TELSTRA EXCHANGE SITE

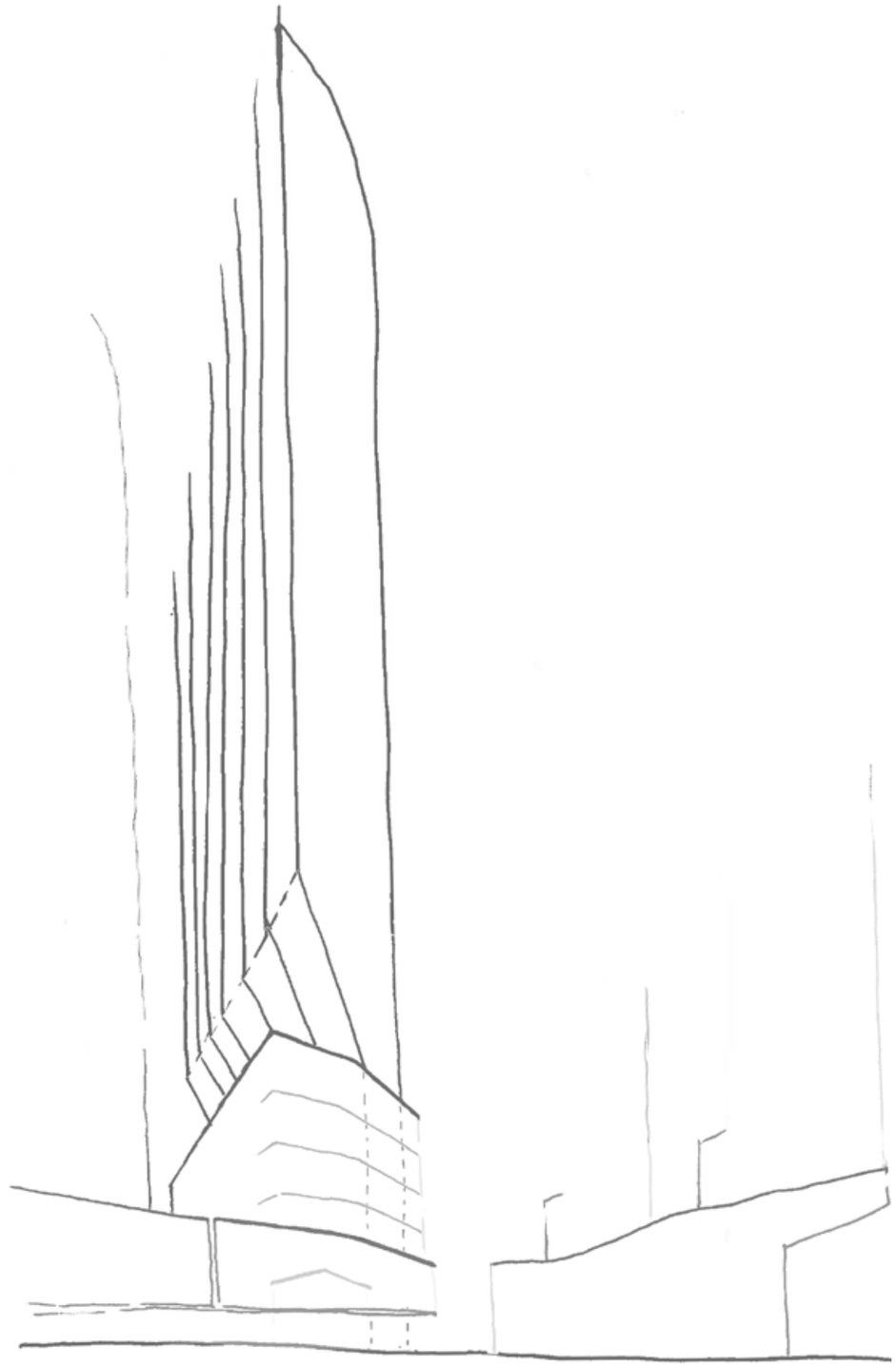
ST LEONARDS

524-542 Pacific Highway

CONCEPT DESIGN REPORT

PREPARED FOR GROCON
2016.12.15

PTW



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TELSTRA EXCHANGE SITE

524-542 PACIFIC HIGHWAY, ST LEONARDS

CONCEPT DESIGN REPORT

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PREPARED BY:	PTW ARCHITECTS
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CONTENT

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 Sydney
- The existing and future connectivity and uses of the sites’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

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 JBA.

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 co-existing in the immediate vicinity of public open space, community services, high-amenity retail and key public transport infrastructure.

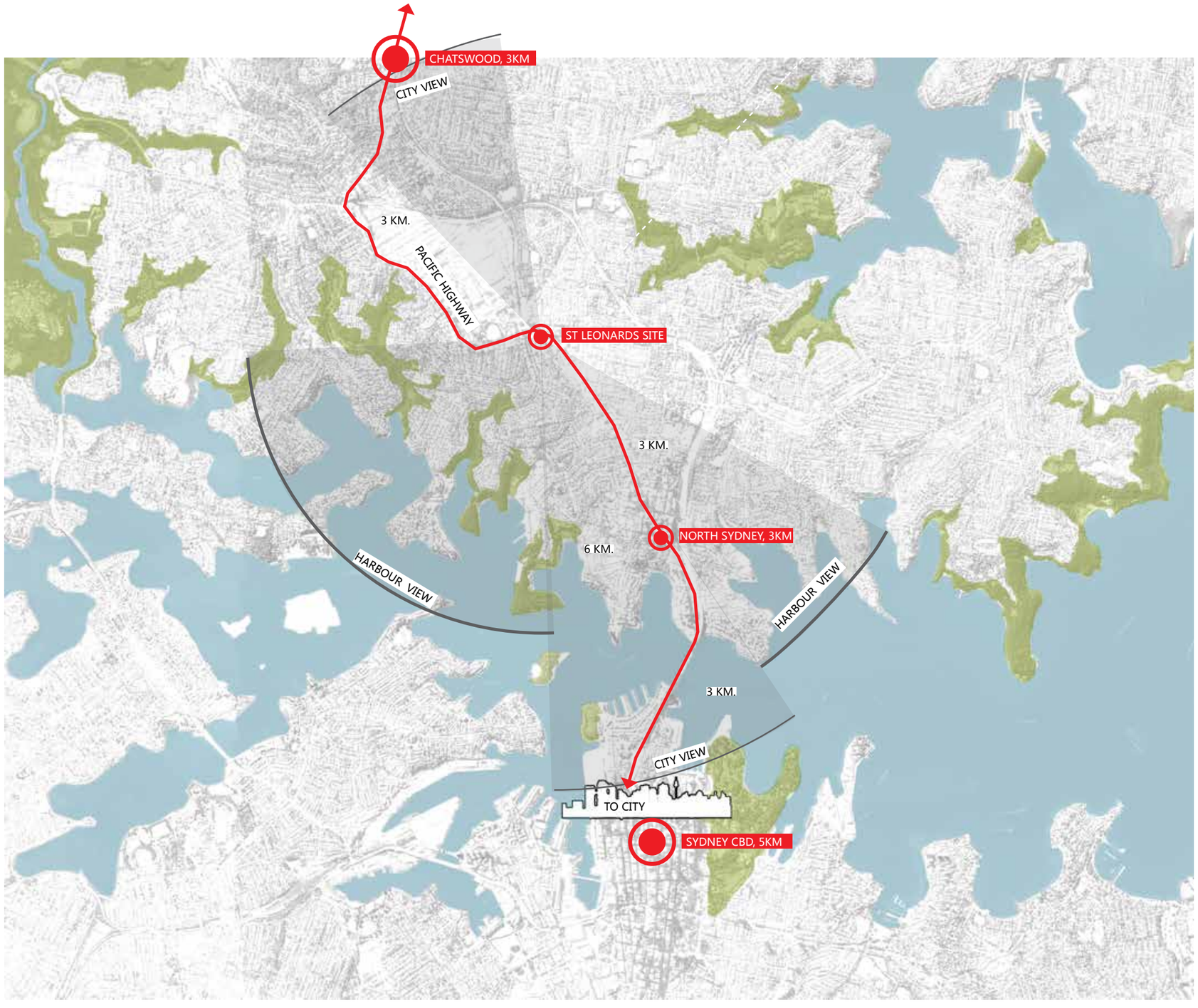
Located just 50 m from St Leonards Station and 350 m from the new Crows Nest Metro Station, the Telstra Exchange site is one of few significant land holdings in Sydney to be within 400 m of two heavy rail stations. The new Metro link will substantially improve the area's already first rate access to 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

REGIONAL CONTEXT



ST LEONARDS: IN CONTEXT WITHIN THE SYDNEY METROPOLITAN AREA.

REGIONAL CONTEXT

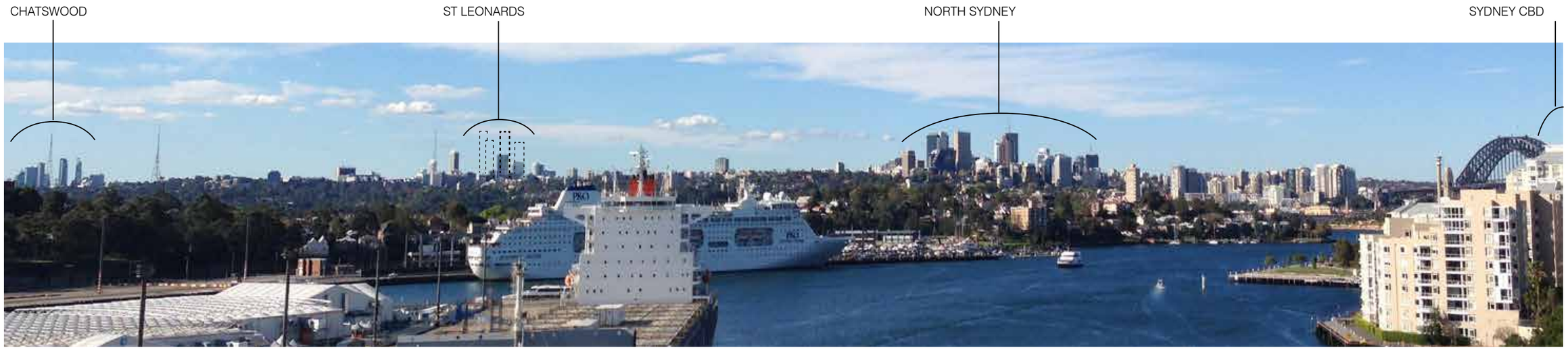
The ridge of the north shore of Sydney extends from Milsons Point through to Hornsby. The Pacific Highway generally follows this ridge along its length with the journey along the highway defined by the urban centres of North Sydney, St Leonards, Chatswood and Hornsby which each of has undergone significant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

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:

