# TELSTRA EXCHANGE SITE ST LEONARDS 524-542 Pacific Highway

**PLANNING PROPOSAL** 

PREPARED FOR GROCON 2018.12.06







**TELSTRA EXCHANGE SITE** 

**524-542 PACIFIC HIGHWAY, ST LEONARDS** 

**CONCEPT DESIGN REPORT** 

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# PROJECT INTRODUCTION PTW

### ST LEONARDS SITE CONTEXT



### **DEVELOPMENT SUMMARY**

The report summarises the design investigations linked to the future development of St Leonards CBD and describes a design concept for a development at 524-542 Pacific Highway, herein known as "the site".

Located along Pacific Highway to the south east of the St Leonards Forum, the site is an amalgamation of 8 allotments. The eastern portion of the site is occupied by the operating Telstra Telephone Exchange, whereas the western side at the corner of Christie Street and Pacific Highway is occupied by fragmented low scale retail and commercial buildings.

### The report investigates:

- The future role of St Leonards in the wider context of
- The existing and future connectivity and uses of the site's surrounds
- Issues in association with the transformation of the St Leonards precinct
- Constraints of the site
- Opportunities to complete the future urban image

### The report describes:

- A response to the challenging site constraints
- A contribution to the future urban context
- An architectural concept seeking design excellence
- A built form with superb amenity

### The report proposes a development with:

- A commercial FSR of 4.1:1
- A total FSR of 23.2:1
- A maximum height of 195m
- 57 storeys
- 366 apartments

This report has been prepared for Grocon by PTW Architects. It is to be read in conjunction with the accompanying Planning Proposal document prepared by Ethos Urban.

# **PROJECT INTRODUCTION**

### A CASE FOR CHANGE



A NEW MIXED-USE CENTRE. ST LEONARDS

### A CASE FOR CHANGE

Since 2014, rezoning approvals on the southern side of Pacific Highway allowing for mixed-use development of significant height and density in the immediate vicinity of the station, have permanently transformed the character and scale of development in the St Leonards precinct. Applications of increased scale on the northern side of the Highway are either already underway or soon to be submitted.

The St Leonards Centre is now destined to become one of Sydney's few genuine mixed-use precincts, with substantial offerings of Commercial and Residential coexisting in the immediate vicinity of public open space, community services, high-amenity retail and key public transport infrastructure.

Located just 50 m from St Leonards Station and 350 m from the new Crows Nest Metro Station, the Telstra Exchange site is one of few significant land holdings in Sydney to be within 400 m of two heavy rail stations. The new Metro link will substantially improve the area's already first rate access to public transport, providing a new link to key employment hubs of Macquarie Park, Barangaroo and Sydney CBD, and further reducing reliance on passenger vehicles in the area.

This proposal presents a unique opportunity to revitalise a significant 'gap' in the built form at a prominent gateway location and a keystone activation point for a precinct now characterised by world-class urban design. The potential for improved amenity and enhanced connectivity to surrounding development, public transport and civic spaces make the site an ideal location to create highly functional mixed-use development whilst at the same time delivering substantial public benefit for the community and the LGA.

The building's strongly articulated vertical fluting and raking geometry in elevation will create a striking sculptural form further emphasising this important corner and provide a unique urban form to fill this gap in this location. The envisioned public domain space at ground level is modelled on integrated commercial offerings with active frontage in other locations. The intention is to align with St Leonards' strategic imperative to retain its commercial core. In addition to this, the site has the opportunity to provide activation to Christie Street and Christie Lane, as well as achieving better continuity in the built form in the Centre.

# 1. Context



# CONTEXT PTW

### **REGIONAL CONTEXT**

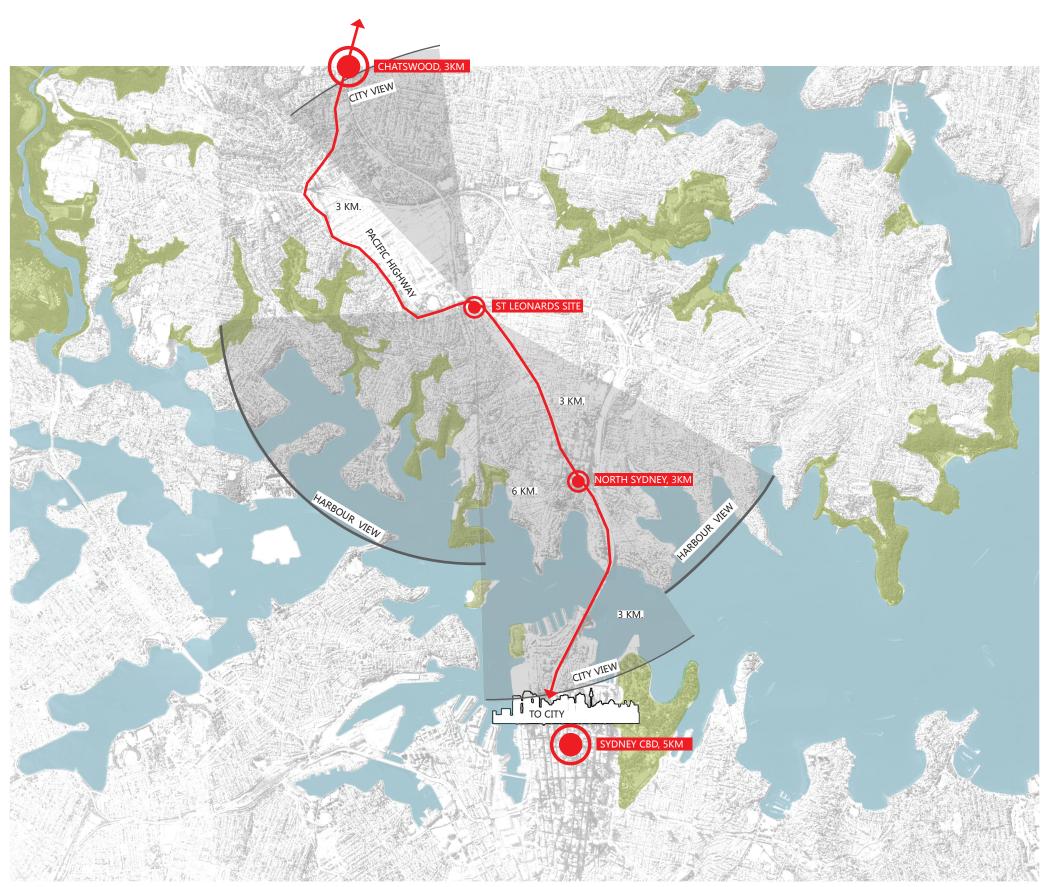
### **REGIONAL CONTEXT**

The ridge of the north shore of Sydney extends from Milsons Point through to Hornsby. The Pacific Highway generally follows this ridge along its length with the journey along the highway defined by the urban centres of North Sydney, St Leonards, Chatswood and Hornsby which each of has undergone significant growth in recent

The journey by road along the highway, the sense of passing through these centres is improved when the composition of each centre; the sense of entry, focus and urban structure is clear. St Leonards currently lacks such structure however several major proposed developments will help compose the town centre building groups.

The Telstra Exchange site sits within St Leonards Specialised Centre and is near key locations within the St Leonards Centre, namely:

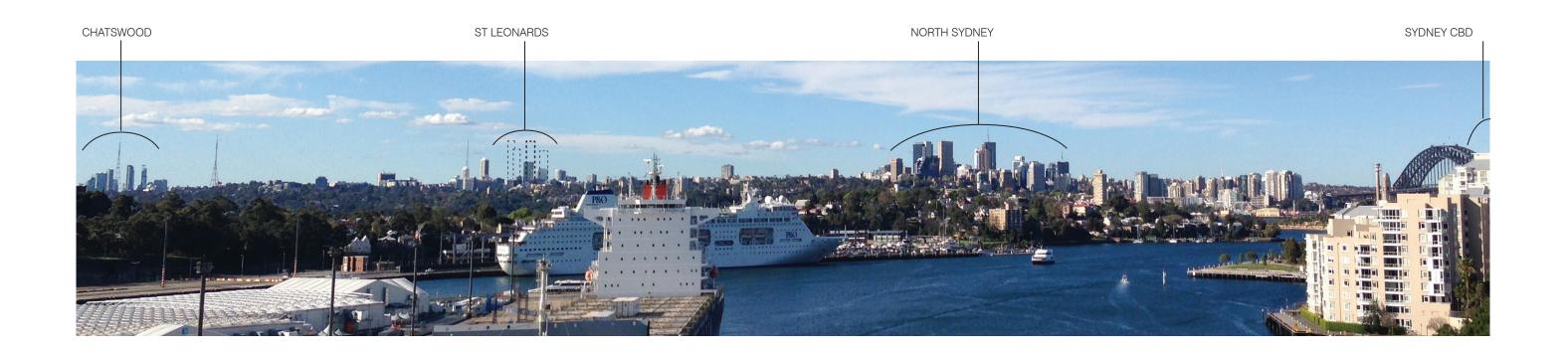
- The St Leonards Forum retail
- Royal North Shore Hospital
- Willoughby Road / Crows Nest
- North Sydney TAFE



ST LEONARDS: IN CONTEXT WITHIN THE SYDNEY METROPOLITAN AREA.

### STRATEGIC CENTRES OF THE NORTH SHORE

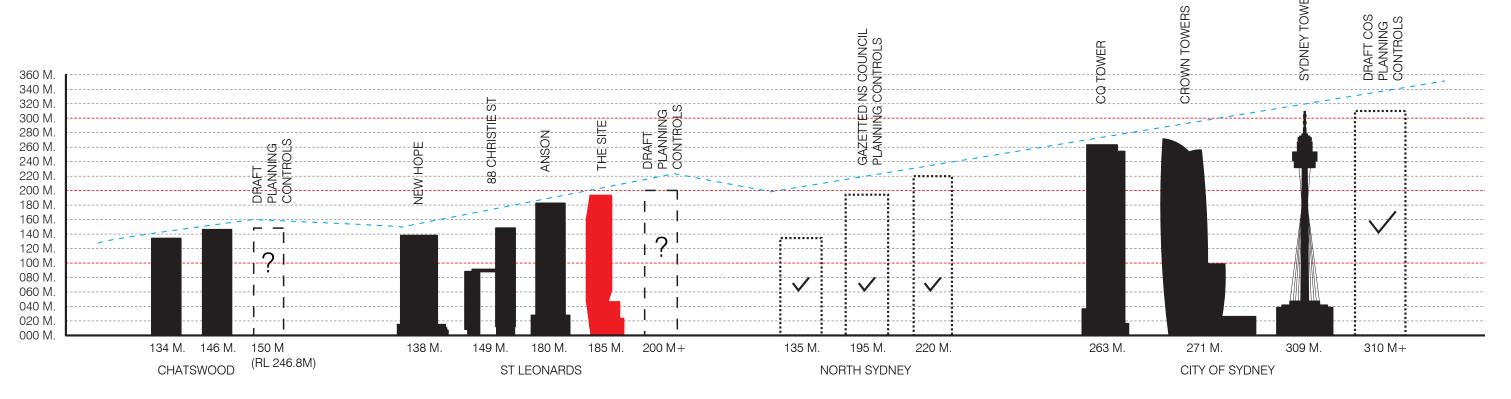




ST LEONARDS: A KEY ELEMENT OF THE COMPOSITION OF THE NORTHERN RIDGE

### I PTW **CONTEXT**

### **HEIGHTS ANALYSIS - NORTH SHORE**









ANSON, 617 PAC. HWY, ST LEONARDS



88 CHRISTIE ST, ST LEONARDS



CROWN TOWER, BARANGAROO

### NORTH SHORE BUILDING HEIGHTS

The built form presented in this Proposal has been informed by the existing and future development landscape at St Leonards as well as the Centre's place in the regional context of Sydney's Lower North Shore. Whilst all of these Centres are seeking to grow, some are restricted by significant environmental constraints that do not apply to this site.

North Sydney Council recently released gazetted new planning controls for the North Sydney CBD, with a maximum height of RL 289m. It is understood that Willoughby Council is also currently reviewing height controls for the Chatswood CBD, but key shadowing constraints restrict a number of significant opportunities for the Centre.

Clearly the proximity of the adjoining residential areas (including heritage areas and items) is a significant constraint to the future growth (and commensurate height) in both locations. The potential for adverse environmental impact are not present in the same way at St Leonards or, more specifically, at the Telstra Exchange site.

As a Strategic Centre, located within the Global Economic Corridor, our studies suggest St Leonards' position at the topographical peak of the region means that a height limit of over 200m could be accommodated without significant environmental impact.

# CONTEXT | PTW

### **REGION AND DISTRICT PLANS**

**North District** 

City of Ryde

Hunters Hill

Ku-ring-gai

Lane Cove

North Sydney

Northern Beaches Willoughby

Eastern

City

District

Mosman

North

South

District

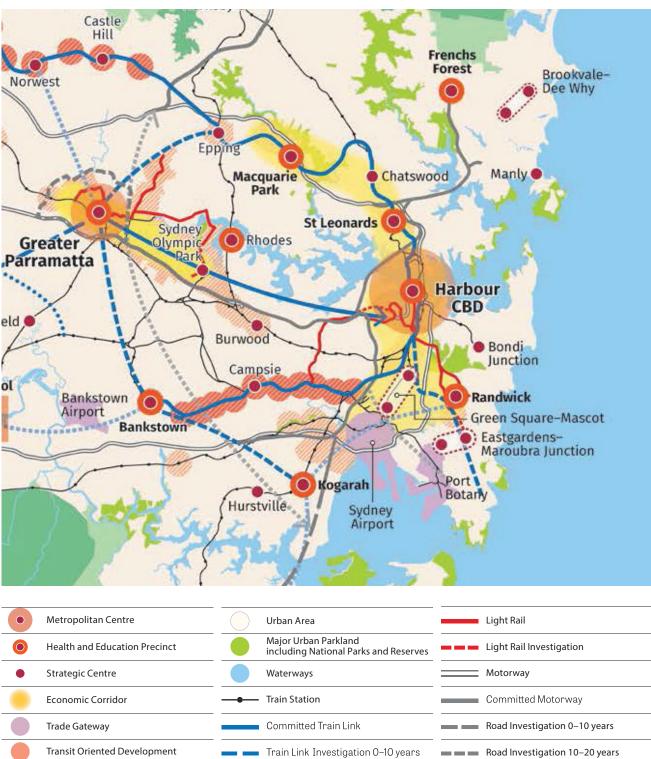
Central

City

District

District

Hornsby



■ ■ Train Link Investigation 10-20 years



GREATER SYDNEY REGION PLAN - ECONOMIC CORRIDOR

Urban Renewal Area

SOURCE: GREATER SYDNEY COMISSION

Road Visionary

A PLAN FOR GROWING SYDNEY - ST LEONARDS STRATEGIC CENTRE

> St Leonards is located within the Global Economic Corridor, a concentration of employment, economic activity and other uses in centres, transport gateways and industrial zoned land extending from Port Botany and Sydney Airport, through Sydney CBD, north-west through Macquarie Park, and towards Norwest, Parramatta and Sydney Olympic Park.

> Under the Plan, St Leonards is identified as a Health and Education with a specific priority to:

- · Work with council to retain a commercial core in St Leonards for long-term employment growth;
- Work with council to provide capacity for additional mixed-use development in St Leonards including offices, health, retail, services and housing;
- Support health-related land uses and infrastructure around Royal North Shore Hospital; and
- Work with council to investigate potential future employment and housing opportunities associated with a Sydney Rapid Transit train station at St Leonards/Crows Nest.

