterion requirement of a minimum 60% cross ventilated apartments in the first nine storeys of a building.

CALCULATION OF CROSS VENTILATION COMPLIANCE

GLEN ST LEVELS	ALFRED ST LEVELS	CROSS VENT	TOTAL UNITS
BASEMENT 4		0	0
BASEMENT 3		0	0
BASEMENT 3 Upper		2	2
BASEMENT 2		3	3
BASEMENT 1		3	3
GROUND	GROUND	0	0
LEVEL 1	LEVEL 1	3	6
LEVEL 2	LEVEL 2	3	6
LEVEL 3	LEVEL 3	3	5
LEVEL 4	LEVEL 4	5	9
	LEVEL 5	5	9
	LEVEL 6	5	9
	LEVEL 7	5	9
	LEVEL 8	6	8
		43	69
		COMPLIANT	62%
		TOTAL APT	43/125
			34%

ADG OBJECTIVE 4B-3

Design criteria

- At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building.
 Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed
- Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line

52 ALFRED STREET MILSONS POINT PLANNING PROPOSAL 96

52 ALFRED STREET, MILSONS POINT

SEPP 65 SOLAR ACCESS

SOLAR ACCESS SUMMARY

Thorough analysis was undertaken through the use of a full 3D digital model in which adverse overshadowing from buildings adjacent to and remote from the site has been taken account of.

Out of 125 total apartments, 90 apartments (72%) achieves more than 2 hours of direct sunlight between 9am - 3pm (mid winter 21st June).

This complies with the ADG design criterion which requires at least 70% of apartments in a building to receive a minimum of 2 hours direct sunlight between 9am - 3pm at mid winter.

Considering that the subject site is disadvantaged by the adverse overshadowing from buildings adjacent to and remote from the site, the achievement of 70% solar access is a remarkably high level of compliance.

52 ALFRED ST SOLAR ACCESS SUMMARY TABLE

9AM - 3PM		
TOTAL UNITS	125	
70%	87.5	
Units > 2hrs	90	
Units that receive		
no direct sunlight	20	
	16%	
Proposed	72%	

APARTMENT DESIGN GUIDE

Objective 4A-1

To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space

Design criteria

- Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas
- In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid winter
- A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter

Design guidance

The design maximises north aspect and the number of single aspect south facing apartments is minimised

Single aspect, single storey apartments should have a northerly or easterly aspect

Living areas are best located to the north and service areas to the south and west of apartments

To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used:

- · dual aspect apartments
- · shallow apartment layouts
- · two storey and mezzanine level apartments
- · bay windows

To maximise the benefit to residents of direct sunlight within living rooms and private open spaces, a minimum of 1m² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes

Achieving the design criteria may not be possible on some sites. This includes:

- where greater residential amenity can be achieved along a busy road or rail line by orientating the living rooms away from the noise source
- · on south facing sloping sites
- where significant views are oriented away from the desired aspect for direct sunlight

Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective

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