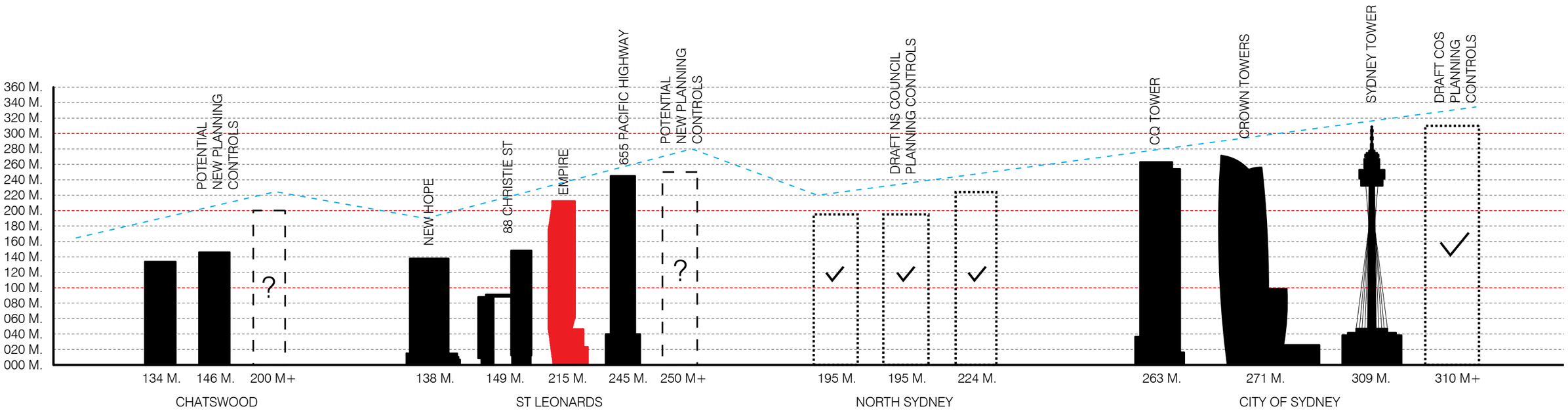
- The St Leonards Forum retail
- Royal North Shore Hospital
- Willoughby Road / Crows Nest
- North Sydney TAFE

STRATEGIC CENTRES OF THE NORTH SHORE



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

HEIGHTS ANALYSIS - NORTH SHORE



CQ TOWER, SYDNEY CBD

655 PACIFIC HIGHWAY, ST LEONARDS

88 CHRISTIE ST, ST LEONARDS

CROWN TOWER, BARANGAROO

NORTH SHORE BUILDING HEIGHTS

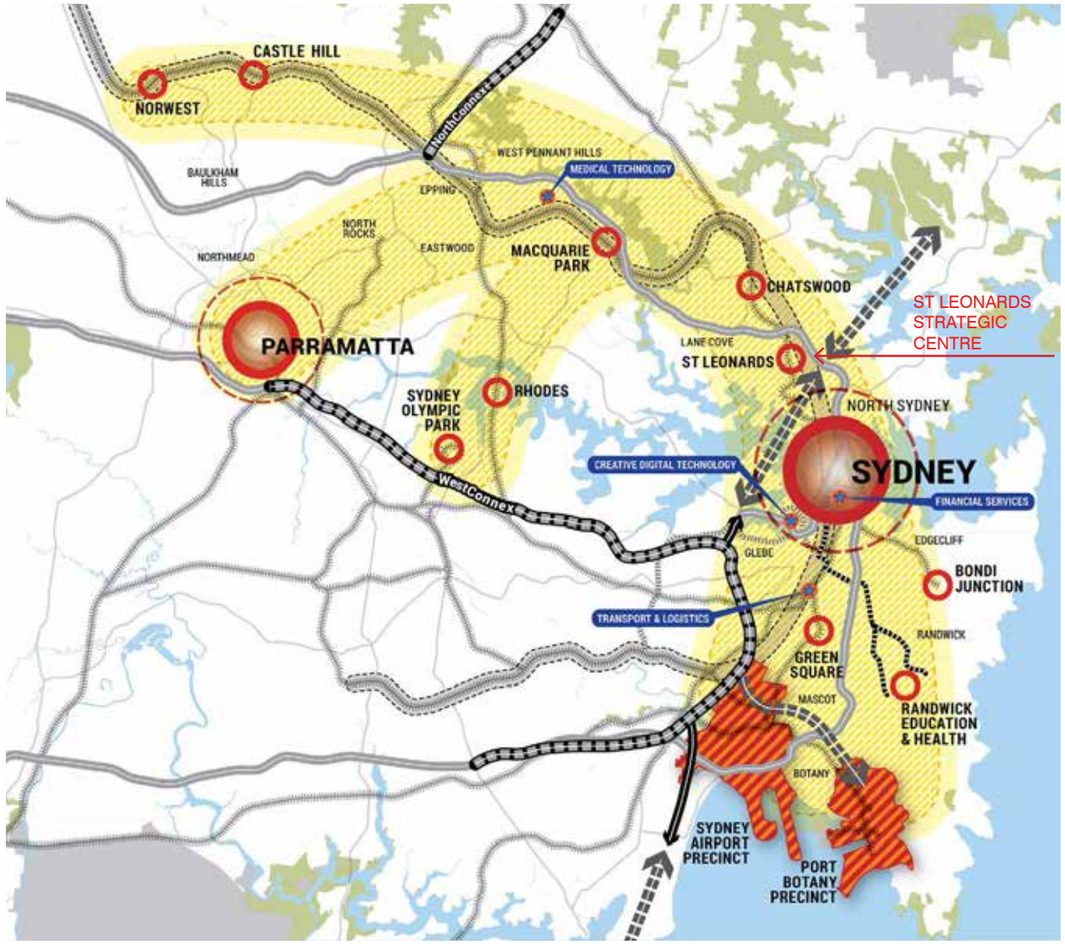
The built form presented in this Proposal has been informed by the existing and future development landscape at St Leonards as well as the Centre's place in the regional context of Sydney's Lower North Shore. Whilst all of these Centres are seeking to grow, some are restricted by significant environmental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

North Sydney Council recently released amended draft planning controls for the North Sydney CBD, with a maximum height of 225 m. This amendment, however, was based on modelling that prohibits any net overshadowing of areas outside of the CBD between the hours of 10 am and 2 pm. It is understood that Willoughby Council is also currently reviewing height controls for the Chatswood CBD, but again, key shadowing constraints restrict a number of significant opportunities for the Centre.

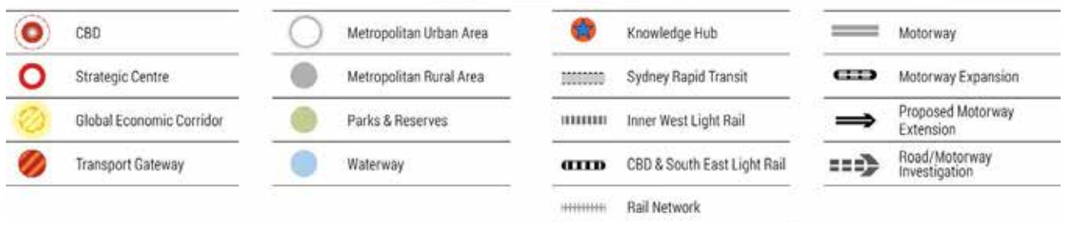
Clearly the proximity of the adjoining residential areas (including heritage areas and items) is a significant constraint to the future growth (and commensurate height) in both locations. The potential for adverse environmental impact are not present in the same way at St Leonards or, more specifically, 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 250 m could be accommodated without significant environmental impact.

A PLANNING FOR GROWING SYDNEY - NORTH REGION DISTRICT PLAN



PLAN FOR GROWING SYDNEY: ST LEONARDS STRATEGIC CENTRE



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 one of 28 Strategic Centres, 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.

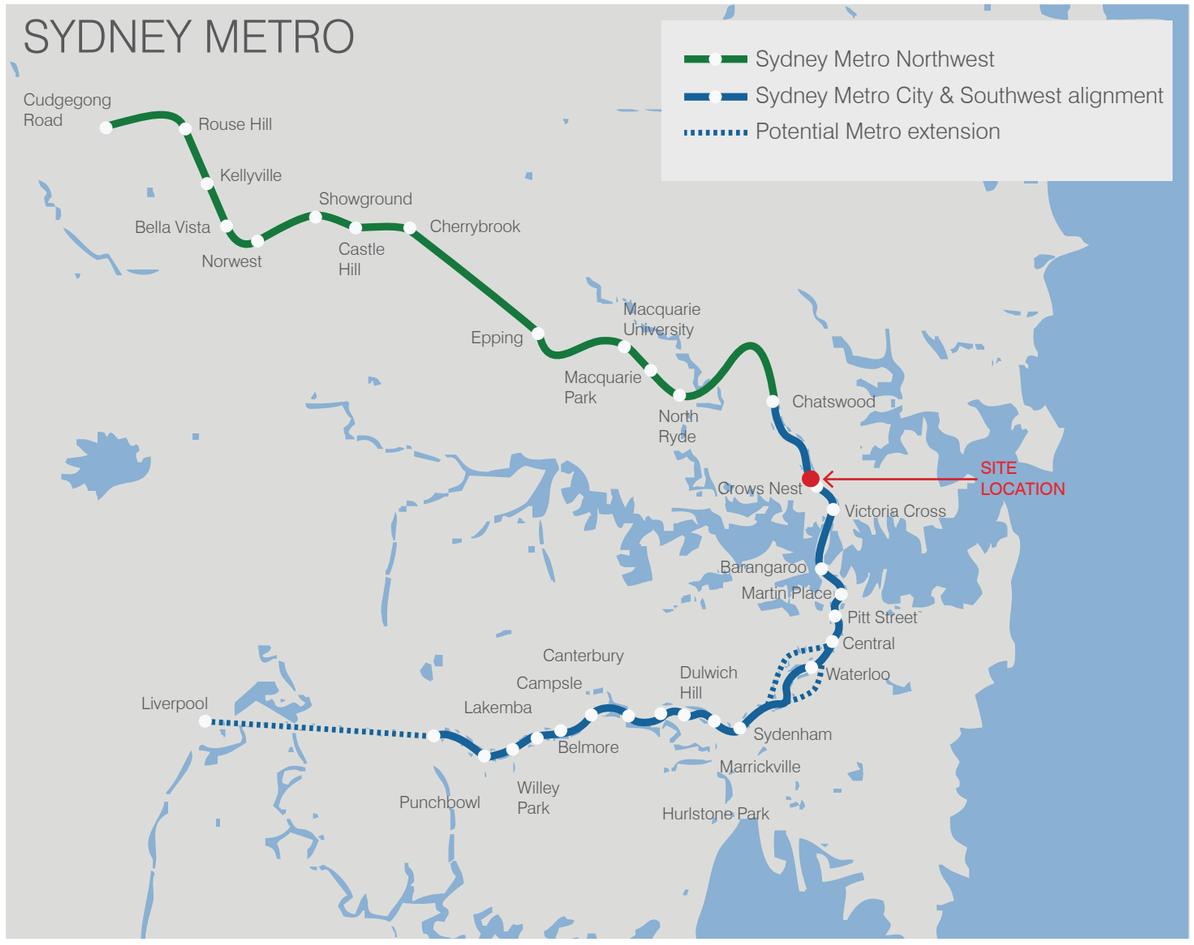
GREATER SYDNEY COMMISION DISTRICT PLANS - NORTH REGION

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

Action P4 of the District Plan is to 'Facilitate place making and the growth and diversification of job opportunities in St Leonards'. Planning for the area will include considerations to:

- Leverage off the new Sydney Metro station at Crows Nest to deliver additional employment and residential capacity
- Identify actions to grow jobs in the centre
- Reduce the impact of vehicle movements on pedestrian and cyclist accessibility
- 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

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 peak times.