### NORTH DISTRICT PLAN

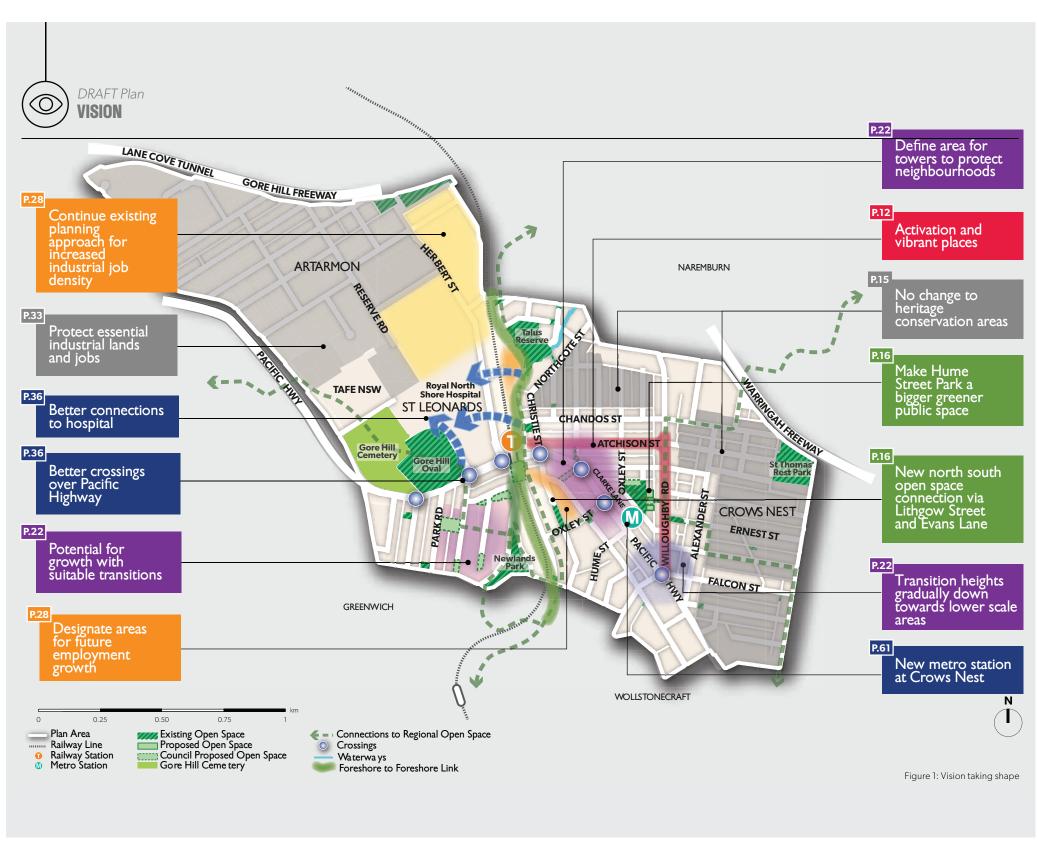
The North District Plan is a matter for consideration in this Planning Proposal and applies to the St Leonards Centre and the subject site.

Action 34 of the District Plan is to Strengthen St Leonards through approaches that:

- Leverage the new Sydney Metro Station at Crows Nest to deliver additional employment capacity
- Grow jobs in the centre
- Reduce the impact of vehicle movements on pedestrian and cyclist accessibility
- Protect and enhance Willoughby Road's village character and retail/ restaurant strip
- Deliver new high quality open space, upgrade public areas, and establish collaborative place-making initiatives
- Promote synergies between the Royal North Shore Hospital and other health and education-related activities, in partnership with NSW Health
- Retain and manage the adjoining industrial zoned land for a range of urban services.



### DRAFT ST LEONARDS AND CROWS NEST 2036 PLAN



VISION FOR ST LEONARDS AND CROWS NEST

SOURCE: DEPARTMENT OF PLANNIG AND ENVIRONMENT

### DRAFT ST LEONARDS AND CROWS NEST 2036 PLAN

The significance of St Leonards has been recognised by the NSW Department of Planning & Environment, who have been undertaking investigations into the future rezoning of the precinct for the past few years. This process has culminated in the release of the Draft St Leonards and Crows Nest 2036 Plan (2036 Plan), which sets a vision for the precinct and provides a framework for Council-led planning proposals to amend zoning and density controls.

Generally, the plan envisages the following:

- · New development clustered along the Pacific Highway between the new Crows Nest Station and existing St Leonards core.
- Protection of existing heritage and heritage conservation areas.
- Improvements to the movement network in the area, including better walking and cycling routes.
- A high-quality built form outcome that respects and enhances the existing local character of the area.
- Support for St Leonards and Crows Nest as an employment hub, providing 16,500 additional jobs over the next 20 years.
- A greater diversity of dwellings to cater to future residents of the area.
- Protection of existing and provision of additional open spaces for local residents to enjoy.

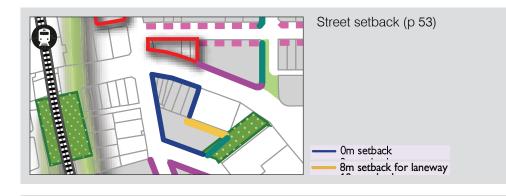


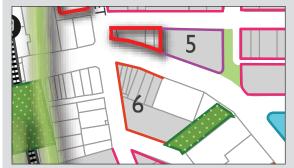
### SUMMARY OF PP RELATIVE TO HEADINGS WITHIN THE DRAFT PLAN

### DRAFT ST LEONARDS AND CROWS NEST 2036 PLAN

# Density (p 24)

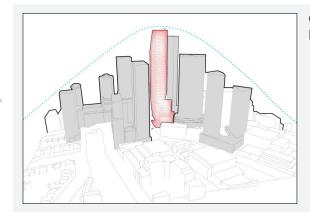




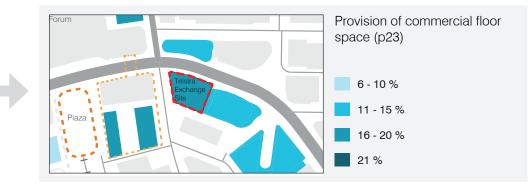


Street wall height in storeys (p 52)

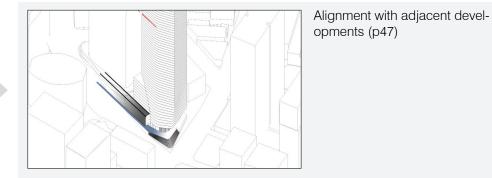
### PLANNING PROPOSAL











Site plan (p41)

### **DENSITY - HEIGHT**

The proposal for the site is consistent with the height peak described in the Draft St Leonards and Crows Nest 2036

### NON-RESIDENTIAL FSR CHANGES

This proposal seeks a larger quantum of employment generating floor space than other planning proposals submitted to Lane Cove council in the Precinct.

The site is restricted by the unmovable Telstra Exchange which also eliminates the possibility of below ground parking. If the volume of the Telstra Exchange and the car stacker would be converted into commercial levels the commercial FSR would exceed 6:1.

### STREET SETBACK

The proposal contributes to the public domain by providing larger setbacks at ground level and activating the adjacents pedestrian links with retail offerings.

### STREET WALL HEIGHT

The proposal continues the podium alignments of the adjacent New Hope development. Towards the prominent corner of Christie St and Pacific Highway, the lower levels of the building step back in relation to the tower above and the shaped high-rise form can be appreciated in its full extent.

### SUMMARY OF PP RELATIVE TO HEADINGS WITHIN THE DRAFT PLAN

### DRAFT ST LEONARDS AND CROWS NEST 2036 PLAN



Significant Sites(p 62)

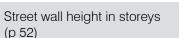
Significant Sites must demonstrate consistency with the vision, area wide design principles and design criteria in this Plan (page 4, 10 & 11) and deliver exceptional design quality and contribute to the following:

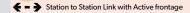
- Undertake a design excellence process.
- Sustainable, walkable and liveable city.
- Meet solar height planes in this Plan (identified in figure 11 on page 26).
- Manage cumulative overshadowing impacts of significant sites in the area. Consider actions and recommendations dentified in the draft Plan.
- Respond to street character and surrounding heritage items and/or areas when determining street wall height, awnings and ground and upper level setbacks.
- Exemplary street level activation and contribution to the public domain with ground level setbacks, plazas or similar.

Friedlander Place

under construction

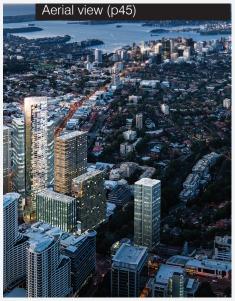
- Have a positive impact on the area's key view lines and vistas, with consideration of a visual marker of an important place.
- Slender towers (smaller floor plate) to avoid
- Make significant improvements to the public domain and local infrastructure.
- Provide gradual transitions, sensitive interfaces and an appropriate response to the scale of the street (using a combination of street wall heights, ground and upper level setbacks).
- Avoid unreasonably constraining development potential of neighbouring
- Tree canopy planting or other landscaping in public spaces on site.





### PLANNING PROPOSAL









### SIGNIFICANT SITES - DESIGN CRITERIA

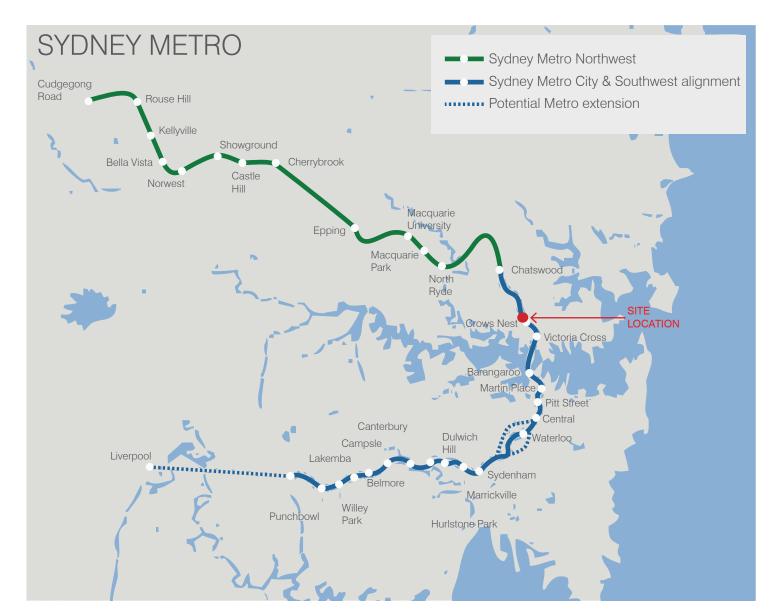
The new development seeks to enhance and animate pedestrian links. Its proposed height complements the St Leonards skyline and is the result of a detailed investigation to minimise overshadowing impact on public open space in particular Newlands Park to almost 0%. Located at the prominent corner of Pacific Highway and Christie Street the new tower provides a focal point through its slender curving form and monumental foyer. It continues setbacks and podium alignments of adjacent developments and responds to the scale of each of the surrounding streets and laneways.

### PLACE ACTIONS

The Draft Plan proposes a station to station link with active frontage along the south of the site which currently is occupied by the unmovable Telstra Exchange with its solid brick wall built to the boundary line. The proposal seeks to enhance and animate the blanc wall through facade treatment. It carefully sets back the wall on ground level in order to introduce shallow retail.

# CONTEXT | PTW

### **SYDNEY METRO - CROWS NEST STATION**





### SYDNEY METRO

The Chatswood to Sydenham section of the \$11B Sydney Metro Rail Project, Sydney Metro City and Southwest Rail project, will include new metro stations at Crows Nest, Victoria Cross in North Sydney, Barangaroo, Martin Place, Pitt Street, Central and Waterloo.

The project will result in around 30 million fewer car trips annually in 2036. The new line will provide a dramatic increase in rail service capacity, a metro trip from Chatswood to Central will take just 15 minutes - 11 minutes faster than the existing suburban railway system

### **CROWS NEST STATION**

The new Crows Nest Metro Station, located the corner of Oxley Street and Pacific Highway, is within 350 m walking distance to the site. Scheduled to be opened in 2024, as part of the 'City & Southwest' section of the project, the new Metro rail will provide 15 services per hour during

The Department of Planning & Environment recently released a rezoning proposal for Crows Nest Station, which when finalised, will facilitate a 27-storey over-station development alongside the delivery of the Crows Nest Metro Station.





**CROWS NEST STATION** 



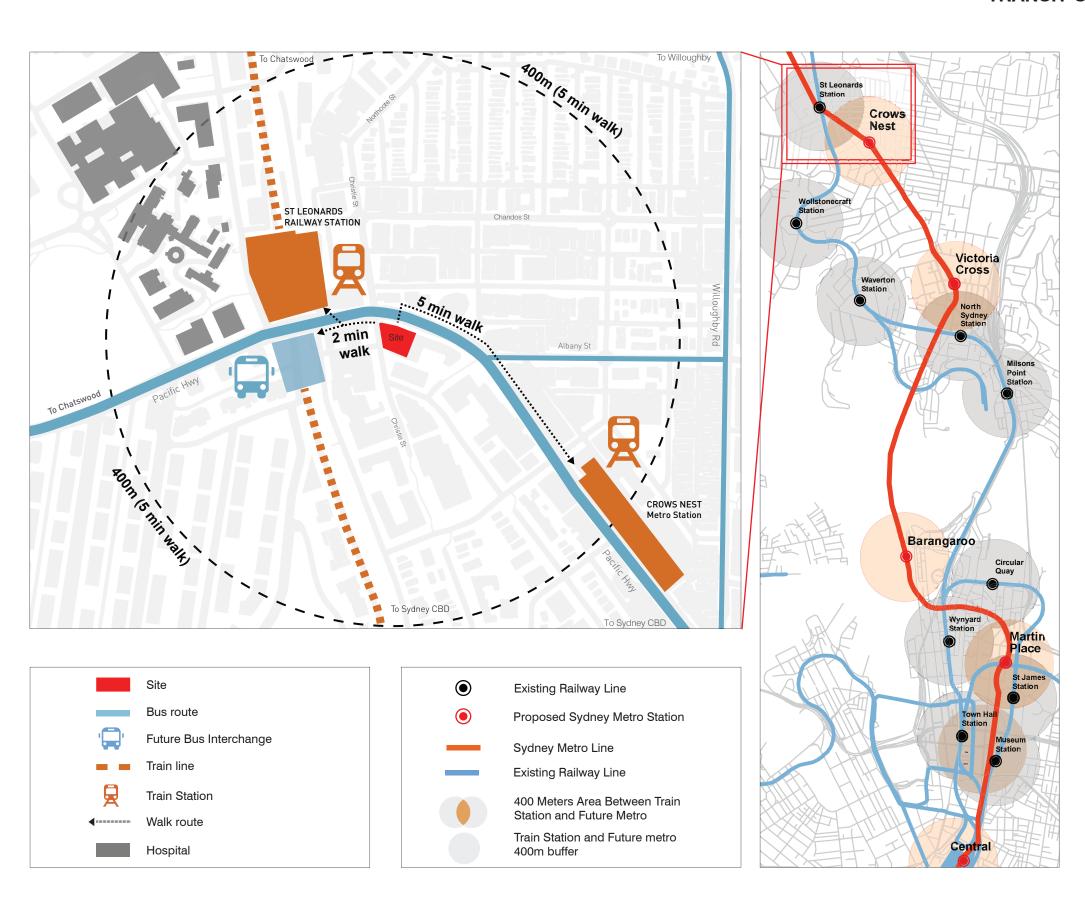
MARTIN PLACE STATION



SCALE: N/A

# CONTEXT PTW

### TRANSIT ORIENTED DEVELOPMENT



### TRANSPORT NETWORK

Located just 50 m from St Leonards Station and 350 m from the new Crows Nest Metro Station, the site provides a unique opportunity for transit oriented development as one of few significant land holdings in Sydney to be within 400 m of two heavy rail stations.

Strong provision of existing transport infrastructure (St Leonards train station, multiple bus services and Pacific Highway - a major arterial road) provide residents with access to a significant opportunities for employment, underpinning the area's value as a highly functional mixed-use precinct. At Present, St Leonards Station provides residents with access to approximately 520,000 jobs within a 20-minute train ride.