The Department of Planning & Environment is working with Lane Cove, North Sydney and Willoughby City Councils to undertake a strategic planning investigation of the St Leonards and Crows Nest Station Precinct. The investigation will respond to the actions identified in this Plan, including ways to maintain employment in the area, provide new homes, shops, cafes and open space and maximise the great access to public transport.

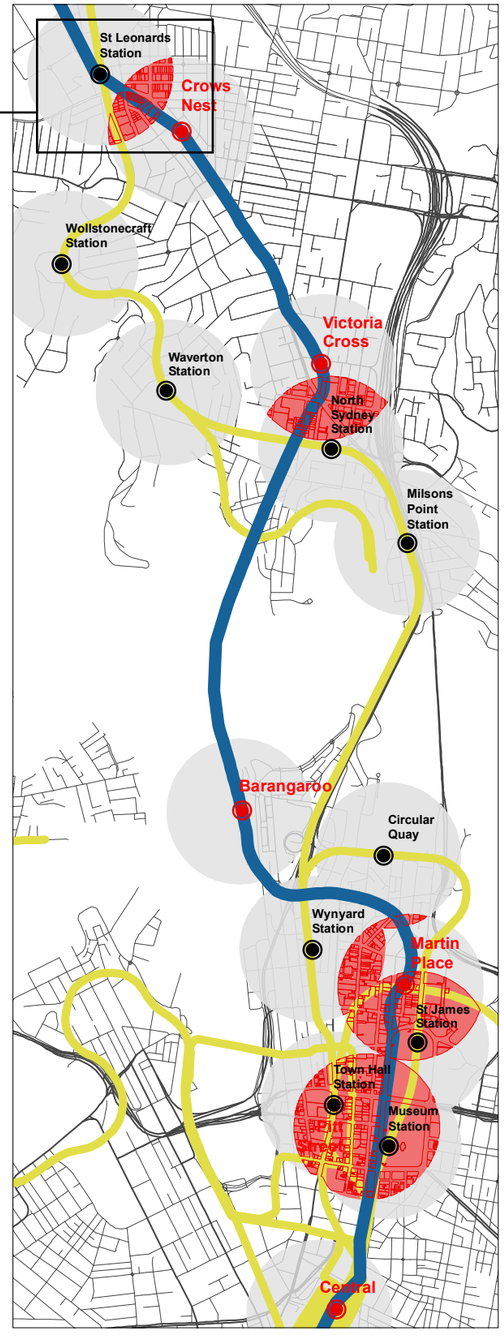
BARANGAROO STATION

CROWS NEST STATION

MARTIN PLACE STATION

SCALE: N/A

TRANSIT ORIENTED DEVELOPMENT



- Site
- Bus route
- Future Bus Interchange
- Train line
- Train Station
- Crows Nest Station
- Hospital

- Existing Railway Line
- Proposed Sydney Metro Station
- Sydney Metro Line
- Existing Railway Line
- 400 Meters Area Between Train Station and Future Metro
- Train Station and Future metro 400m buffer

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.

SCALE: N/A

SURROUNDING LAND USES

- Site
- Commercial
- Predominantly Commercial
- Mixed Use
- Education
- Hospital
- Low Residential
- Medium to High Residential

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.

88 CHRISTIE ST

ROYAL NORTH SHORE HOSPITAL NEW BUILDING

ST LEONARDS SQUARE, NEW HOPE

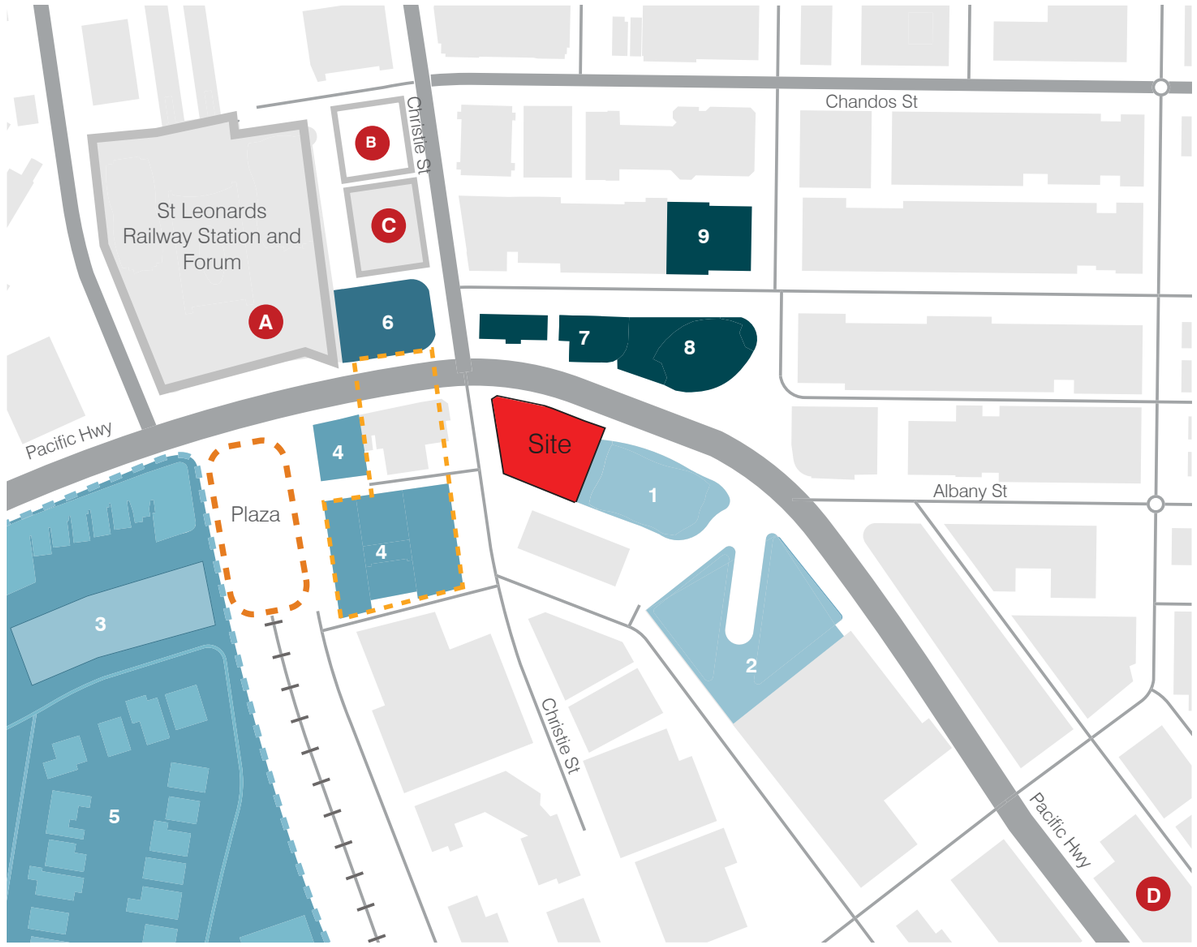
2. Transformation of Precinct

CURRENT

FUTURE

TRANSFORMATION OF PRECINCT | PTW

DEVELOPMENT OF ST LEONARDS PRECINCT



- Approved
- Approved for RPA Implementation
- Pending
- Tall Towers
- Proposed underground connection
- Future St Leonards Plaza / Bus Interchange

KEY SITES

- A St Leonards Train Station
- B Christie Street Reserve
- C 100 Christie Street
- D Future Crows Nest Metro Station

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 year.

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.

REZONING PROPOSALS

Approved

1. New Hope, 500-520 Pacific Hwy - 139m
2. St Leonards Square, 486 Pacific Hwy - 91-115m
3. 1-13A Marshall Ave - 94m

Approved for RPA Implementation

4. 88 Christie St.- 92-147m
5. St Leonards South Master Plan – rezoned R2 -> R4

Pending

6. 655 Pacific Hwy, Charter Hall - 200-245m

Tall Towers Sites

7. 617-621 Pacific Hwy
8. 601 Pacific Highway [IBM]
9. 20-22 Atchison St

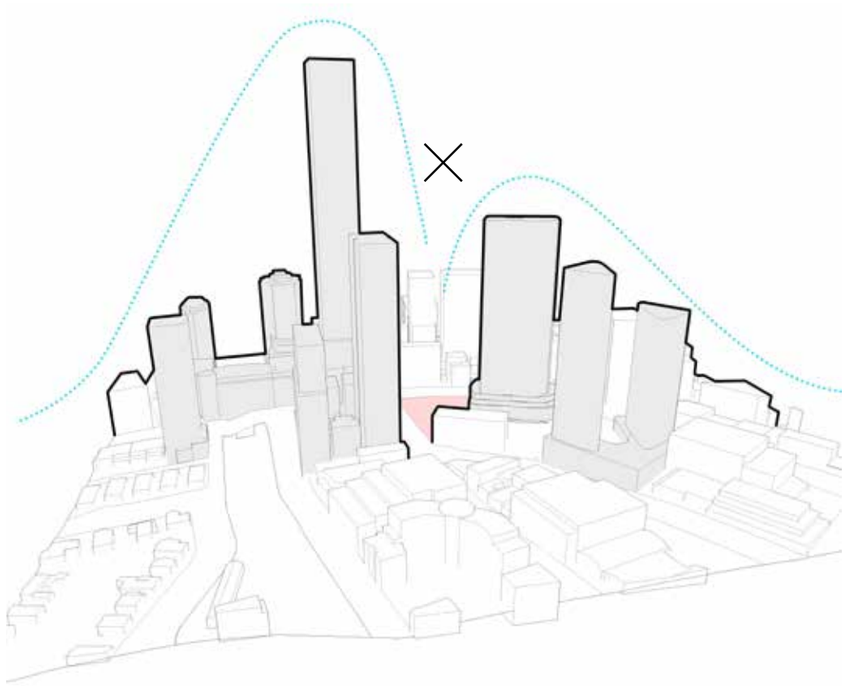
SCALE: N/A

COMPLETING THE ST LEONARDS SKYLINE

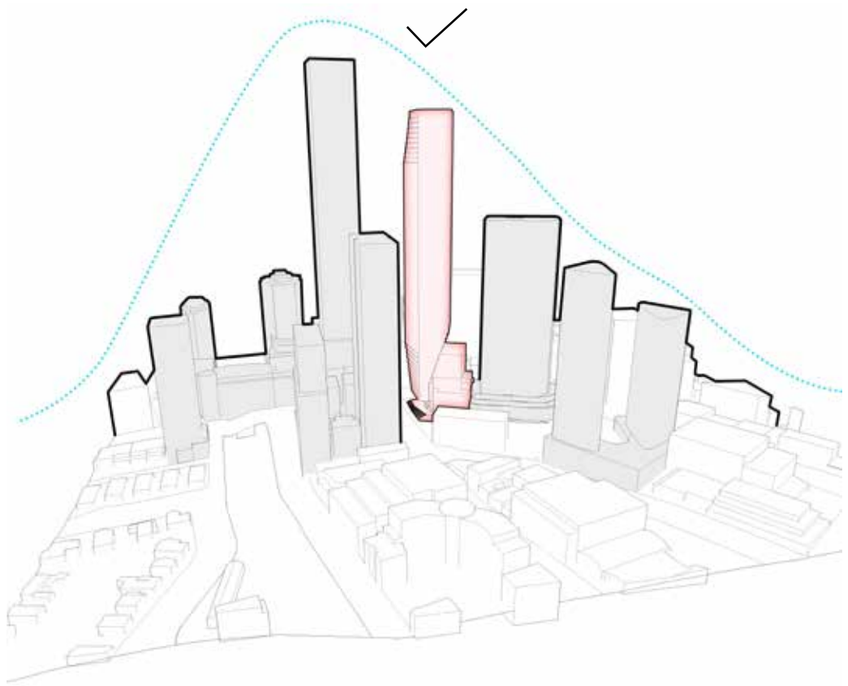
PROFILE OF ST LEONARDS

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.

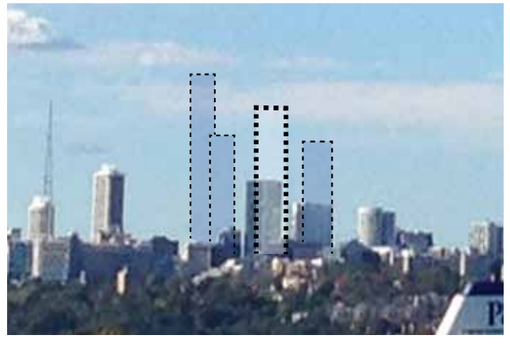
The Telstra Exchange site is centrally located within the future development context of the Centre and as such is perfectly located to accommodate a taller building form, stepping up towards the centre of the Precinct. The proposal in its scale, proportion and form will provide a focus for the St Leonards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



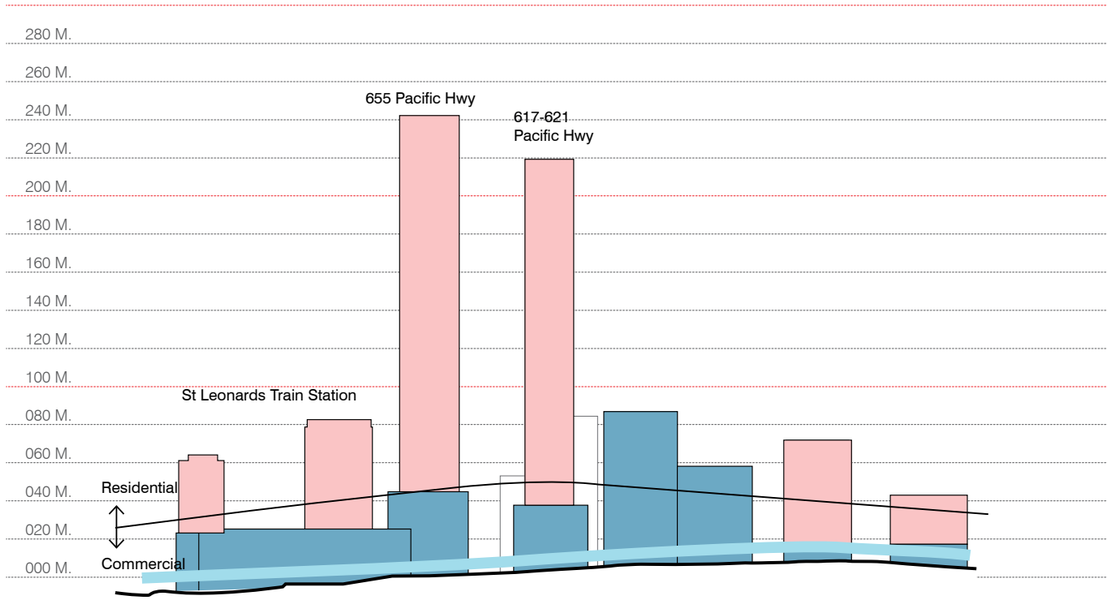
CURRENT



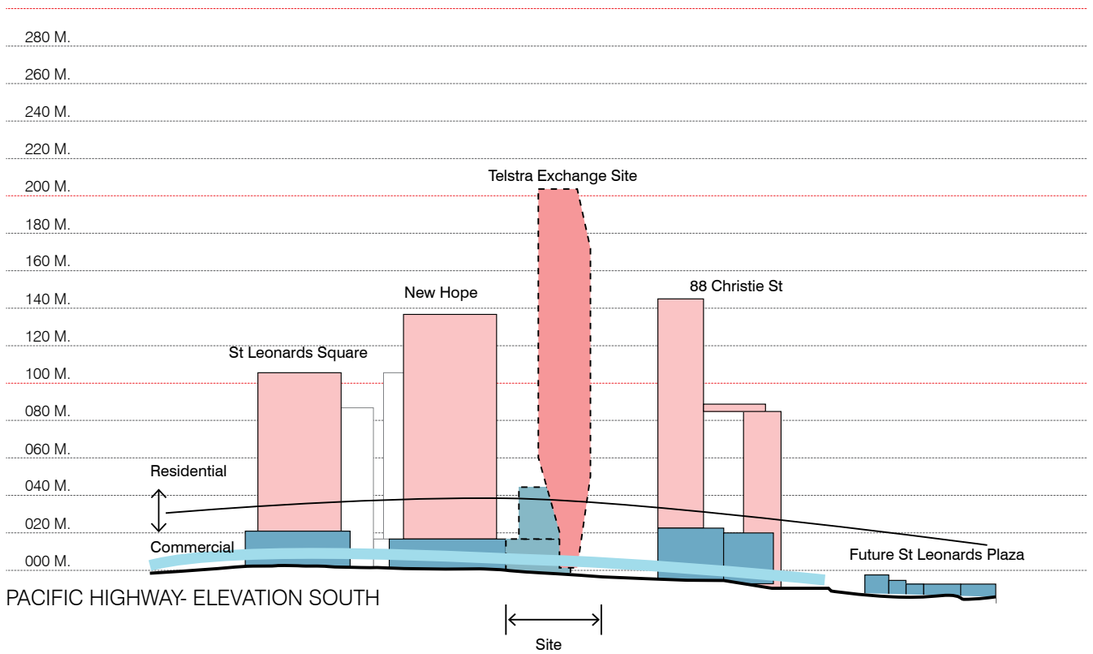
FUTURE



PATTERN OF COMMERCIAL + RESIDENTIAL ALONG PACIFIC HIGHWAY



PACIFIC HIGHWAY - ELEVATION NORTH



PACIFIC HIGHWAY- ELEVATION SOUTH

PATTERN OF COMMERCIAL AND RESIDENTIAL ALONG PACIFIC HIGHWAY

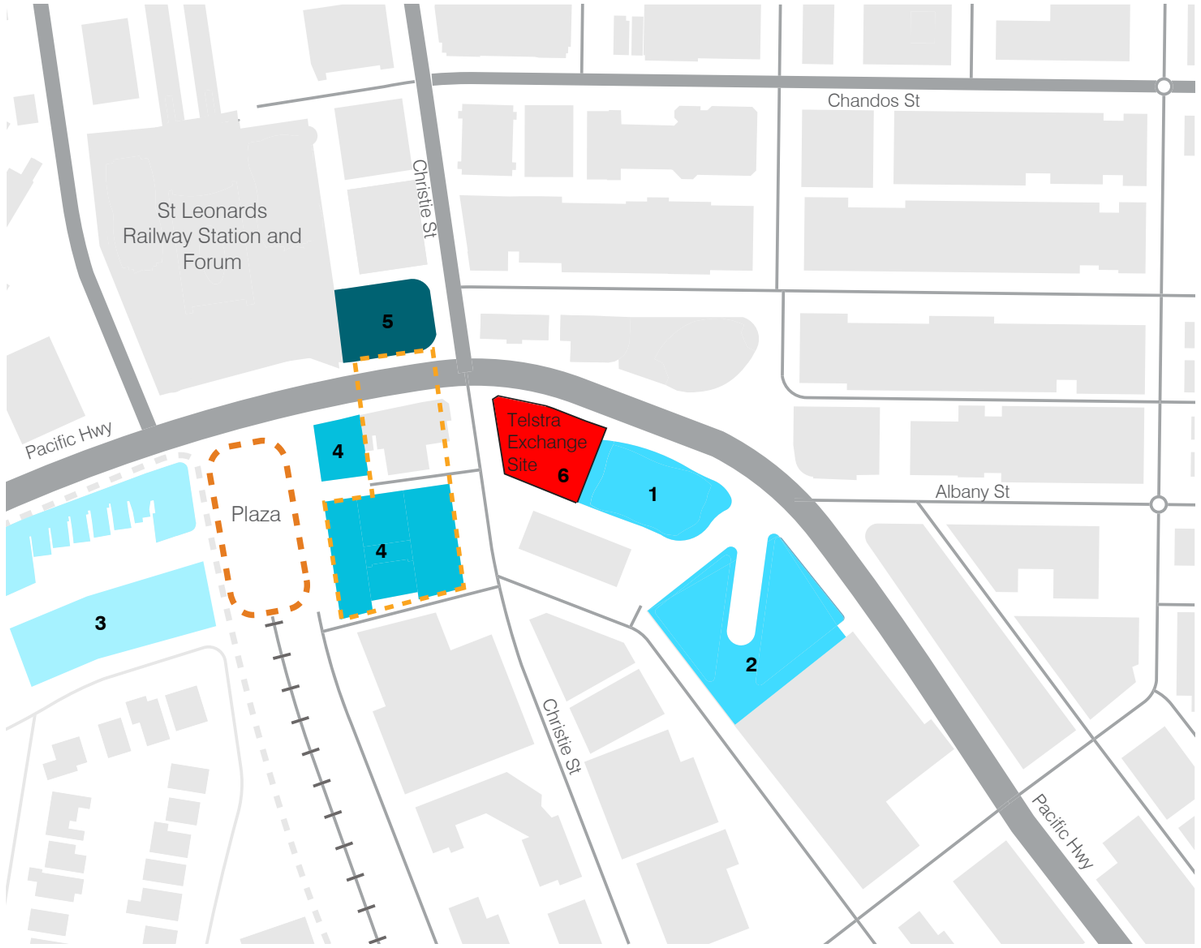
The stretch of the Pacific Highway as it passes through the St Leonards CBD has historically been populated by predominately low-to-medium scale commercial buildings. Many buildings in the immediate vicinity of the station along both sides of the Highway are now evolving to incorporate a mix of uses, 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 tower.

SCALE: N/A

TRANSFORMATION OF PRECINCT | PTW

PROVISION OF COMMERCIAL FLOOR SPACE



- 0%
- 0 - 5 %
- 6 - 10 %
- 11 - 15 %
- 16 - 20 %
- 21 %

KEY SITES

1. Leighton - 138m
2. Charter Hall 91-115m
3. Marshall - 94m
4. 88 Christie - 92-147m
5. 655 Pacific Hwy - 200-245m
6. Telstra Exchange Site

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.