Significant investment in future public transport infrastructure in the immediate area (Crows Nest Metro Station and St Leonards Bus Interchange) will further increase access to employment with direct links to key employment hubs, including Macquarie Park, Barangaroo, and Sydney CBD.

This investment in infrastructure further highlights the strategic significance of St Leonards as a provider of high-amenity mixed-use housing choice in the immediate vicinity of both stations, particularly within DPE's walking distance guidelines for commuters.

Looking at the diagram, it is apparent that the Telstra Exchange site will be one of only a small number of sites located outside of Sydney CBD to be within the 400 m walking catchment of both an existing heavy rail line and a new Metro station.



# CONTEXT | PTW

### **SURROUNDING LAND USES**



### SURROUNDING LAND USES

The site is adjacent to future mixed-use developments of significant height and density. Immediately north-west of the site is the St Leonards Forum, which current sits at the Centre's commercial, retail and transport hub.

Royal North Shore Hospital, north-west of St Leonards Station, is a key driver for employment in the area and will continue to thrive through its ongoing \$1 Billion redevelopment.

The core areas of activity at present are the Forum and the streets to its east, including Chandos Street. Future mixed-use developments south of Pacific Highway will increase activity in the Precinct, particularly in the vicinity of the upgraded retail offering along Christie Lane and the new St Leonards Plaza.







ROYAL NORTH SHORE HOSPITAL NEW BUILDING



ST LEONARDS SQUARE, NEW HOPE

2. Transformation of Precinct







ARTIST IMPRESSION OF POTENTIAL DEVELOPMENT AS PART OF 88 CHRISTIE STREET PROJECT

FUTURE CURRENT



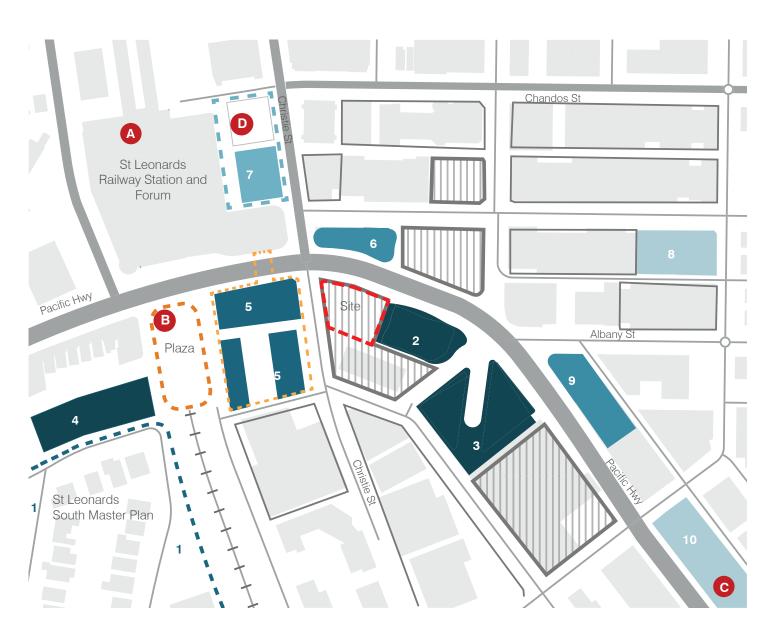


CURRENT FUTURE

### TRANSFORMATION OF PRECINCT



### **DEVELOPMENT OF ST LEONARDS PRECINCT**



### **KEY SITES**

- A St Leonards Train Station
- Bus Interchange
- Future Crows Nest Metro Station
- 100 Christie Street & Christie Street Reserve

### DA Approved Rezoning Approved Approved for RPA implementation Approved for Exhibition Pending Significant Sites

Proposed height changes

Future St Leonards Plaza / Bus Interchange

Proposed underground connection

### **REZONING PROPOSALS**

1 St Leonards South Master Plan – rezoned R2 -> R4

### DA Approved

- 2) New Hope, 500-520 Pacific Hwy 138m
- 3 St Leonards Square, 486 Pacific Hwy 91-115m
- 4 Loftex, 1-13A Marshall Ave 94m

### Rezoning Approved

(5) 88 Christie St.- 87-147m

### Rezoning Approved for RPA Implementation

- (6) Anson, 617-621 Pacific Hwy 180m
- 9 597 Pacific Highway 56m

### Rezoning Approved for Exhibition

(7) 100 Christie St - 137m

### Pending

- 8 21-35 Atchison Street 56m
- (10) Crows Nest Overstation Development

### DEVELOPMENT OF ST LEONARDS PRECINCT

The St Leonards Centre is currently undergoing a transition from an ageing commercial precinct, to an active mixed-use area incorporating a mix of commercial and residential land uses.

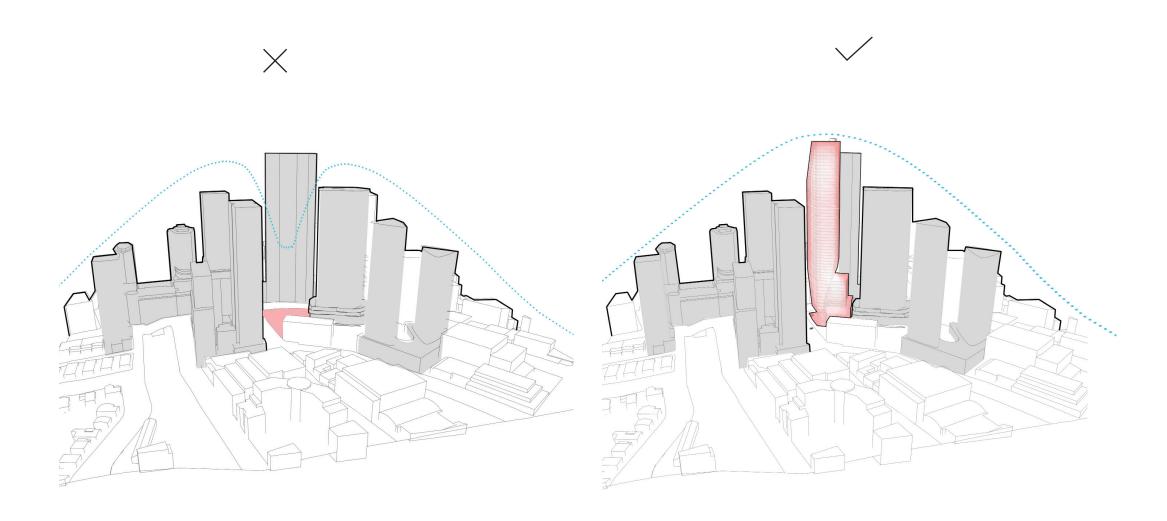
This transition is being supported by current development activity, recent approvals and further planned development.

The diagram on the left documents recent rezoning approvals in the immediate vicinity of the site as well as recently lodged applications and sites identified as potential 'tall tower' sites under the Christie Street Masterplan released by North Sydney Council earlier this

These sites are all destined to be high rise, mixed-use developments with varying offerings of commercial floor space. The approval landscape here has transformed the character and scale of development in the precinct permanently, activating the area's "natural" centre through the provision of high-amenity connectivity to a range of land uses.



### **COMPLETING THE ST LEONARDS SKYLINE**



### PROFILE OF ST LEONARDS

The St Leonards skyline has the beginnings of a 'bell' or 'pyramid' profile appropriate to the composition of the North Shore ridge, however it lacks cohesion due to significant gaps between buildings.

The Telstra Exchange site is centrally located within the future development context of the Centre and as such is perfectly located to accommodate a taller building form, stepping up towards the centre of the Precinct. The proposal in its scale, proportion and form will provide a focus for the St Leonards 'CBD' building group and complete the pyramid composition.



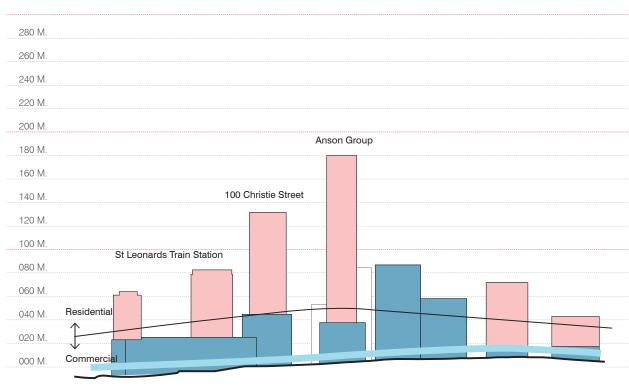


### PATTERN OF COMMERCIAL + RESIDENTIAL ALONG PACIFIC HIGHWAY

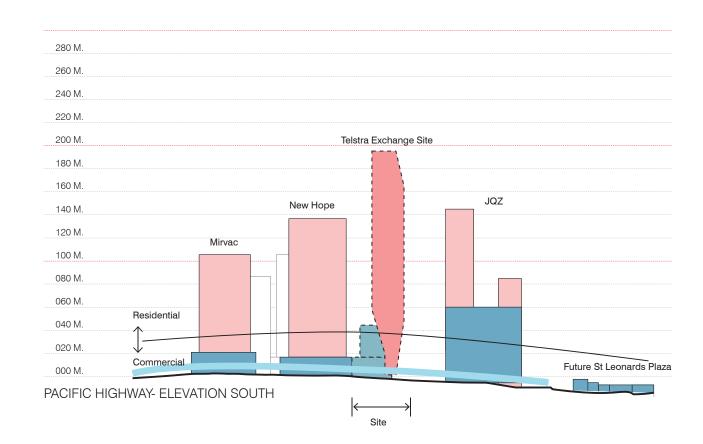
Residential

Commercial

Retail



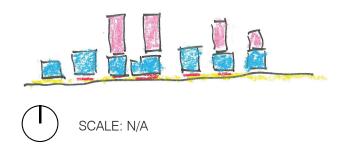
PACIFIC HIGHWAY - ELEVATION NORTH



PATTERN OF COMMERCIAL AND RESIDENTIAL ALONG PACIFIC HIGHWAY

The stretch of the Pacific Highway as it passes through the St Leonards CBD has historically been populated by predominately low-to-medium scale commercial buildings. Many buildings in the immediate vicinity of the station along both sides of the Highway are now evolving to incorporate a mix of uses, with retail at Ground level and residential situated above commercial space.

The proposed design maintains this same pattern, with the commercial and residential components of the building clearly differentiated within the overall geometry of the



### PROVISION OF COMMERCIAL FLOOR SPACE



### PLANNING PROPOSALS AT ST LEONARDS

	1. Grocon Telstra 542 Pac Hwy	<b>2. New Hope</b> 500-504 Pac Hwy	<b>3. Mirvac</b> 472 - 486 Pac Hwy	4. Loftex 1 Marshall Ave	5. JQZ 88 Christie St *	6. Anson Group 617-621 Pac Hwy	7. Christie St 100 Christie St
Residential	31,759	41,511	51,385	24,721	55,500	21,860	18,532
Commercial	6,914	6,357	8,263	290	11,364 *	3,450	5,709
Total	38,756	47,868	59,648	25,011	66,864	25,310	24,241
No. of Commercial Storeys	12	9	4	3	15	5	6
Commercial GFA as a % of total GFA	17.78%	13.28%	13.85%	1.16%	17.00%	13.63%	23.55%
LGA	Lane Cove	Lane Cove	Lane Cove	Lane Cove	Lane Cove	North Sydney	North Sydney

<sup>\*</sup> Only mixed-use building

### PROVISION OF COMMERCIAL FLOOR SPACE

This proposal seeks a significantly larger quantum of employment generating floor space than other Planning Proposals submitted to Lane Cove Council in the Precinct.

The offering here is in line with the strategic objective to 'retain a commercial core' in St Leonards. When considered in concert with current site constraints and intended urban design character for the area, it necessitates a building height in excess of 200m.



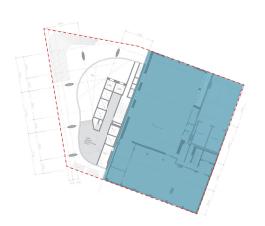
<sup>\*</sup> Including library

### POTENTIAL COMMERCIAL FLOOR SPACE WITHOUT TELSTRA EXCHANGE



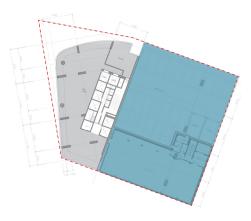
UPPER GROUND FLOOR PLAN

COMMERCIAL 422m<sup>2</sup> X 1 FLOOR



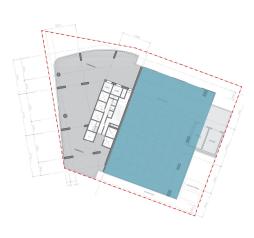
MEZZANINE FLOOR PLAN

COMMERCIAL 930m<sup>2</sup> X 1 FLOOR



L1-2 PODIUM FLOOR PLAN WITH GYM AND CAR STACKER

COMMERCIAL 930m<sup>2</sup> X 2 FLOORS



L03-05 TYPICAL COMMERCIAL FLOOR PLAN WITH CAR STACKER

COMMERCIAL 605m<sup>2</sup> X 3 FLOORS

POTENTIAL COMNMERCIAL FLOOR SPACE WITHOUT TELSTRA EXCHANGE BUILDING

The analysis shows that without the constraints imposed by the Telstra Exchange building, additional commercial floor space equal to approximately 5,000 m2 could be provided. This would result in a total non-residential FSR

The development concept therefore includes space in excess of the 6:1 non-residential FSR nominated in the draft 2036 Plan, but is unable to technically achieve 6:1, due to the limitations of the GFA definition and the need for a car stacker within the podium of the building.

Site Area 1671.7

Commercial	Commercial	Total
as per	replacing	Commercial
Planning	Telstra	
Proposal	Exchange +	
	Car stacker	

GFA (sqm)	6914	5027	11941
FSR	4:1	3:1	7:1

Site Boundary



Proposed floor plans



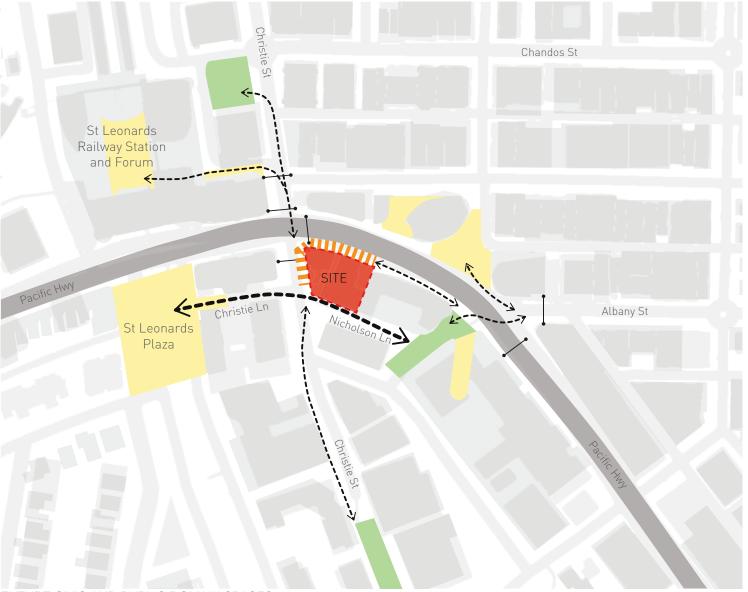
Core/ Plant



Commercial replacing Telstra Exchange and Car Stacker



### **FUTURE CIVIC AND PUBLIC DOMAIN SPACES**



Existing and future civic space Existing and future green space Pedestrian connection Pedestrian signalised crossing

Focal point

### FUTURE CIVIC AND PUBLIC DOMAIN SPACES

The network of existing green and civic spaces in proximity to our site will be enhanced by important future public spaces such as the St Leonards Plaza and pedestrian links such Nicholson Lane.

The site occupies a 'keystone' location within the St Leonards centre, terminating the active laneway from the plaza over the railway as well as being highly visible to the Pacific Highway.

It has the potential to complete the missing public domain link between the pedestrian flow from the forum to the new network of plazas and laneways to the south of Pacific Highway and to the east of the site.