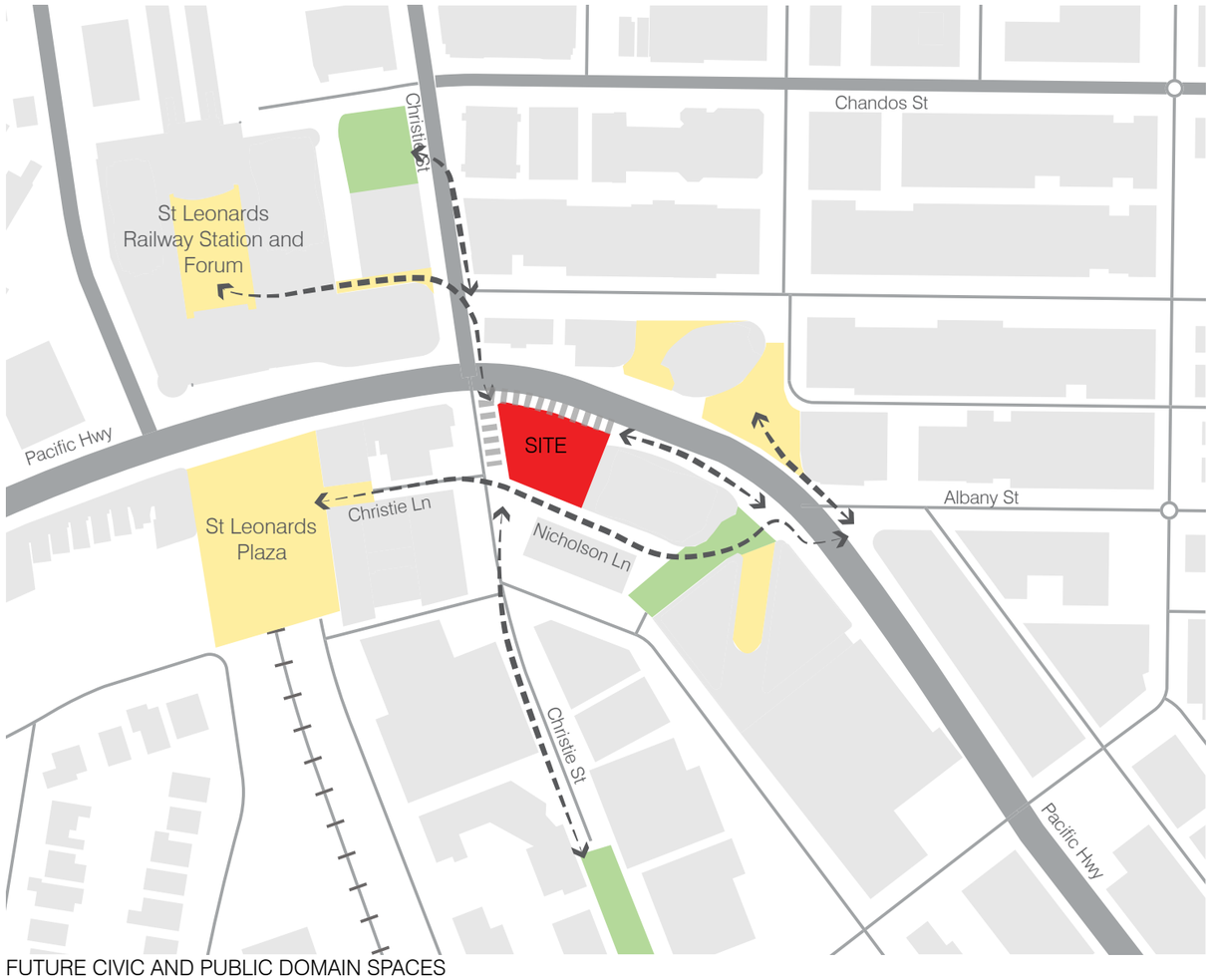
PLANNING PROPOSALS AT ST LEONARDS

	1. Leighton	2. Charter Hall	3. Winten	4. Loftex	5. 655 Pac Hwy	6. Telstra Site
Residential	46,110	30,195	62,822.00	24,944.00	25,590.00	33,868
Commercial	3,750	2,350	8,305.00	327.00	10,340.00	7,309
Total	49,860	32,545	71,127.00	25,271.00	35,930.00	41,177
No. of Commercial Storeys	2-4	3	3	3	12	12
Commercial GFA as a % of total GFA	7.52%	7.22%	11.68%	1.29%	28.78%	17.8%
LGA	Lane Cove	Lane Cove	Lane Cove	Lane Cove	North Sydney	Lane Cove

SCALE: N/A

TRANSFORMATION OF PRECINCT | PTW

FUTURE CIVIC AND PUBLIC DOMAIN SPACES



Existing and future civic space

Existing and future green space

Pedestrian connection

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

ST LEONARDS SQUARE

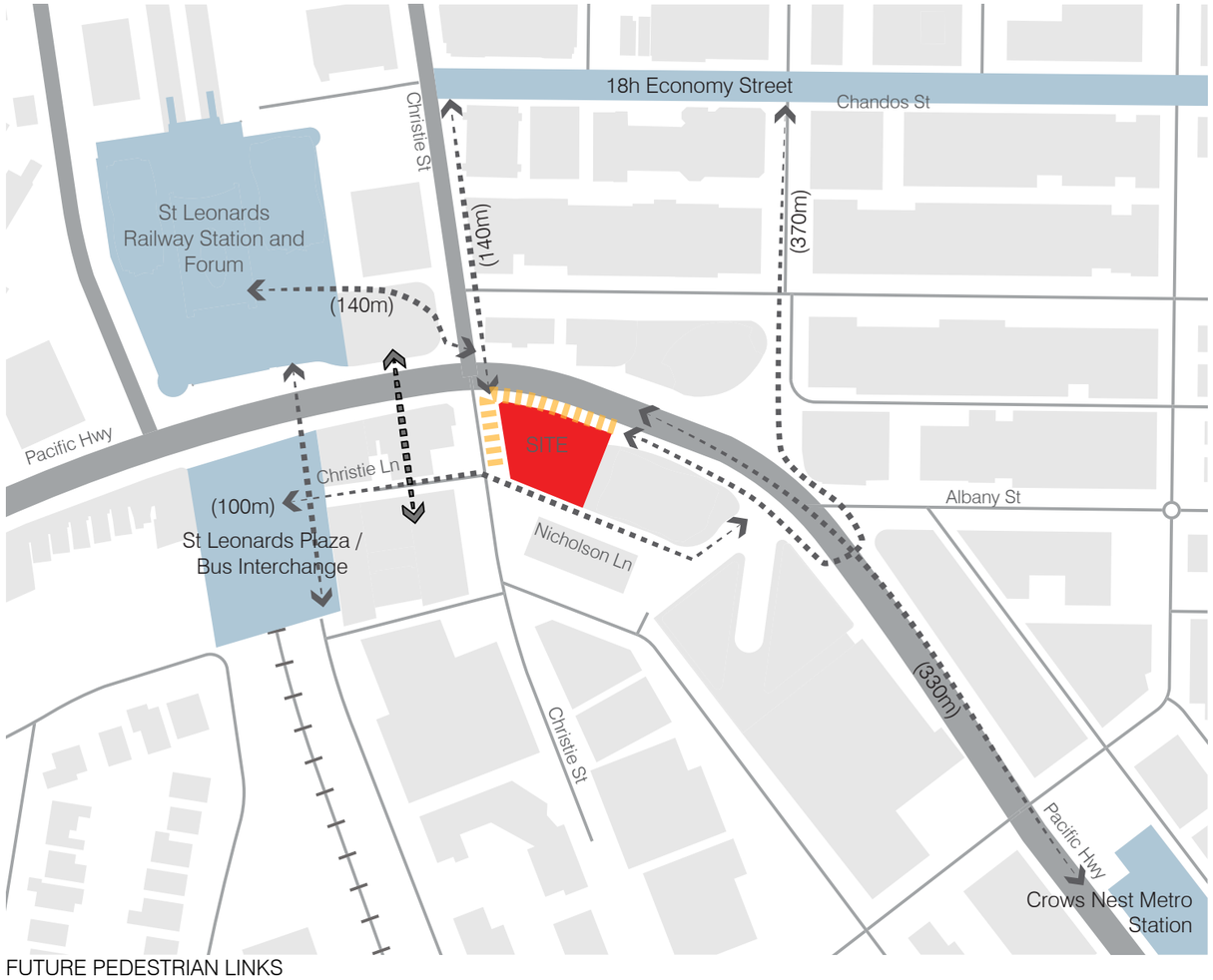
NICHOLSON LANE

ST LEONARDS PLAZA

SCALE: N/A

TRANSFORMATION OF PRECINCT | PTW

FUTURE PEDESTRIAN LINKS



Existing and future main points of destination

Pedestrian connection

Underground pedestrian connection

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

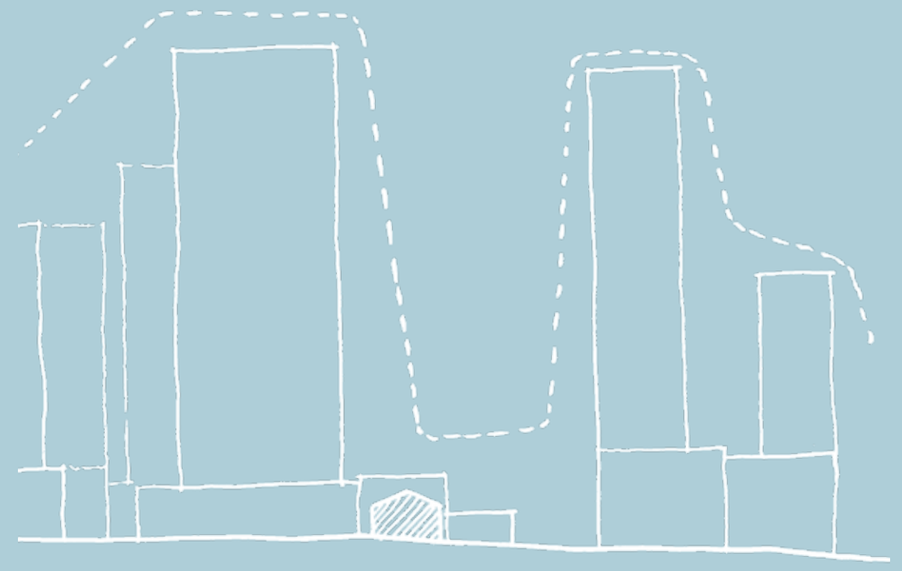
CHRISTIE LANE

PACIFIC HIGHWAY NEW COMMERCIAL SPACES

ST LEONARDS BUS INTERCHANGE

SCALE: N/A

3. Site Constraints and Opportunities




CHRISTIE LANE
Proposed Underground Link
Underground Link

SITE CONSTRAINTS AND OPPORTUNITIES | PTW

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)

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 south.

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 Street.

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.