FUTURE CIVIC AND PUBLIC DOMAIN SPACES



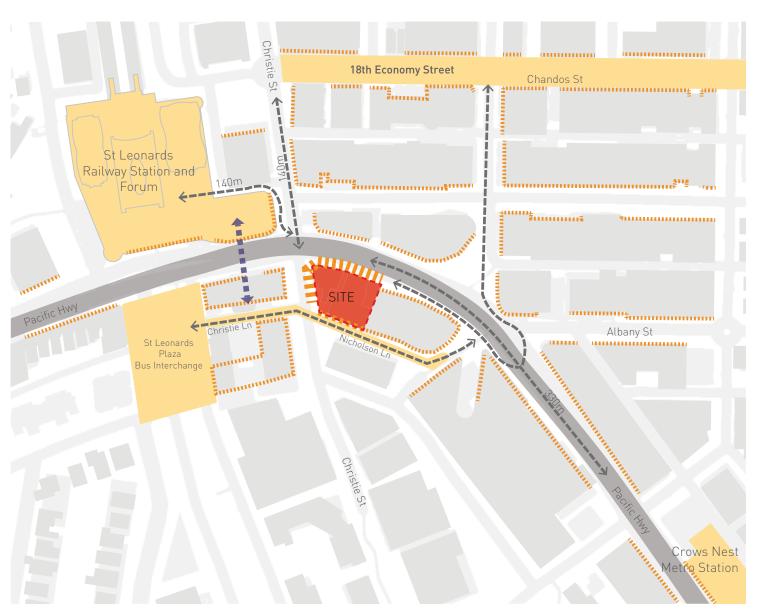
NICHOLSON LANE



ST LEONARDS PLAZA



# TRANSFORMATION OF PRECINCT | PTW **FUTURE PEDESTRIAN LINKS**



Existing and future main points of destination

Pedestrian connection

Underground pedestrian connection

Active frontage

Potential for activation

### **FUTURE PEDESTRIAN LINKS**

The site's surrounds will provide excellent amenity in regards to commercial and retail activity in the future.

New retail hubs such as the 18h Economy street and the activation around the new Crows Nest Station will improve the pedestrian flow. The planned developments along Pacific Highway and the St Leonards Plaza will offer ground floor activation with high pedestrian activity.

Because the site is central to future pedestrian connectivity, it will need to cater for the expected high pedestrian activity and provide space for a quality public domain.

FUTURE PEDESTRIAN LINKS



CHRISTIE LANE



PACIFIC HIGHWAY NEW COMMERCIAL SPACES



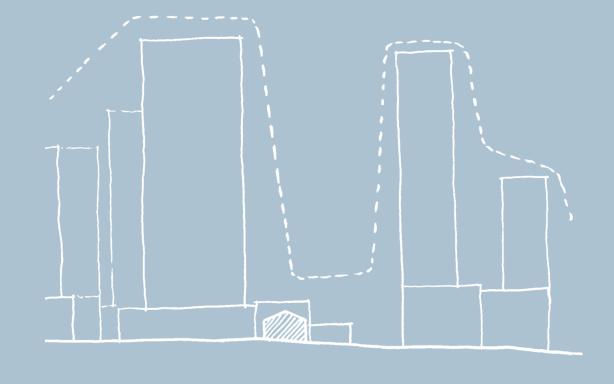
ST LEONARDS BUS INTERCHANGE



### ST LEONARDS SUB-PRECINCT MASTER PLAN



3. Site Constraints and Opportunities



## **SITE CONSTRAINTS AND OPPORTUNITIES**

### POTENTIAL FOR URBAN RENEWAL



RIDGELINE ALONG PACIFIC HIGHWAY AND ST LEONARDS **TOPOGRAPHY** 



1. LOW SCALE RETAIL FACING CHRISTIE STREET CORNER (PACIFIC HIGHWAY AND CHRISTIE STREET)



LOW SCALE RETAIL FACING CORNER OF PACIFIC HIGHWAY AND CHRISTIE STREET



NARROW FOOTPATH ALONG TELSTRA **EXCHANGE FACADE** 



TELSTRA EXCHANGE STREET FRONTAGE TO PACIFIC **HIGHWAY** 

### RIDGELINE

The site is located on a crest, close to the topographical peak of St Leonards centre, making it a focal point when approaching from Pacific Highway. Due to the topography falling towards the harbour and the adjacent southern low scale residential areas, the site is highly visible from the

The current low scale retail lots paired with the 2 storey frontage of the Telstra Exchange create issues with the Pacific Highway street scape and do not reflect the importance of the corner at the intersection with Christie

### GAP

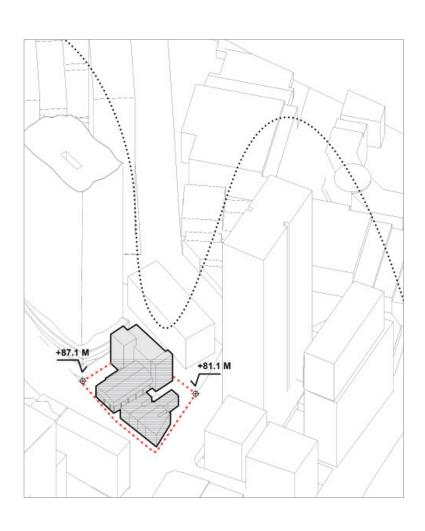
The existing buildings on the site present a visible gap in the urban landscape among the high scale future surrounding developments. They do not support the anticipated future pedestrian flow along Pacific Highway and along Christie St between Nicholson/ Christie Lane and the Forum. The facades of the retail lots and Telstra Exchange are built to the boundary along Pacific Highway and Christie St, leaving a narrow footpath and an unattractive street frontage.

The Telstra telephone exchange provides an important service to the community, but its built form restricts the future urban renewal of the precinct.

### OPPORTUNITY

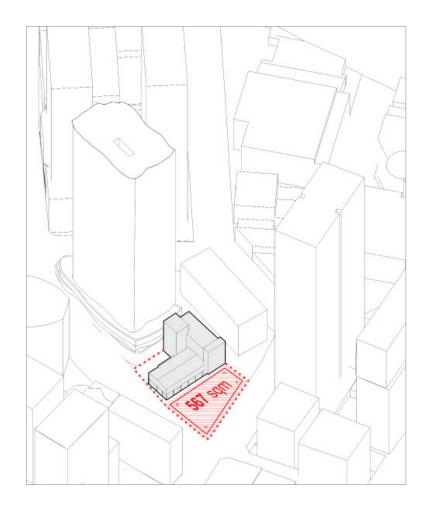
A new development for the site could fulfil the potential of the site as a gateway along Pacific Highway. Most importantly, a new development offers the opportunity to complete the pedestrian connectivity and create a quality public domain along the prominent street corner.

# SITE CONSTRAINTS AND OPPORTUNITIES **SITE CONSTRAINTS**



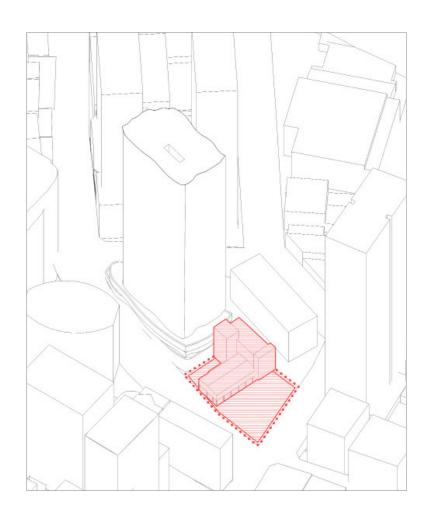
### ISSUES OF EXISTING SITE AND BUILDINGS

- Gap among future high scale developments
- Urban design issues with low scale built form at prominent corner Fragmented retail lots
- 6 m fall between north-east and south-western corner of site



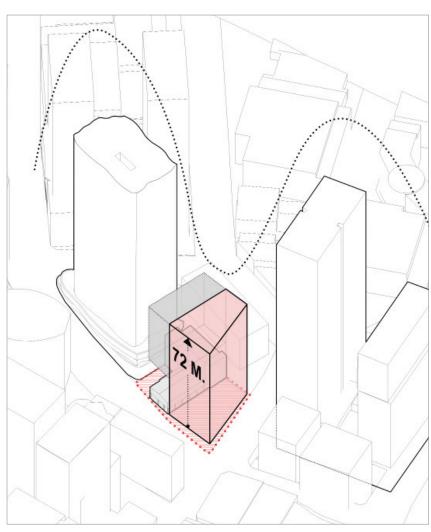
### AVAILABLE SITE AREA

- Immovable Telstra Exchange Building
   Lots adjacent to Telstra Exchange too small for viable new development (narrow floorplate)



### **AMALGAMATION**

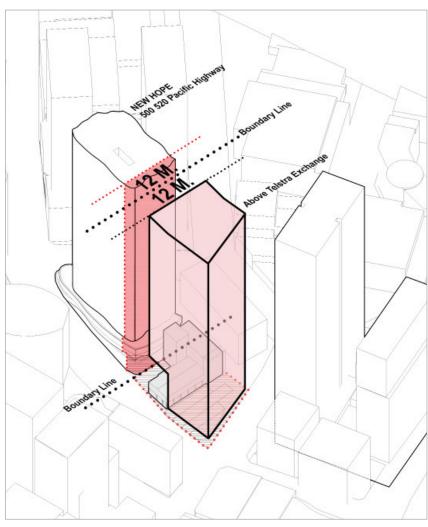
- · Amalgamation of the sites provides an opportunity for viable
- The continuing operational presence of the Exchange necessitates significant structural provisions to enable the construction of floors above the Exchange



### **CURRENT PLANNING CONTROLS**

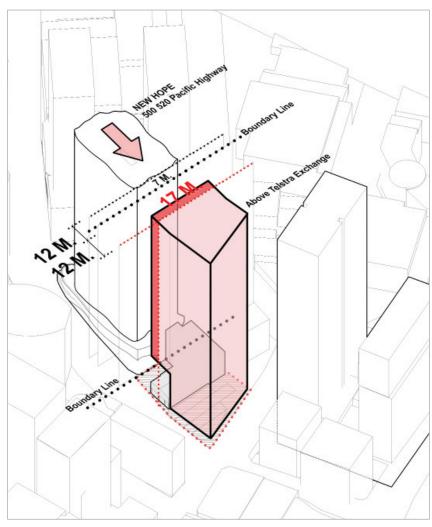
- The structural challenge to build above the operating Exchange building comes at a considerable economic cost.
- A height restriction of 72 m is hindering commercially viable development.

  A medium scale development fails to give an adequate urban response to the prominent street corner and does not relate to the increased height of the surrounding buildings.



### NON-COMPLIANCE OF ADJACENT DEVELOPMENT

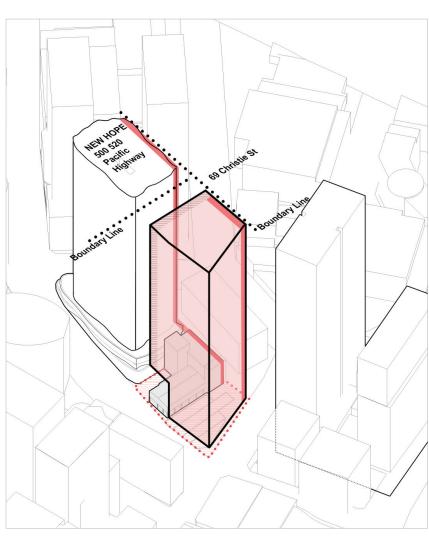
- The ADG identifies building separation requirements in residential/ mixeduse areas as 12 m between habitable rooms and boundary for all storeys
- The proposed residential tower of the New Hope development provides 7 m to the boundary a further 5 m would be required to comply.



### RESULTING IMPOSED INCREASED SETBACKS TO EASTERN BOUNDARY

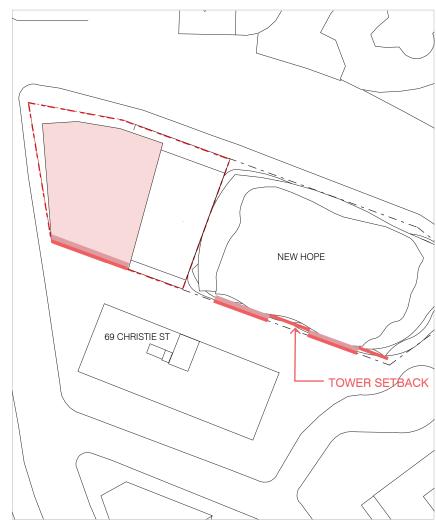
- In order to maintain a building separation of 24 m between habitable rooms, the residential tower on the site will need to provide an additional 5m setback to the normally required 12 m.
- The imposed 17 m setback reduces the residential floorplate and valuable residential floor space.

# SITE CONSTRAINTS AND OPPORTUNITIES SITE OPPORTUNITIES



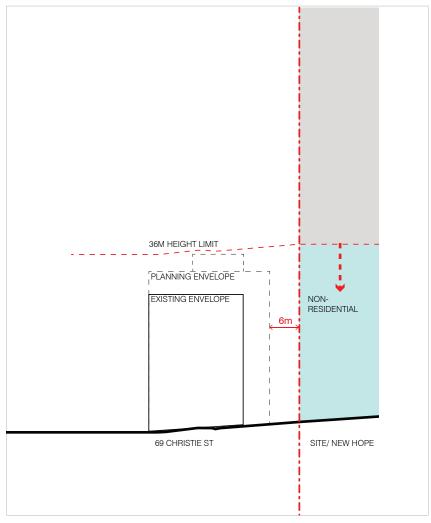
ADAPTED SOUTH SETBACK OF ADJACENT NEW HOPE BUILDING

- The adjacent DA approved New Hope development provides 0-3m setback to the southern boundary.
- The existing Telstra Exchange is built to the southern boundary line.



### ADAPTED NEW HOPE ALIGNMENT

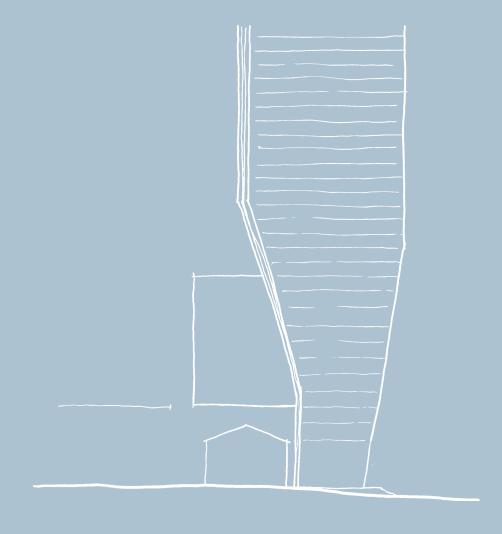
- At tower level the residential facade / balcony line of the New Hope development touches the southern boundary in sections.
- The proposed residential tower on the site has a very narrow frontage to the south.



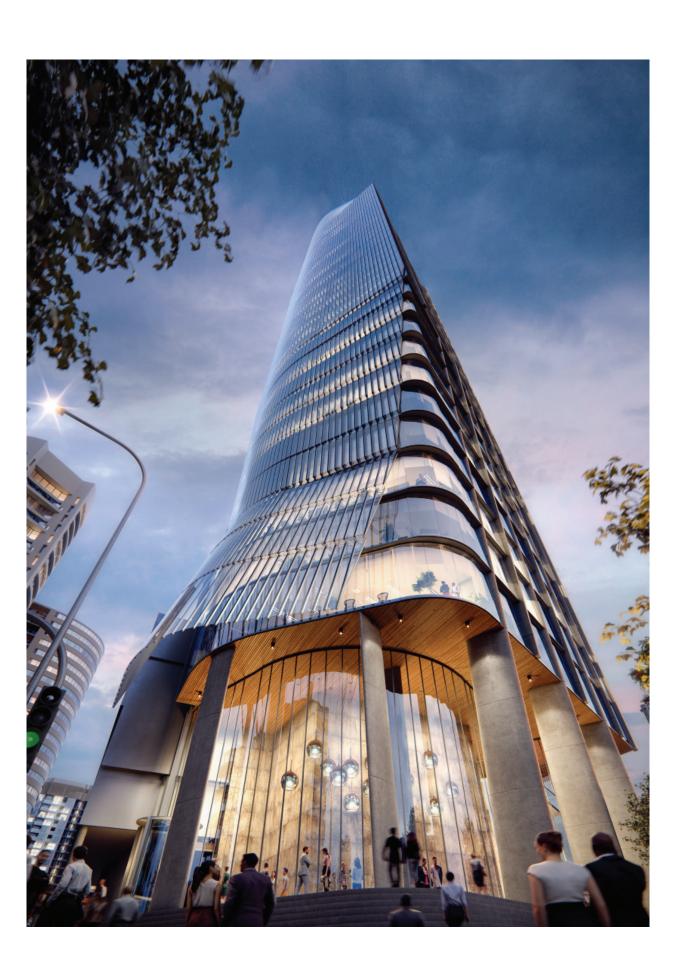
### RELATIONSHIP TO 69 CHRISTIE ST - NEW HOPE'S APPROACH MIRRORED

- New Hope was approved with a nominal setback to 69 Christie Street. In
- the DA the following points were described:
  The maximum height of 69 Christie Street is 36m, and the proposed development cannot be expected to speculate on what the future height
- Non-residential uses are provided to a height of 36m, eliminating any possible interface issues should 69 Christie Street be redeveloped to the current height limit.

4. Design Response



# DESIGN RESPONSE | PTW



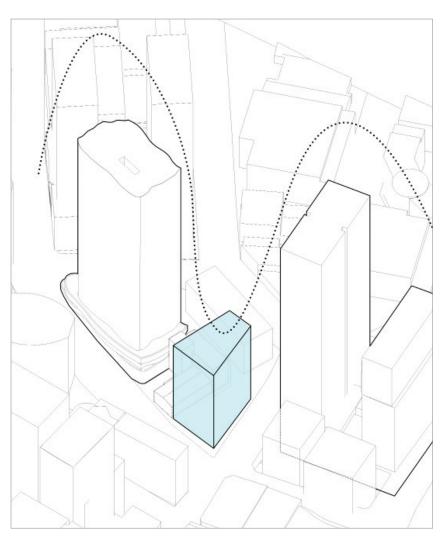
### **DESIGN VISION**

St Leonards is experiencing a period of rapid transformation with a new vision for a dynamic and wellcoordinated public domain, major investment in rail and bus infrastructure and a number of significant new mixeduse building projects, in addition to the recent expansion of North Shore Hospital.

The vision for this project is to create a building which, through the quality of its architecture and the sophistication of its integration with the public domain, will itself manifest the spirit of this important centre.

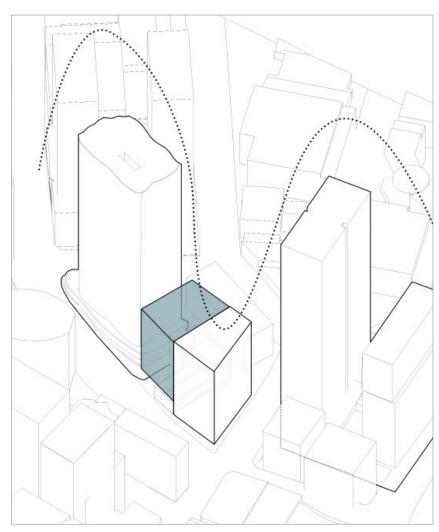
The challenges of the existing use have generated an unusual and iconic building form; tapering at the lower levels to allow structure and services to thread between the existing immovable ground level use of the site. The design will provide a focus for the town centre, elegant and sculptural in its slender curving form, distinctive when seen from a distance and rich and compelling when experienced as a pedestrian. The design proposes a monumental foyer intended to bring the colour and animation of the adjacent laneway system into the building as well as creating a dramatic space well visible from the adjacent highway.

# DESIGN RESPONSE | PTW **SITE STRATEGY**



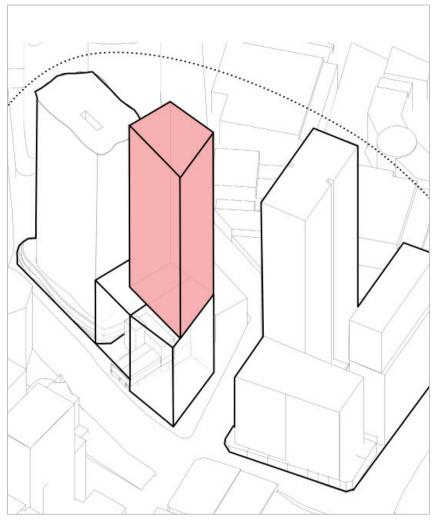
COMMERCIAL BUILDING ADJACENT TO TELSTRA EXCHANGE

A building encompassing only the western portion of the site would not allow for viable development due to small and narrow floorplates.



COMMERCIAL FLOOR ABOVE TELSTRA EXCHANGE

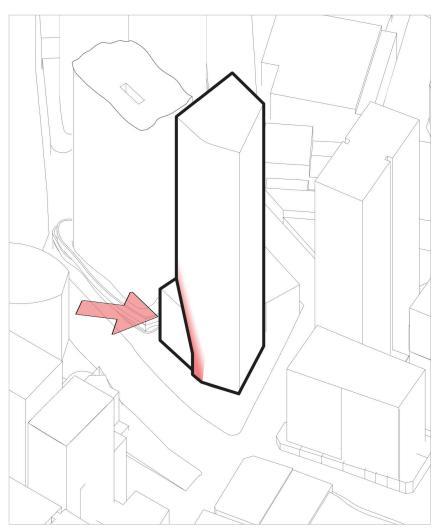
• Construction above the Exchange is cost intensive.



RESIDENTIAL TOWER

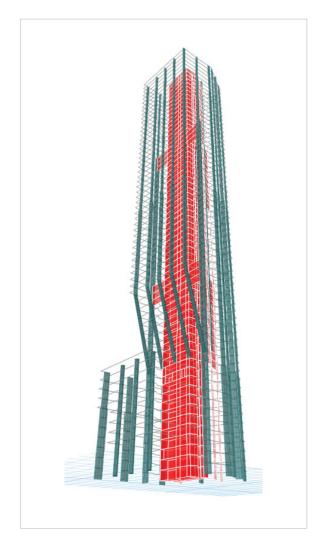
 A residential high-rise is the logical urban response and mitigates additional construction costs on lower levels.

### DESIGN RESPONSE | PTW **CONCEPT PARAMETERS**

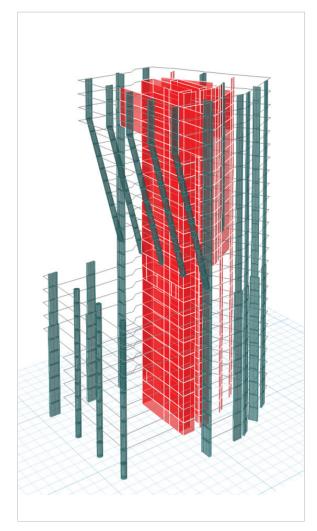


#### STEPPING BACK THE STRUCTURE

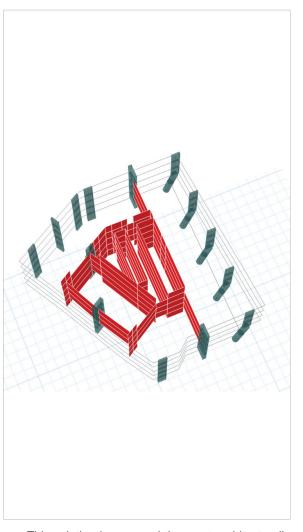
The 57-storey tower is proposed to extend up to 12m over the existing Telstra Exchange building, but is not able to either impose any load onto or run any load-bearing structure through the existing building.



An innovative transfer solution is proposed, in which tower columns along the eastern edge of the residential floors are splayed back to the core over 12 storeys from Level 22 down to Level 10

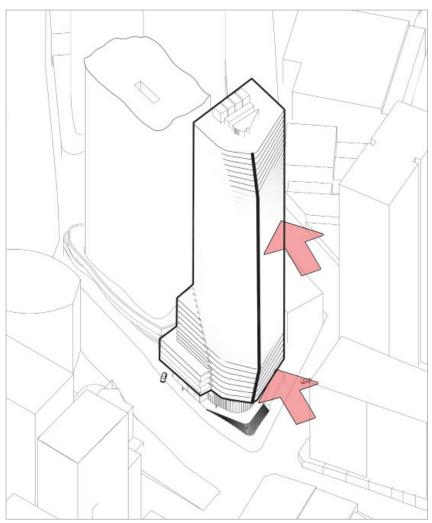


The overturning effect of the splayed tower columns are supported by an outrigger system, which engages tower columns along the western edge of the residential floors all the way to the footings via deep outrigger walls.

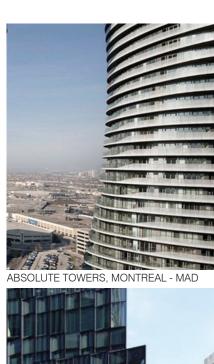


This solution has proved the most architecturally elegant and structurally efficient when compared with the other conventional load-transfer options. It eliminates the need to build a transfer system (minimum two-storeys), with over-sized transfer columns and footings next to the existing building.

### DESIGN RESPONSE | PTW **URBAN RESPONSE**













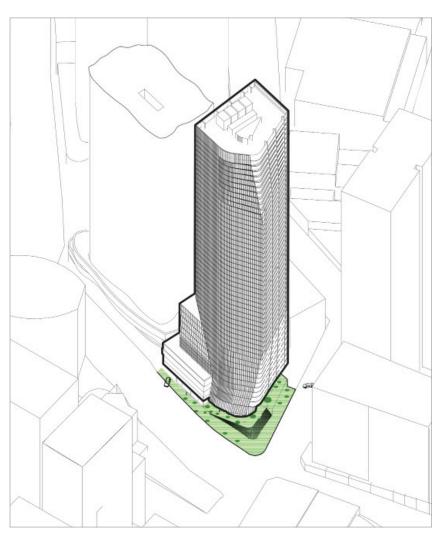
RESHAPING CORNER

- The tapering at the lower levels emphasises the prominent street corner and creates a setback to Christie Street.
  It enables the tower columns to visibly continue down to the ground which provides the building with an uplifting, elevated expression.
  The twisted tapered top creates a distinctive built form recognizable from
- a distance.

FUKOKU TOWER, OSAKA - DPA

TRANSBAY BLIOCK 8, SAN FRANCISCO - OMA

## DESIGN RESPONSE | PTW **PUBLIC DOMAIN CREATION**







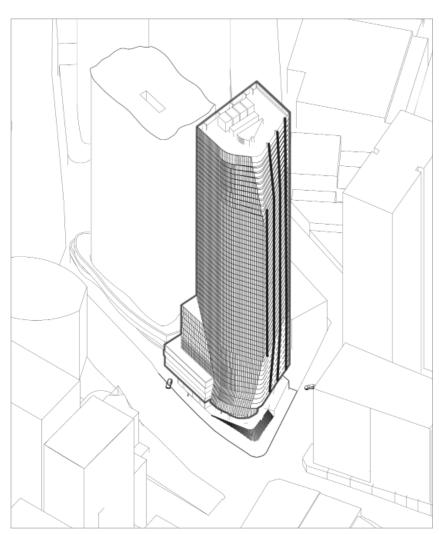
#### CREATING PUBLIC DOMAIN ON GROUND FLOOR

- The design proposes a grand monumental foyer intended to bring the colour and animation of the laneway into the building as well as being of a scale and expression compatible with the Pacific Highway.
- Integration with the surrounding public domain is an important consideration here, given the site's prominence as the termination point for pedestrians travelling east along the upgraded Christie Lane from St Leonards Plaza.

1 BLIGHT STREET, SYDNEY - ARCHITECTUS

1 BLIGHT STREET, SYDNEY - ARCHITECTUS

### DESIGN RESPONSE | PTW **FACADE PARAMETERS**



• The site represents a unique opportunity to revitalise the built form at a prominent

• The building design with its strongly articulated vertical fluting and curved north face (that follows the curve of the corner of the highway) and raking geometry in elevation will create a striking sculptural form further emphasising this important

gateway location and a keystone activation point for the precinct.

A SCULPTURED FORM CREATING A GATEWAY

corner.





443 QUEEN STREET, BRISBANE - ARCHITECTUS



FOSTER AND PARTNERS



GROVE TOWERS, MUMBAI - 3XN

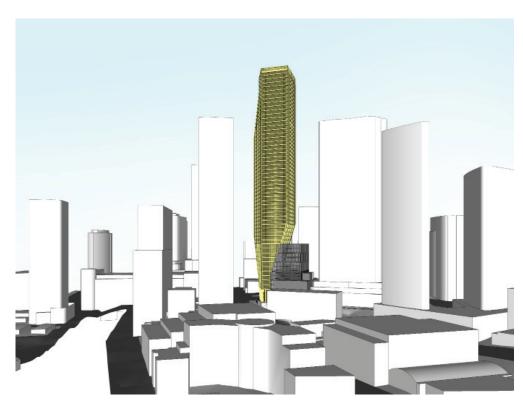




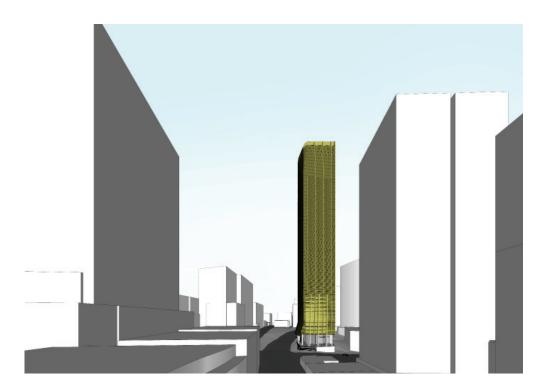
DIAGRAM OF BUILDING FORM

## DESIGN RESPONSE | PTW

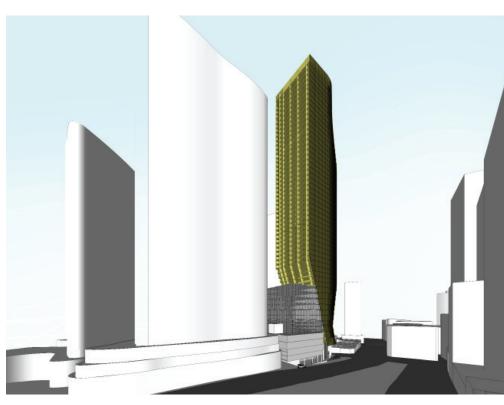
#### **CONTEXTUAL IMAGES**



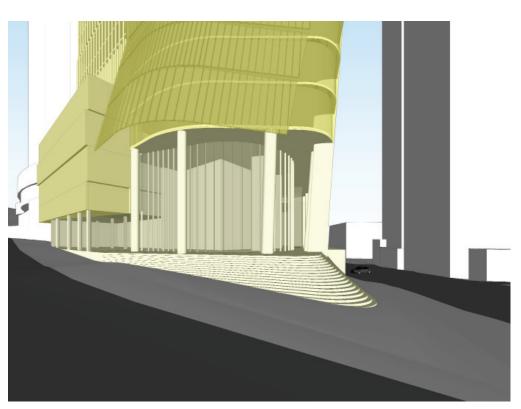
VIEW FROM THE SOUTH



VIEW FROM THE WEST ALONG PACIFIC HIGHWAY



VIEW FROM THE NORTH-EAST ALONG PACIFIC HIGHWAY



VIEW FROM THE CORNER CHRISTIE ST WITH PACIFIC HIGHWAY

#### THE BUILDING IN ITS CONTEXT

The building has been carefully designed and located on its site to respect and maintain the amenity of its neighbours whilst its curved and tapering form to respond to the bend of the Pacific Highway and the technical challenges of its site.