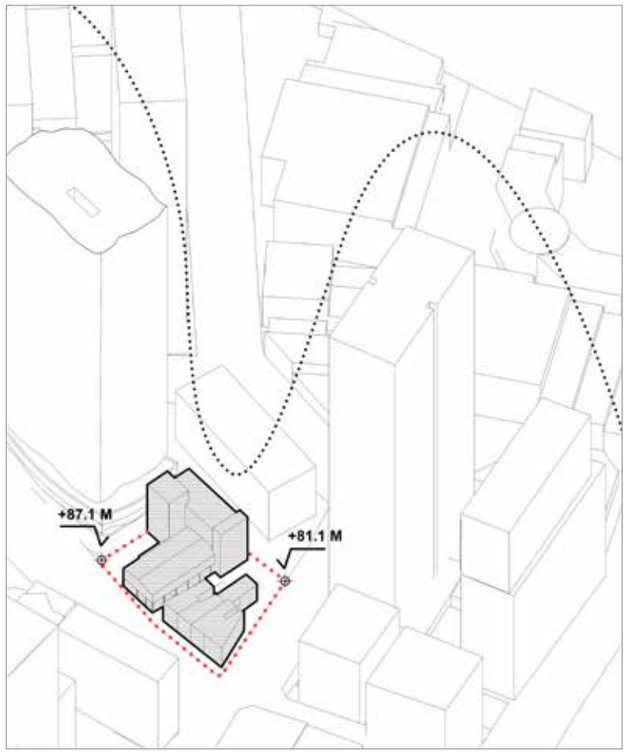
LOW SCALE RETAIL FACING CORNER OF PACIFIC HIGHWAY AND CHRISTIE STREET

NARROW FOOTPATH ALONG TELSTRA EXCHANGE FACADE

TELSTRA EXCHANGE STREET FRONTAGE TO PACIFIC HIGHWAY

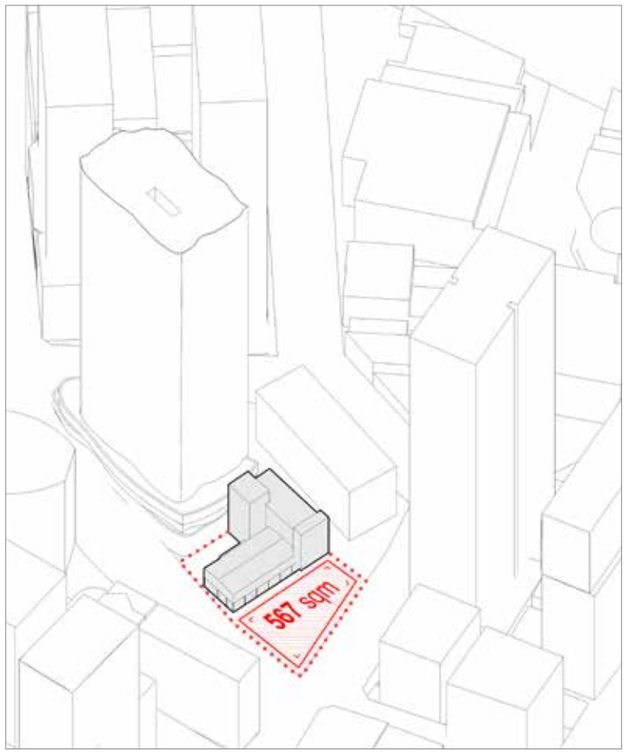
OPPORTUNITY

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.



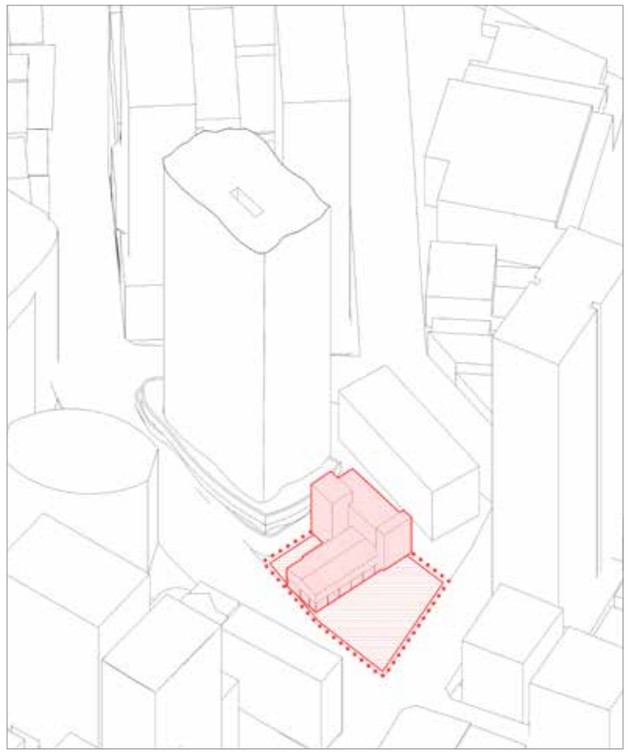
ISSUES OF EXISTING SITE AND BUILDINGS

- 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



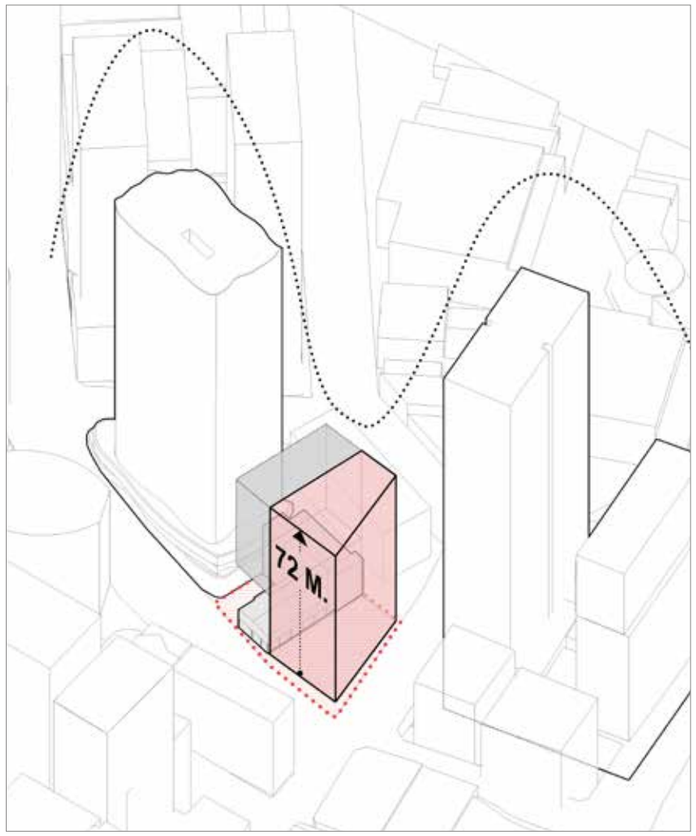
AVAILABLE SITE AREA

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



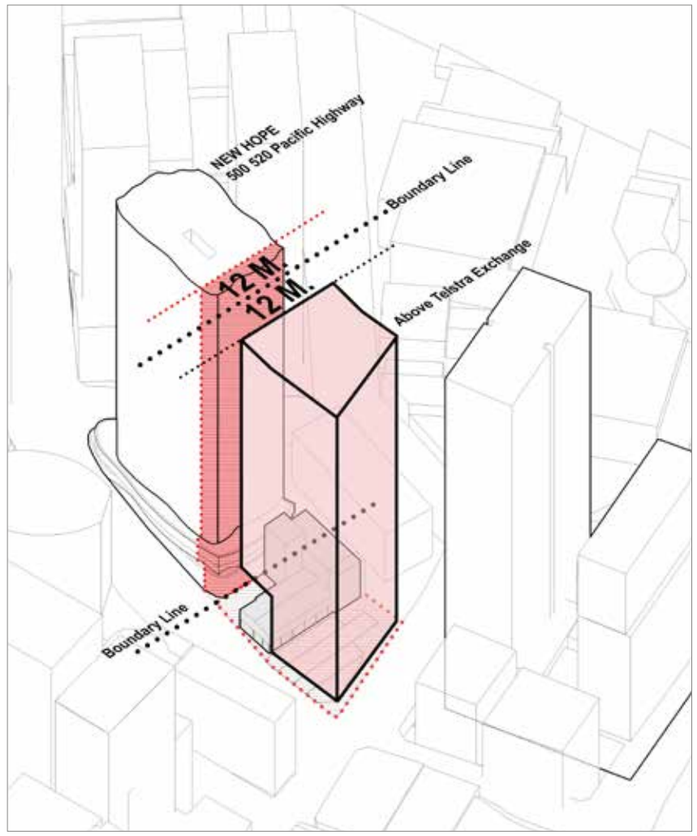
AMALGAMATION

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



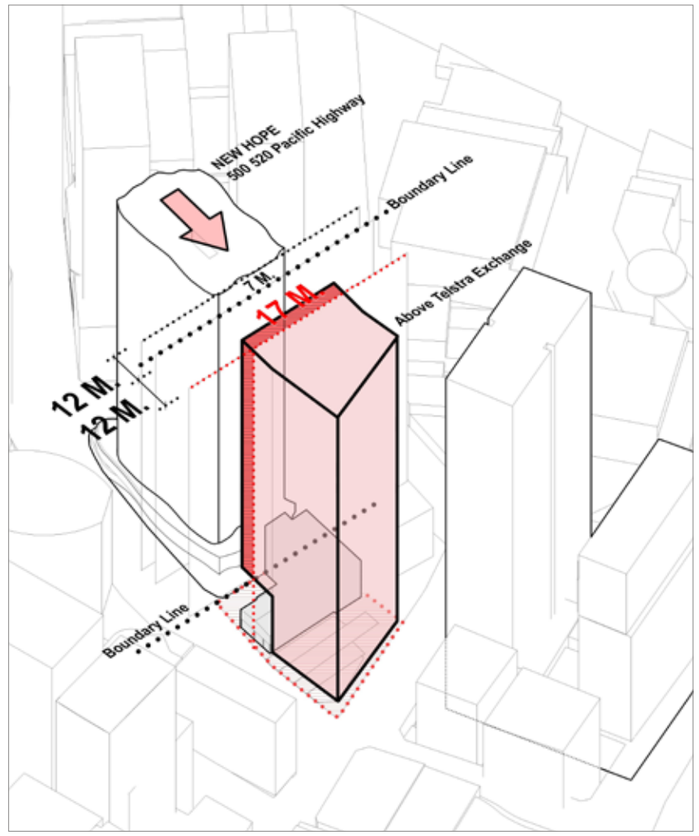
CURRENT PLANNING CONTROLS

- 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

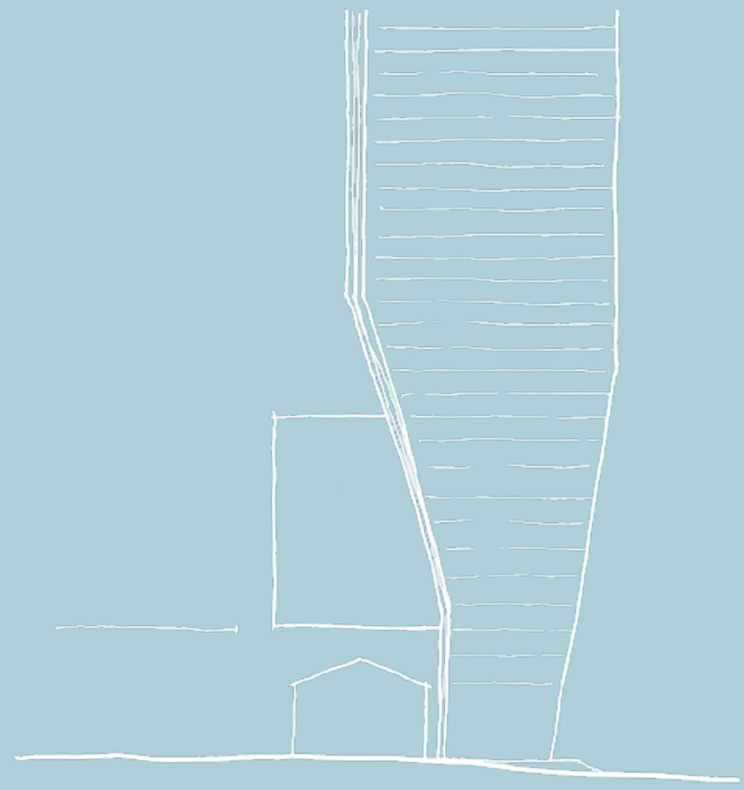
- The ADG identifies building separation requirements in residential/ mixed-use areas as 12 m between habitable rooms and boundary for all storeys above L8.
- The proposed residential tower of the New Hope development provides 7 m to the boundary - a further 5 m would be required to comply.