Its location at this important bend in the Pacific Highway and its pared composition with the tall tower proposed opposite to the north will create a gateway to the St Leonards CBD.

The towers elegant form and tapering shape will ensure that it will be perceived as an iconic landmark.



ARTIST IMPRESSION OF POTENTIAL DEVELOPMENT AS PART OF 88 CHRISTIE STREET PROJECT

## DESIGN RESPONSE | PTW

#### **VISION FOR PUBLIC DOMAIN**

#### VISION FOR PUBLIC DOMAIN

The public domain in this area between the new St Leonards Plaza and Friedlander Place will be linked through the new developments and the active laneway system. Christie and Nicholson Lanes provide the eastwest connections between the major sites of this precinct. These lanes must encourage activity, must extend the vitality of the new plaza and most importantly create a new southern frontage to the sites along the Highway.

The proposed design for the site incorporates active frontages to the Highway, to Christie Street and most significantly to Nicholson Lane.

Our preliminary discussions with the Department of Planning also identifies the importance of adjacent sites continuing the animated frontages to Nicholson Lane. We have included in our proposal a vision for an integrated built form public domain and are confident that the site will play its part in this important area.

## DESIGN RESPONSE | PTW SITE PLAN VISION



## DESIGN RESPONSE | PTW

**VIEW 2 - CHRISTIE LANE** 



ARTIST IMPRESSION OF POTENTIAL DEVELOPMENT AS PART OF 88 CHRISTIE STREET PROJECT

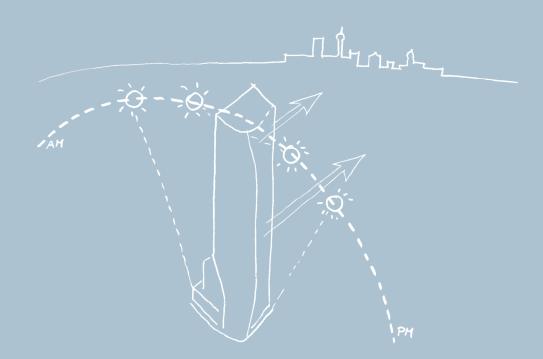
## DESIGN RESPONSE | PTW

**VIEW 2 - NICHOLSON LANE** 



ARTIST IMPRESSION OF POTENTIAL DEVELOPMENT AS PART OF 88 CHRISTIE STREET PROJECT

# 5. Amenity

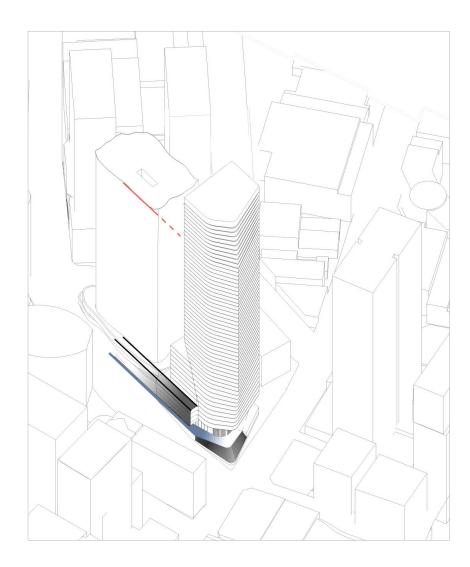


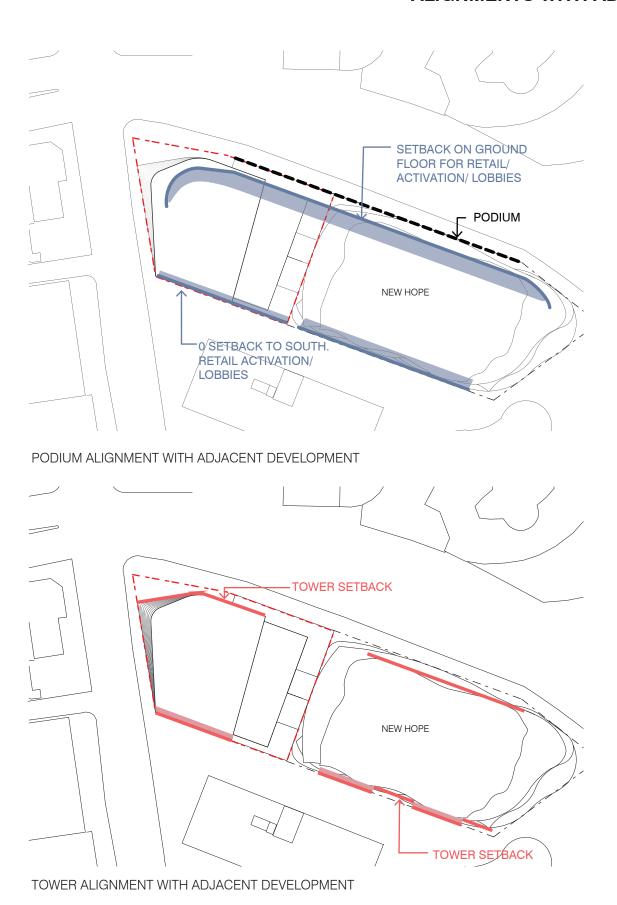




## AMENITY PTW

#### ALIGNMENTS WITH ADJACENT DEVELOPMENT





#### SUMMARY SEPP 65 COMPLIANCE

The proposed scheme has been designed giving consideration to future compliance with the requirements of the NSW Apartment Design Guide. Beyond the consideration of planning controls, this proposal also identifies future streetscapes and positively contributes to

#### ALIGNMENTS WITH ADJACENT DEVELOPMENT

Our proposal continues the retail frontage and podium alignments of the adjacent New Hope development along Pacific Highway, enriching the pedestrian link between the new Metro Station and the St Leonards Forum. An 18 m high street edge, built to the boundary with a set back ground floor, creates an extended covered footpath. The strategy for the activated ground floor incorporates the Telstra building. Its facade will be modified and set back at ground level.

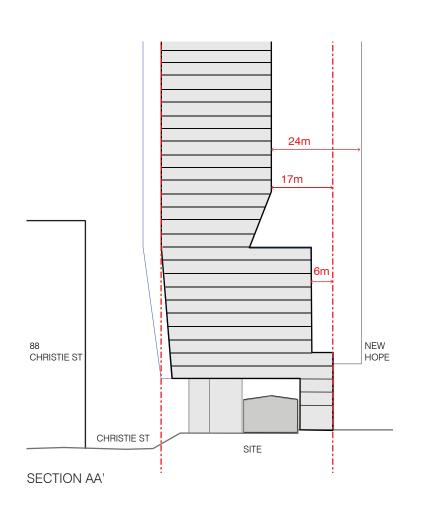
Along Nicholson Lane the existing solid brick wall of the Telstra Exchange will be opened up to allow for retail frontage.

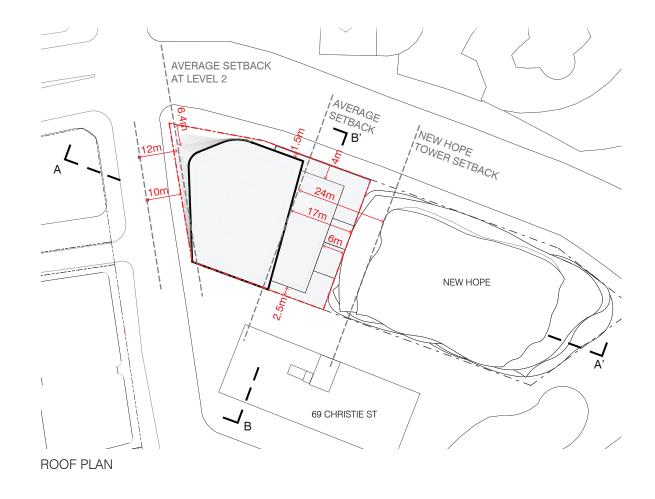
Towards the prominent corner of Christie St and Pacific Highway, the lower levels of the building step back in relation to the tower above and the shaped high-rise form can be appreciated in its full extent.

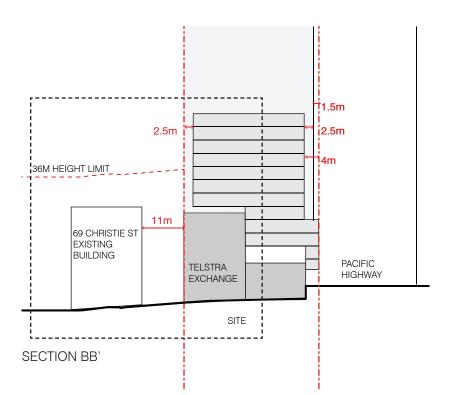
The residential tower on the site maintains similar setbacks to Pacific Highway and Nicholson Lane as the adjacent New Hope development. It continues the principle of alignments with adjacent future development.

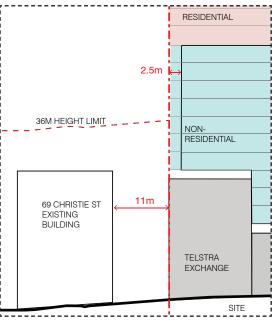


### **AMENITY SETBACKS**

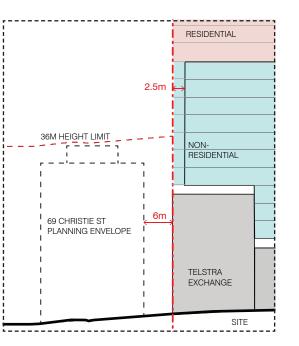












FUTURE SETBACK RELATIONSHIP (SCALE 1:750)

#### **SETBACKS**

Building separation as required by the ADG can be achieved.

The residential tower is set back 24 m from the New Hope Development as per ADG requirements. The distance is not shared equally between our site and the neighbouring site due to the reduced setback (only 7 m) provided by the New Hope development.

The setback towards Christie Street is guided by the objective to enlarge the street's public domain. Hence the average distance to the boundary is greatest at the lower levels. The site is opposite to the 50m high commercial component of 88 Christie Street. Its roof has a similar RL to the lowest residential levels on the site. This will provide the apartments facing Christie Street with great amenity and sufficient privacy.

It is proposed to mirror the approach taken by New Hope by providing a zero setback to 69 Christie Street, and providing non-residential uses above the current maximum height of 69 Christie Street (36 metres).

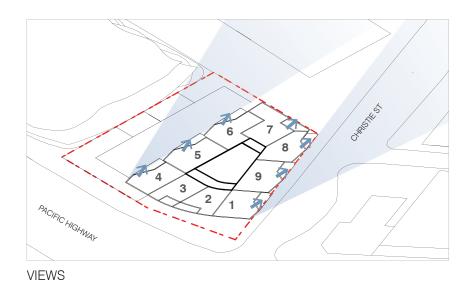


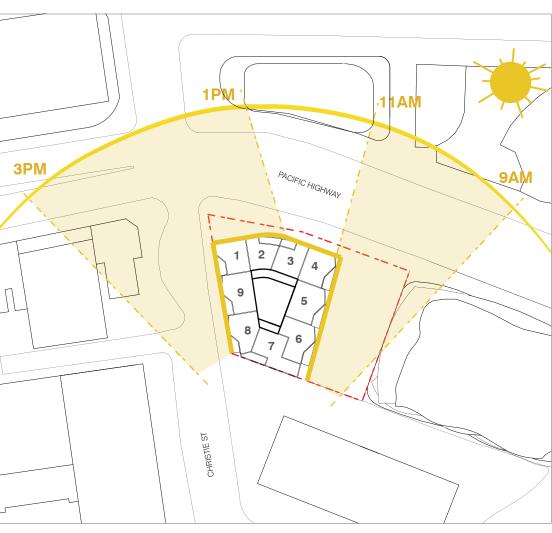
## AMENITY PTW

#### **SOLAR ACCESS AND VIEWS**



SOLAR ACCESS AND VIEWS





**SOLAR ACCESS** 

#### **SOLAR ACCESS**

Excellent solar access is achieved due to the north, east and west orientation of all apartments within the residential tower. The building shape has been adjusted to allow for a minimum of 2 hours direct sunlight to living rooms and private open spaces between 9 am and 3 pm in midwinter for the majority of apartments. In order to reduce the impact of any future developments on solar performance of the residential tower the number of north facing units has been maximised.

#### **VIEWS**

7 out of 9 apartments per floor offer excellent views to the harbour. The shape of the floorplate and its fluted east and west facade, create ideal apartment layouts, with balconies and living rooms orientated towards the most desirable views.

#### VISUAL IMPACT

The slender building form and 24 m separation to the New Hope development ensure that key view corridors to the Harbour and CBD are maintained for surrounding developments.

#### **CROSS VENTILATION**

As all of the residential apartments are located above level 9, the directive to achieve 60% cross ventilation set out in the natural ventilation design criteria is not applicable at this site.

#### **COMMUNAL SPACE**

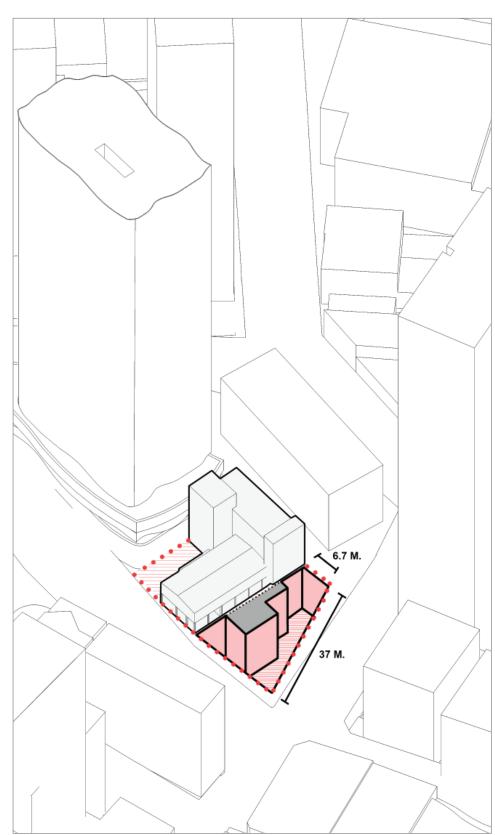
The scheme offers a range of quality communal areas for its residents:

- Lounge and roof terrace with pool on level 52
- Residential amenities on levels 53 and 11

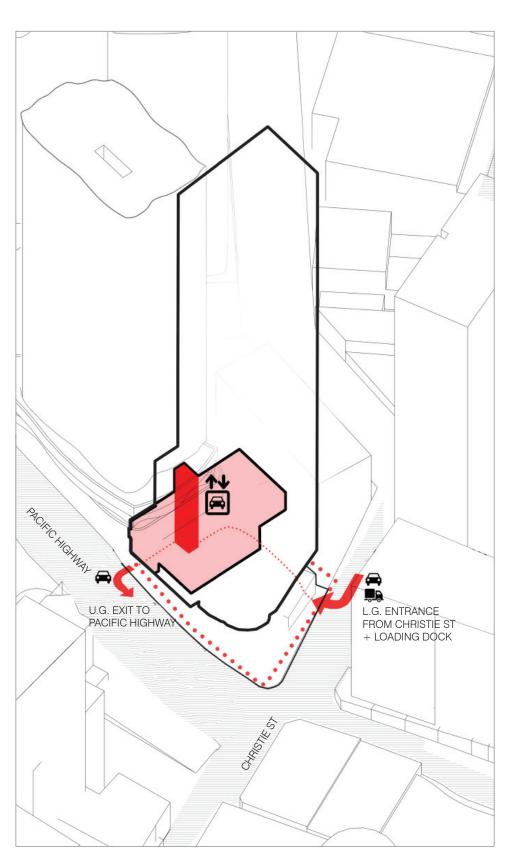




#### **TECHNICAL CONSIDERATIONS**



POTENTIAL BASEMENT EXCAVATION



**CARSTACKER** 

#### INSUFFICIENT SPACE FOR BASEMENT PARKING

Parking cannot be accommodated below ground due to the following constraints:

- The continuing operational presence of the Telstra Exchange and the associated network of cabling means that basement excavation is not possible in any form underneath the building.
- The core will need to be located next to the Exchange which further reduces free widths of the basement.
- The remaining space is too narrow and small to include a car ramp and offers too little area to make any other parking systems below ground viable.