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.

4. Design Response



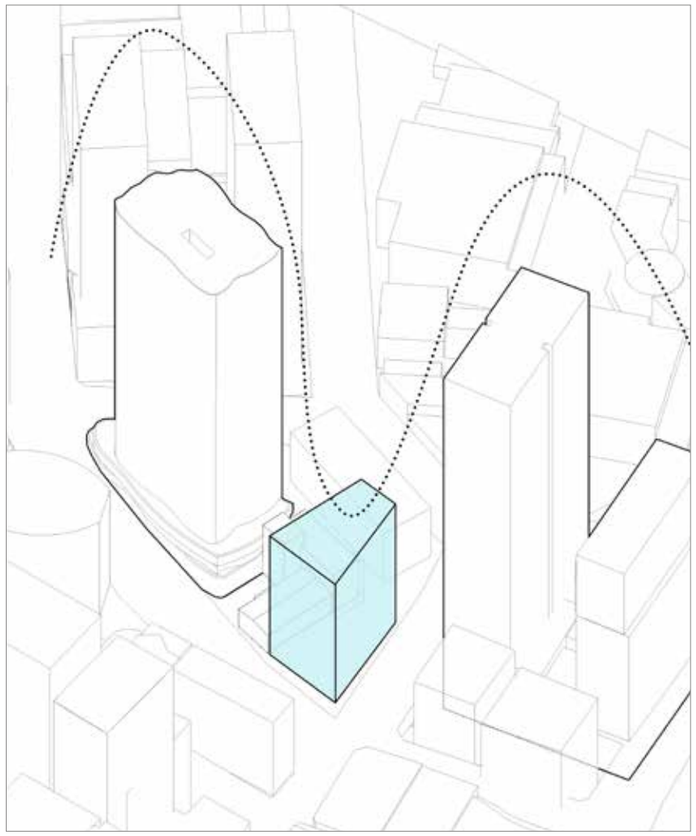
VISION

DESIGN VISION

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

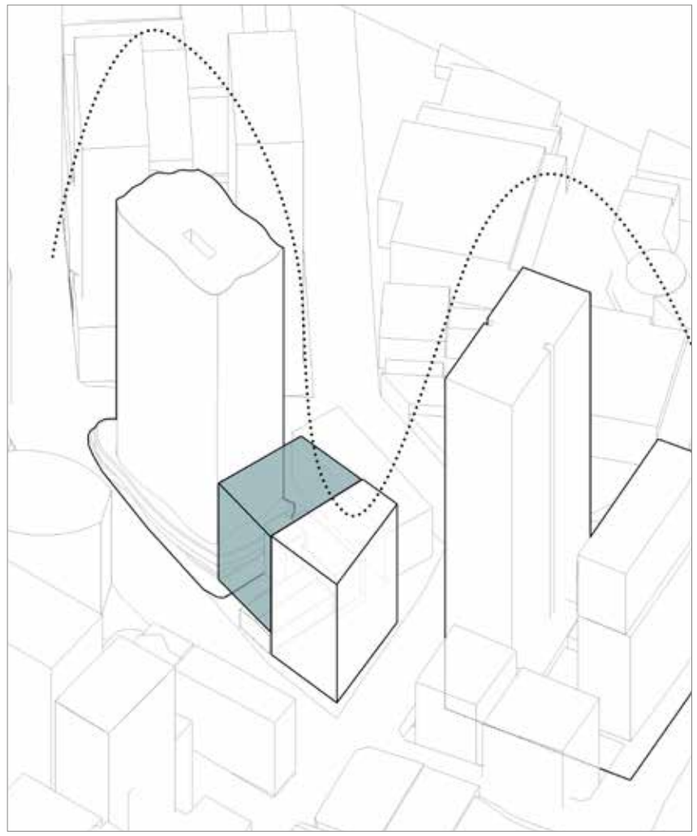
The vision for this project is to create a building which, through the quality of its architecture and the sophistication of its integration with the public domain, will itself manifest the spirit of this important centre.

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.



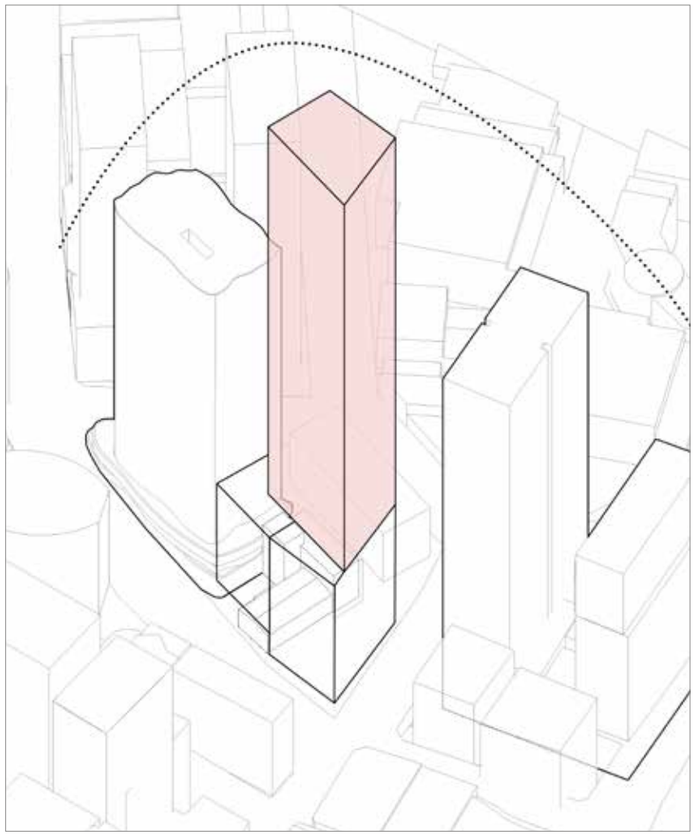
COMMERCIAL BUILDING ADJACENT TO TELSTRA EXCHANGE

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



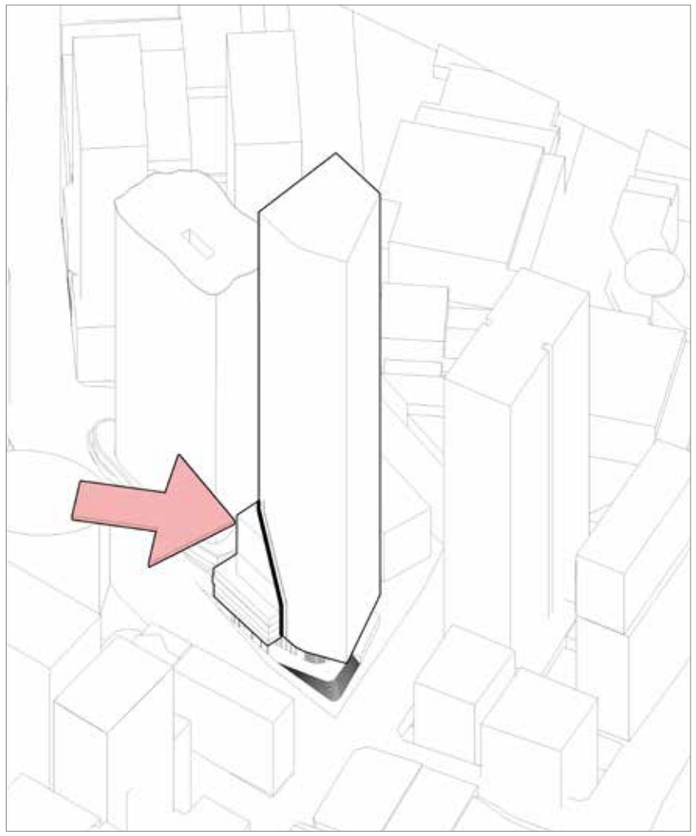
COMMERCIAL FLOOR ABOVE TELSTRA EXCHANGE

- Construction above the Exchange is cost intensive.



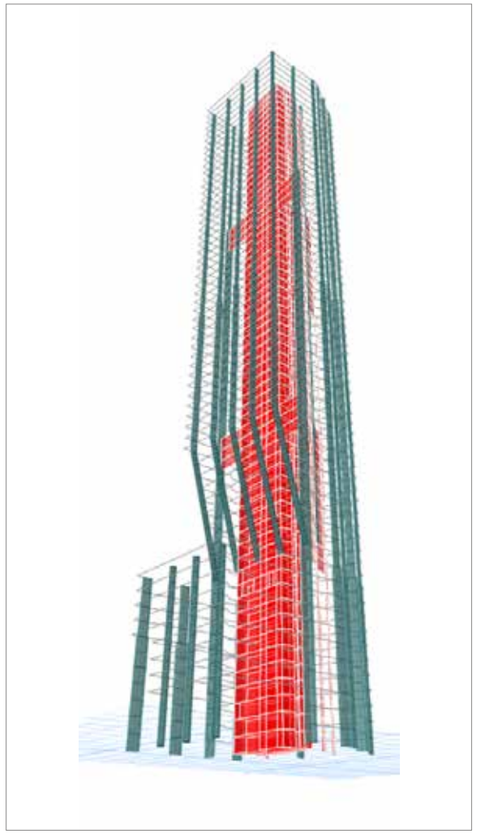
RESIDENTIAL TOWER

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

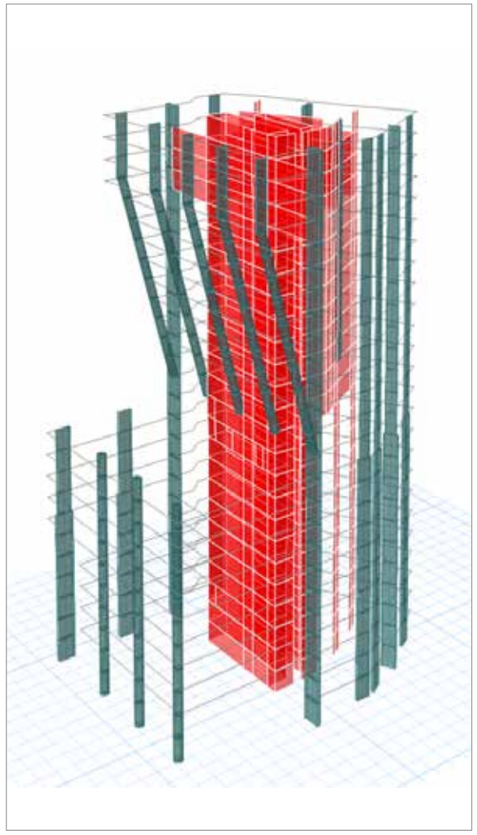


STEPPING BACK THE STRUCTURE

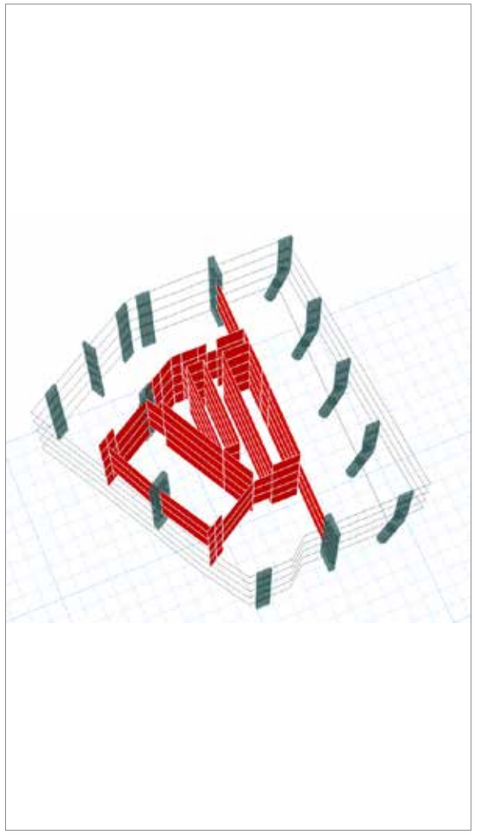
- The 63-storey tower is proposed to extend up to 12m over the existing Telstra Exchange building, but is not able to either impose any load onto or run any load-bearing structure through the existing building.