#### PARKING STRATEGY FOR SITE

In response to this, the scheme proposes to provide parking for the residents in the form of an automated carstacker located above the Telstra Exchange.

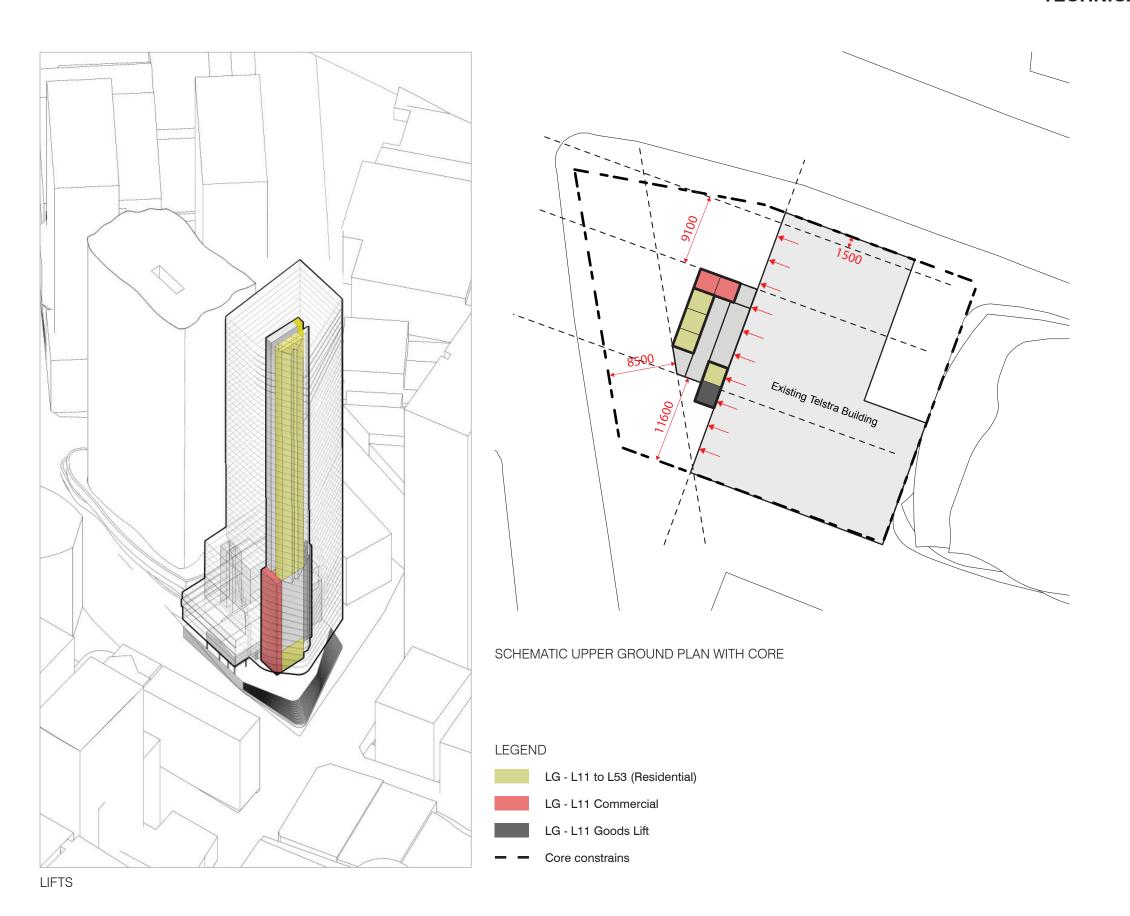
The cars enter via Christie Street and exit a level above on Pacific Highway without causing additional issues for the existing traffic. The entrance on Christie Street also functions as a loading dock.

The impact of the carstacker lift for the adjacent eastern development is low as it is located next to the staircase tower of the Telstra Exchange not exceeding its height.

The facade of the carstacker has been carefully designed in consideration of the prominent street frontage to Pacific Highway, using quality screening elements such as louvres to create a soft transition to the commercial facade above.

## AMENITY | PTW

#### **TECHNICAL CONSIDERATIONS**



#### CORE DESIGN OPTIMISED FOR HIGH RISE

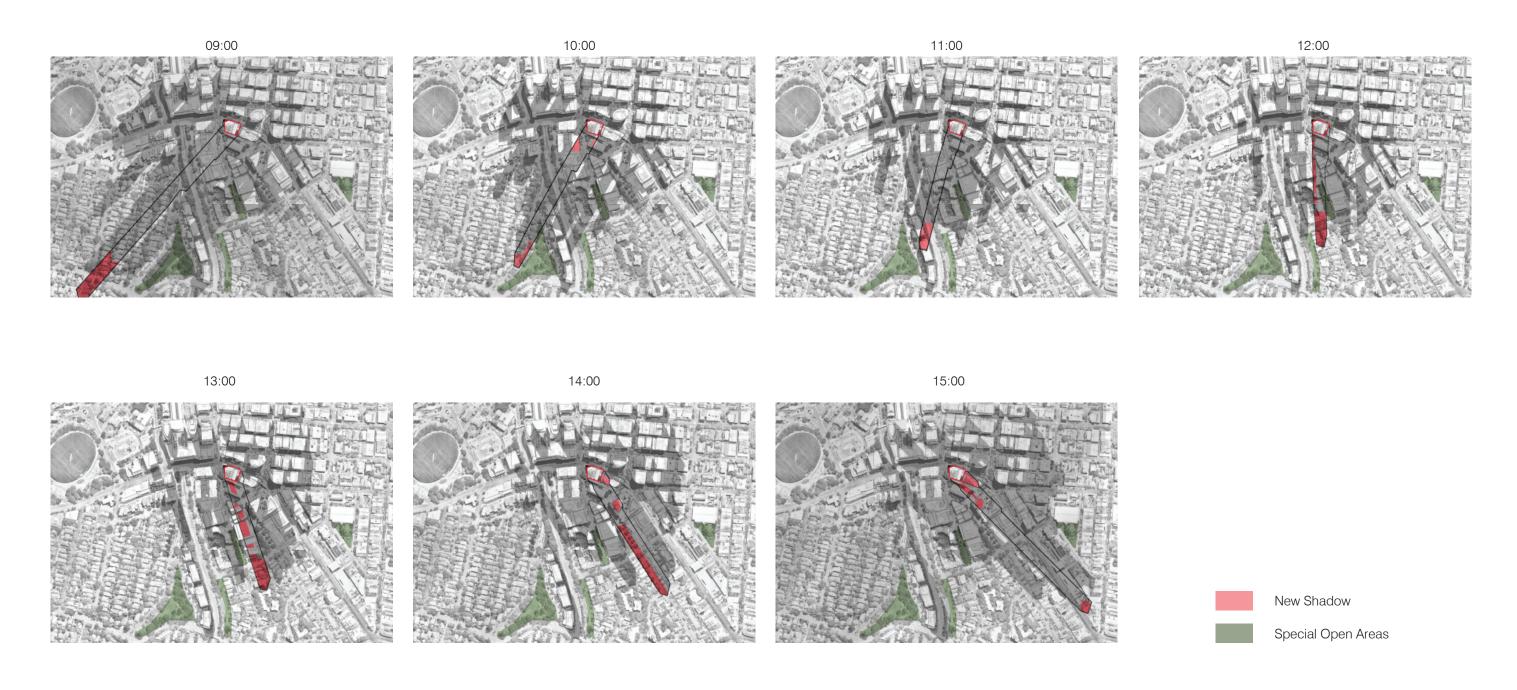
The core design has been carefully developed considering the structural challenges of the site and the limited space next to the Telstra Exchange.

A lift consultant has been engaged to ensure optimal service to all residential apartments and commercial floors:

- Two lifts and a goods lift service the commercial areas with the possibility of a reception lobby on each floor towards Pacific Highway.
- Four conventional residential passenger lifts enable a fast service to all levels.

# AMENITY | PTW

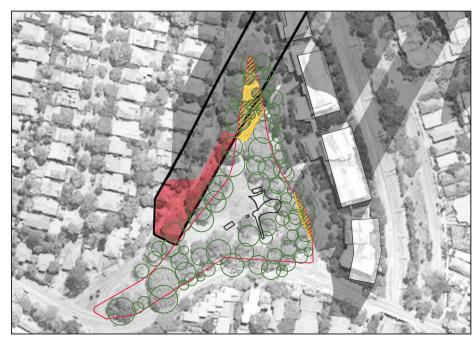
#### **SHADOW STUDIES**



## AMENITY | PTW

#### **SHADOW IMPACT - NEWLANDS PARK**

#### 10:00 AM

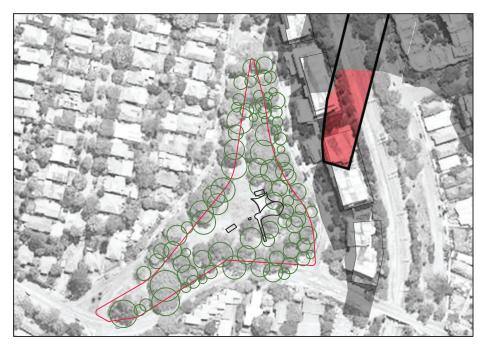


EXISTING SHADOW NEW SHADOW 195m ENVELOPE

OPEN AREA EXISTING SHADOW NEW SHADOW 195m ENVELOPE

8.0%

#### 11:00 AM

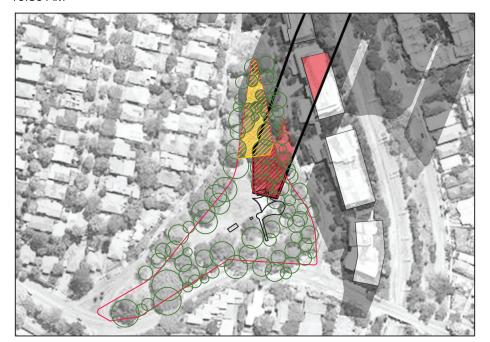


PARK EXISTING SHADOW NEW SHADOW 195m ENVELOPE

0.0%

OPEN AREA EXISTING SHADOW NEW SHADOW 195m ENVELOPE

10:30 AM



PARK AREA EXISTING SHADOW NEW SHADOW 195m ENVELOPE

13.5% 7.8%

OPEN AREA EXISTING SHADOW NEW SHADOW 195m ENVELOPE

11.6%

#### SHADOW IMPACT - NEWLANDS PARK

Solar studies demonstrate no additional overshadowing at times noted.









OPEN AREA 3538 SQM





PARK AREA EXISTING SHADOW



PARK AREA NEW SHADOW 195m ENVELOPE



OPEN AREA EXISTING SHADOW

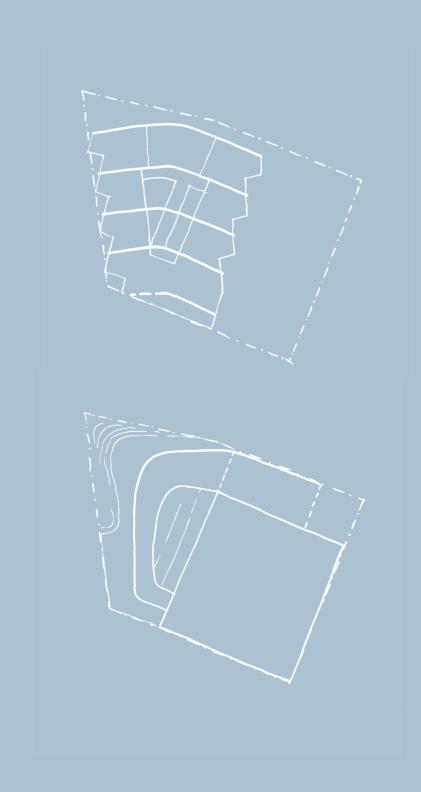


OPEN AREA NEW SHADOW 195m ENVELOPE

#### SUMMARY

LOCATION	SUA DOW CASTING	21-Jun		
LOCATION	SHADOW CASTING	10:00am	10:30am	11:00am
PARK	EXISTING SHADOW	9.5%	13.5%	0.0%
	PROPOSED SHADOW 195m ENVELOPE	0.0%	7.8%	0.0%
OPEN AREA	EXISTING SHADOW	8.0%	11.6%	0.0%
	PROPOSED SHADOW 195m ENVELOPE	0.0%	0.0%	0.0%

6. Appendices



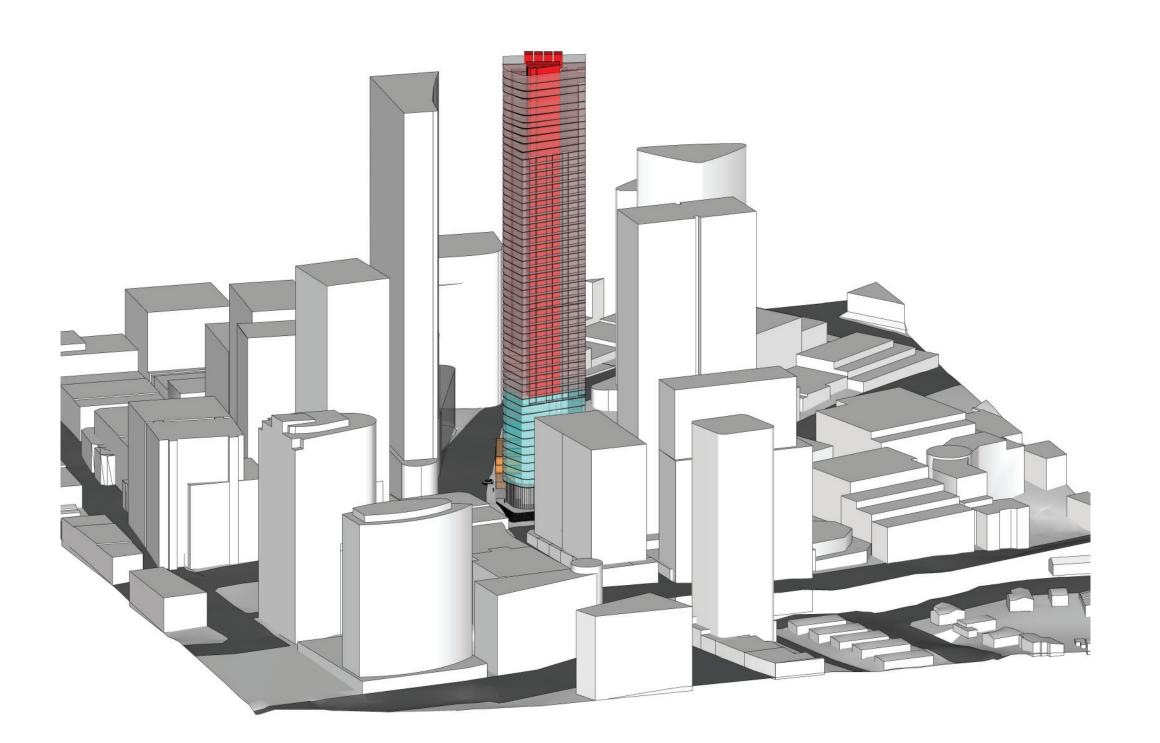
# ARCHITECTURAL DRAWINGS | PTW

#### **SITE ANALYSIS - GFA CALCULATIONS**

1671.7 Site Area (sqm) Building height with plant/ lift overrun (m) 194.80

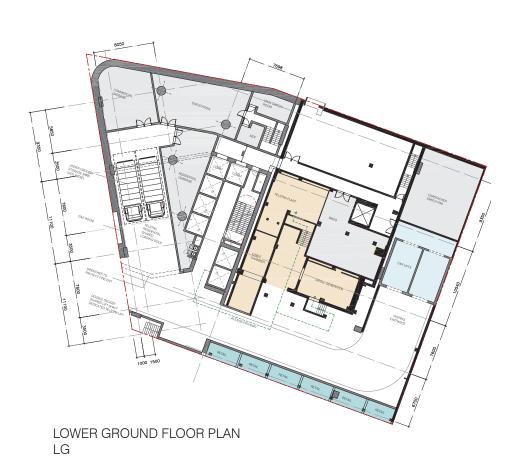
	Comm*	Resi	Telstra	Total
No. Floors	12	45	5	57
GFA	6914.0	31759.0	83.0	38756.0
FSR	4.1	19.0		23.2
Apartment No.		366		
Unit Mix:	30% 1bed, 65% 2bed, 5% 3bed			

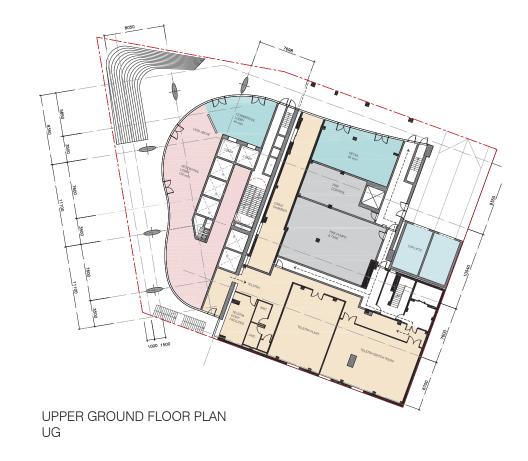
<sup>\*</sup> measured from lower ground floor



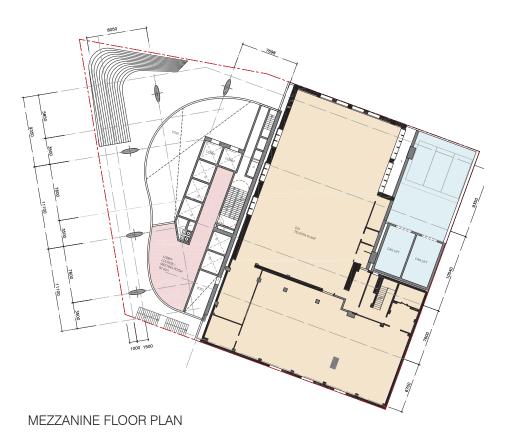
Residential Apartments/ Lounge Commercial/ Retail/ Gym/ Childcare Telstra Exchange Core

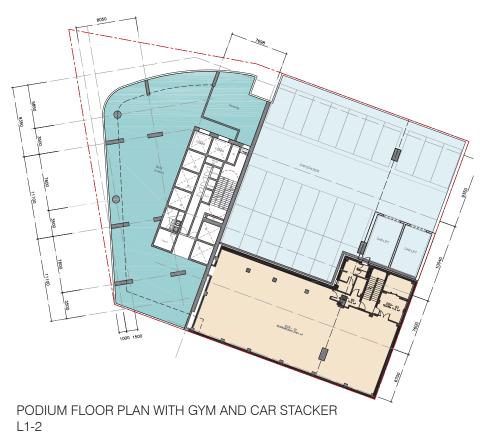
## ARCHITECTURAL DRAWINGS PTW **TYPICAL FLOOR PLATES**







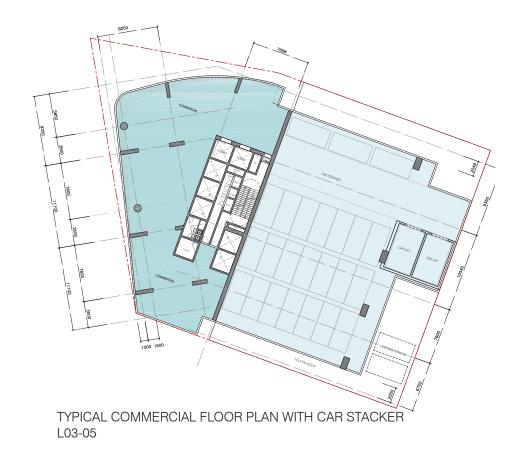


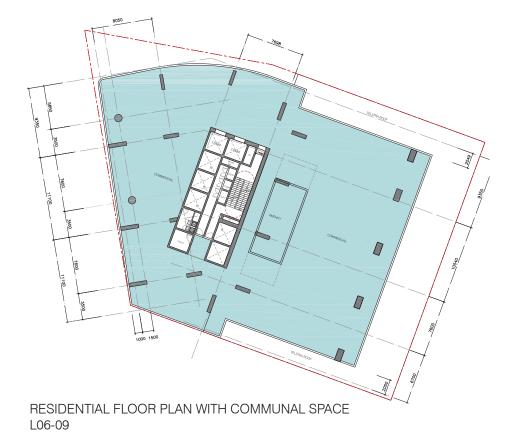




# ARCHITECTURAL DRAWINGS PTW

#### **TYPICAL FLOOR PLATES**





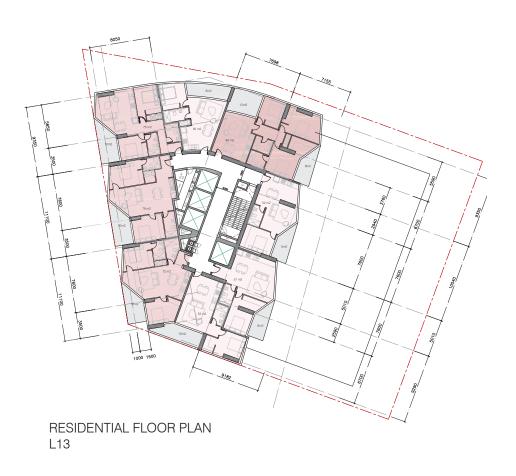


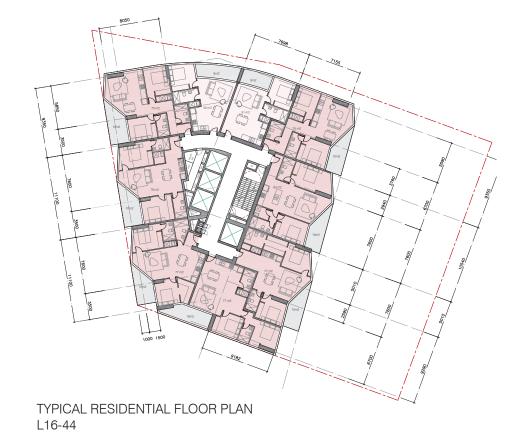


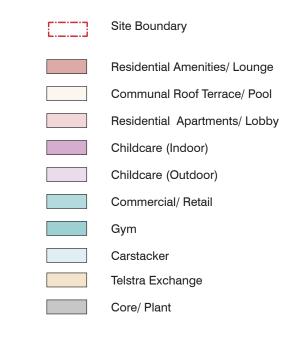




## ARCHITECTURAL DRAWINGS PTW **TYPICAL FLOOR PLATES**

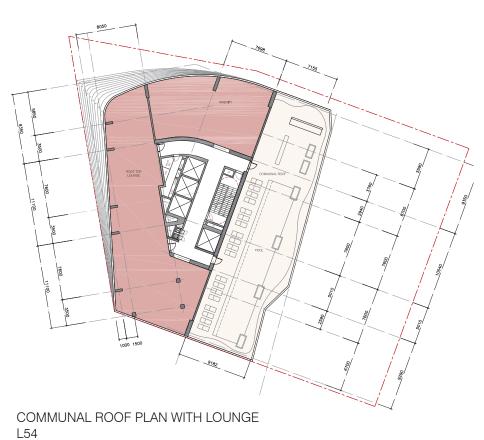






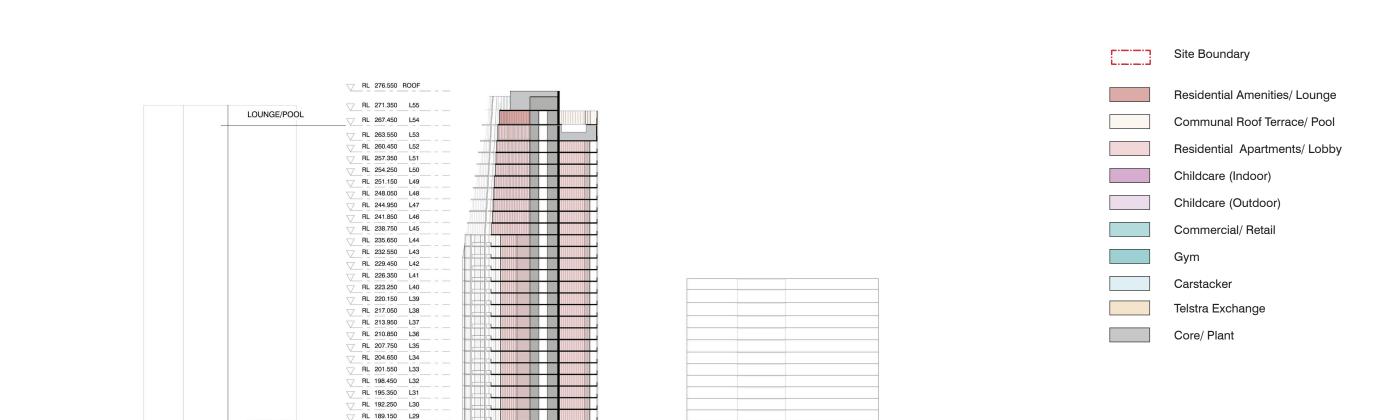


L52

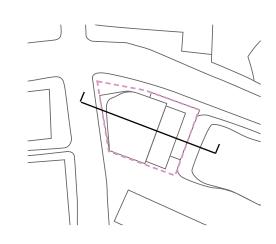




### ARCHITECTURAL DRAWINGS **SECTION**



RL 110.350 P10
RL 108.150 P09
RL 105.950 P08
RL 103.750 P07
RL 101.550 P06
RL 99.350 P05
RL 96.550 P04
RL 94.350 P03
RL 92.150 P02
RL 89.950 P01



SECTION SCALE: 1:1000

RESIDENTIAL

43 STOREYS

CHILD CARE

COMMERCIAL / CAR STACKER

LOBBY

LOADING DOCK

RL 186.050 L28

RL 182.950 L27 RL 179.850 L26 RL 176.750 L25 RL 173.650 L24 RL 170.550 L23 RL 167.450 L22 RL 164.350 L21 RL 161.250 L20 RL 158.150 L19 RL 155.050 L18 RL 151.950 L17 RL 148.850 L16 RL 145.750 L15 RL 142.650 L14 RL 139.550 L13 RL 136.450 L12 RL 132.550 L11

RL 128.950 L10 RL 125.350 L09 RL 121.750 L08 RL 118.150 L07 RL 114.550 L06

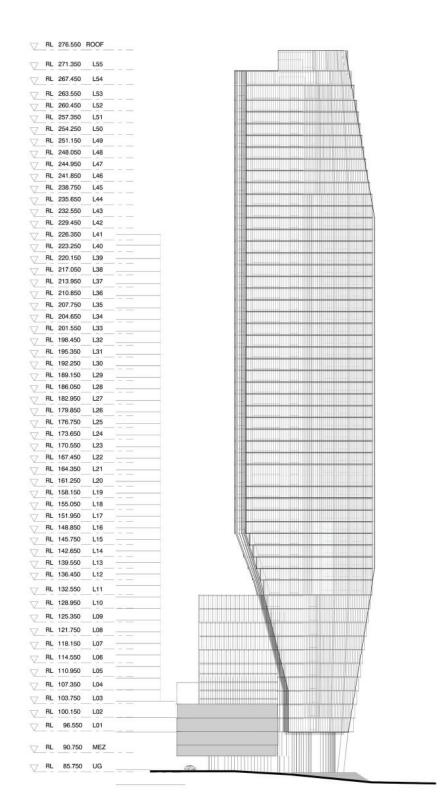
RL 110.950 L05

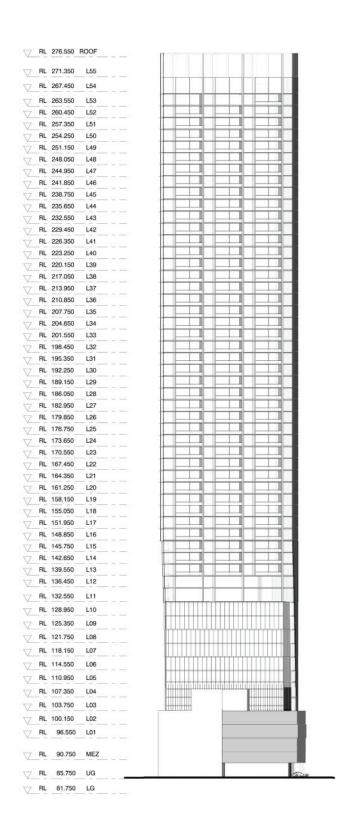
RL 107.350 L04 RL 103.750 L03 RL 100.150 L02

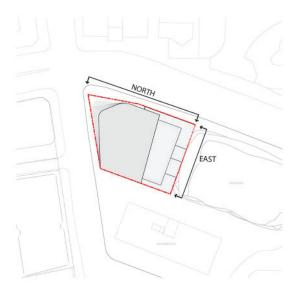
RL 90.750 MEZ

RL 85.750 UG

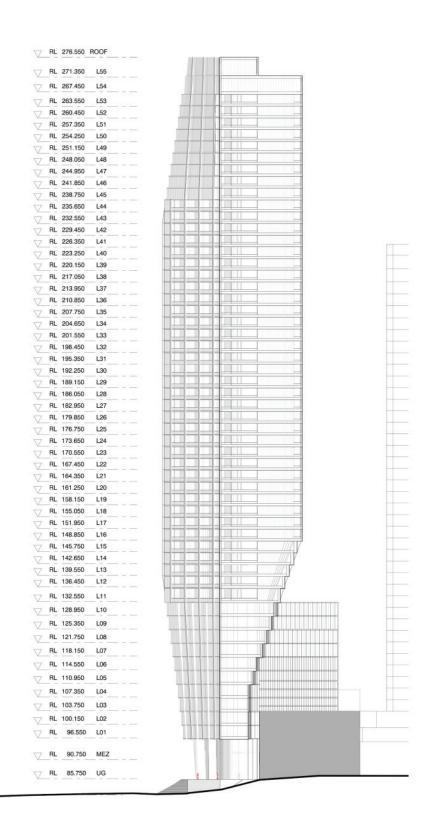
RL 81.750 LG

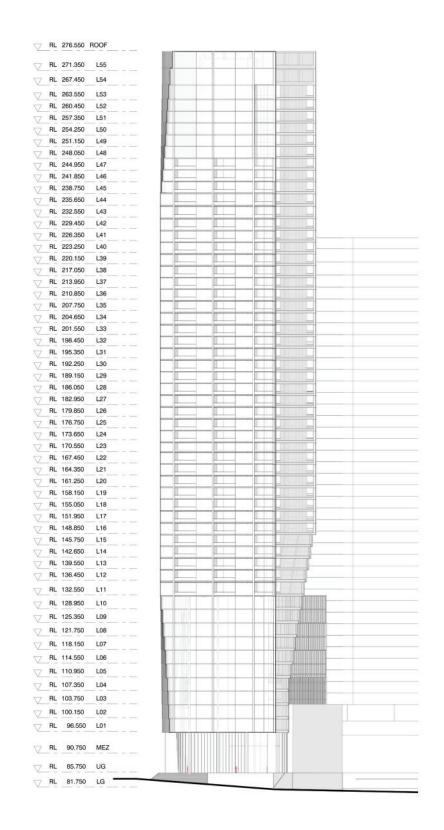






### ARCHITECTURAL DRAWINGS | PTW **ELEVATIONS**







SOUTH ELEVATION - PUBLIC LINK WEST ELEVATION - CHRISTIE STREET SCALE: 1:1000