- 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

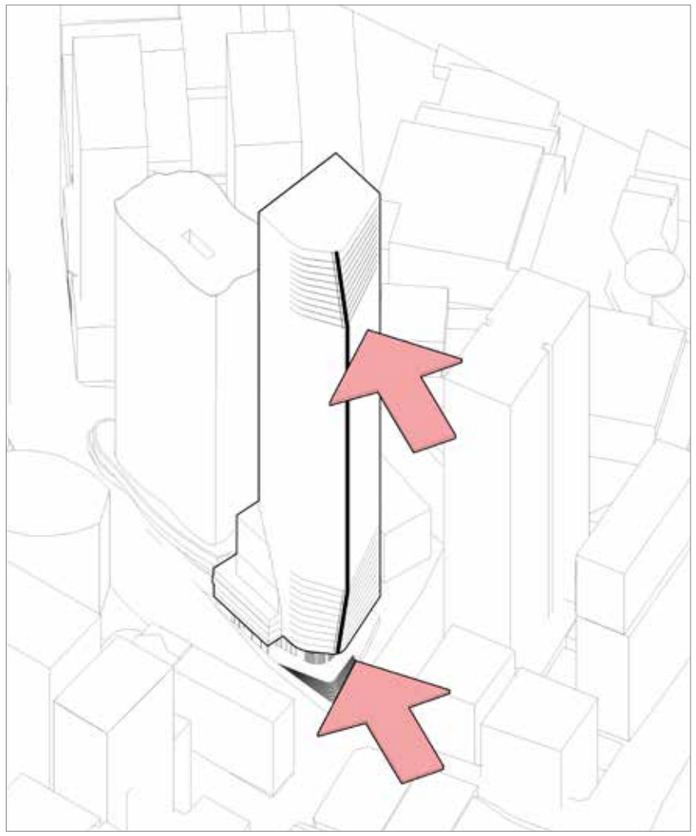


- The overturning effect of the splayed tower columns are supported by an outrigger system, which engages tower columns along the western edge of the residential floors all the way to the footings via deep outrigger walls.



- 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.

URBAN RESPONSE



RESHAPING CORNER

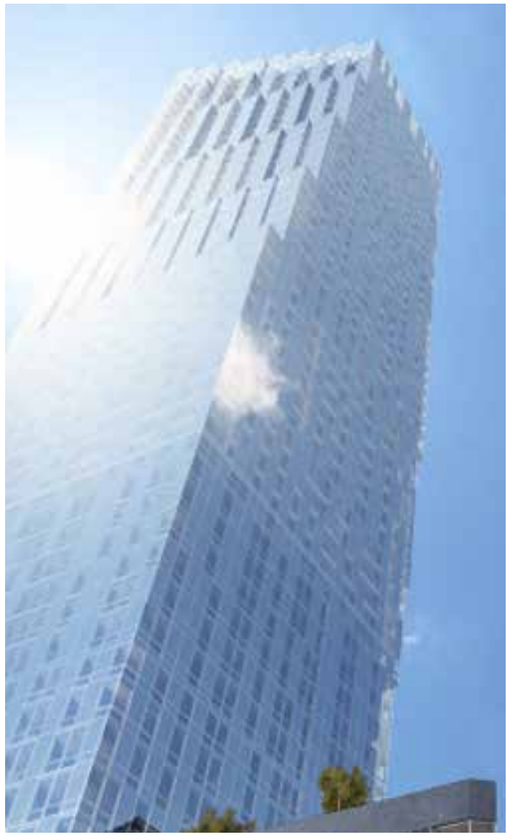
- The tapering at the lower levels emphasises the prominent street corner and creates a setback to Christie Street.
- It enables the tower columns to visibly continue down to the ground which provides the building with an uplifting, elevated expression.
- The twisted tapered top creates a distinctive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

COCONOUT GROVE, MIAMI - BIG

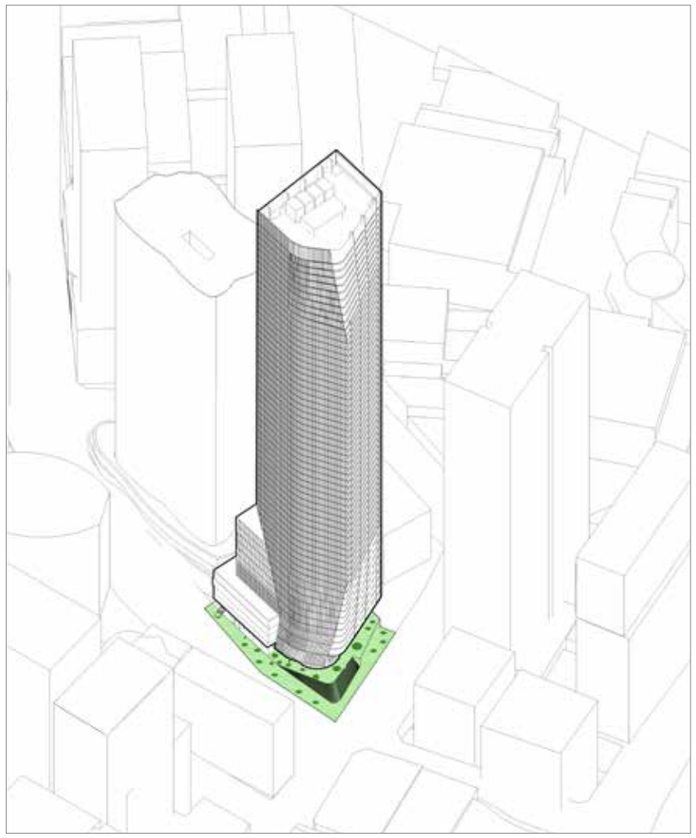
ABSOLUTE TOWERS, MONTREAL - MAD

FUKOKU TOWER, OSAKA - DPA

NILE TOWER, CAIRO - ZAHA HADID



TRANSBAY BLIOCK 8, SAN FRANCISCO - OMA



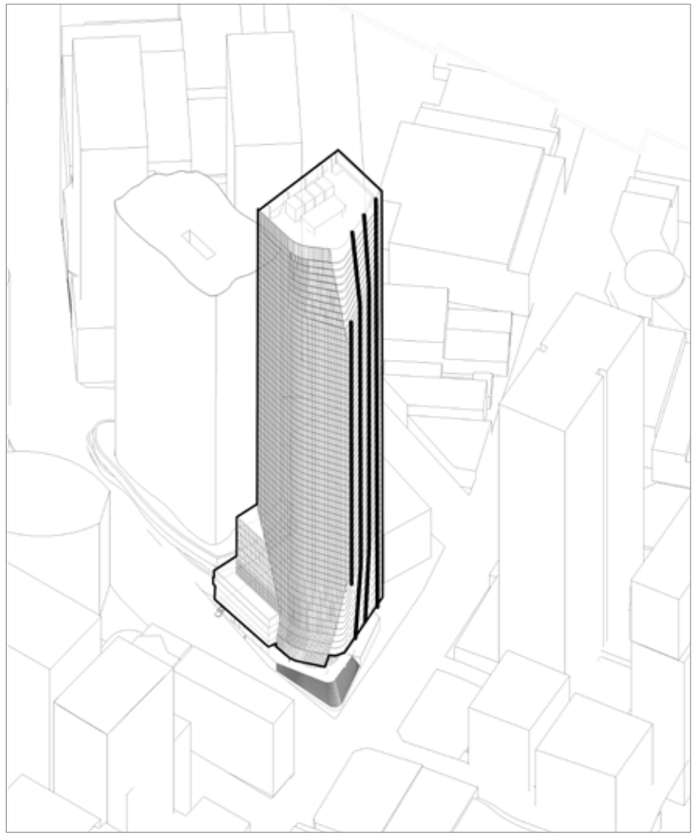
CREATING PUBLIC DOMAIN ON GROUND FLOOR

- 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

FACADE PARAMETERS

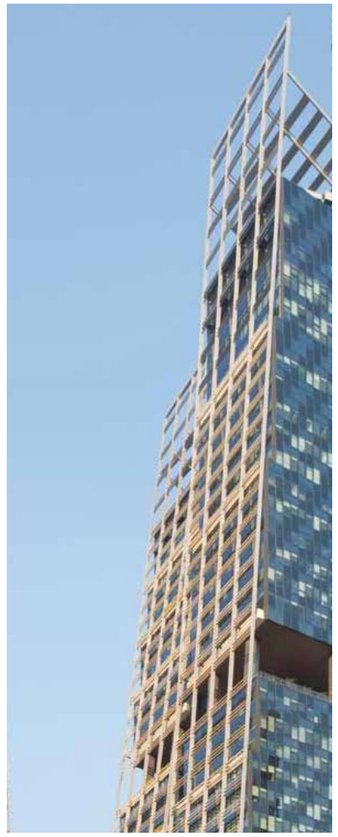


A SCULPTURED FORM CREATING A GATEWAY

- The site represents a unique opportunity to revitalise the built form at a prominent gateway location and a keystone activation point for the precinct.
- 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 corner.

AURORA PLACE, SYDNEY - RPBW

443 QUEEN STREET, BRISBANE - ARCHITECTUS



BEACH ROAD TOWERS, SINGAPORE - FOSTER AND PARTNERS

GROVE TOWERS, MUMBAI - 3XN

AURORA PLACE, SYDNEY - RPBW

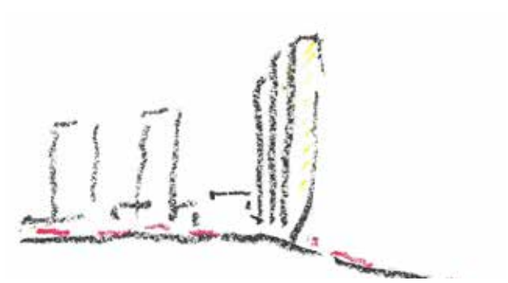
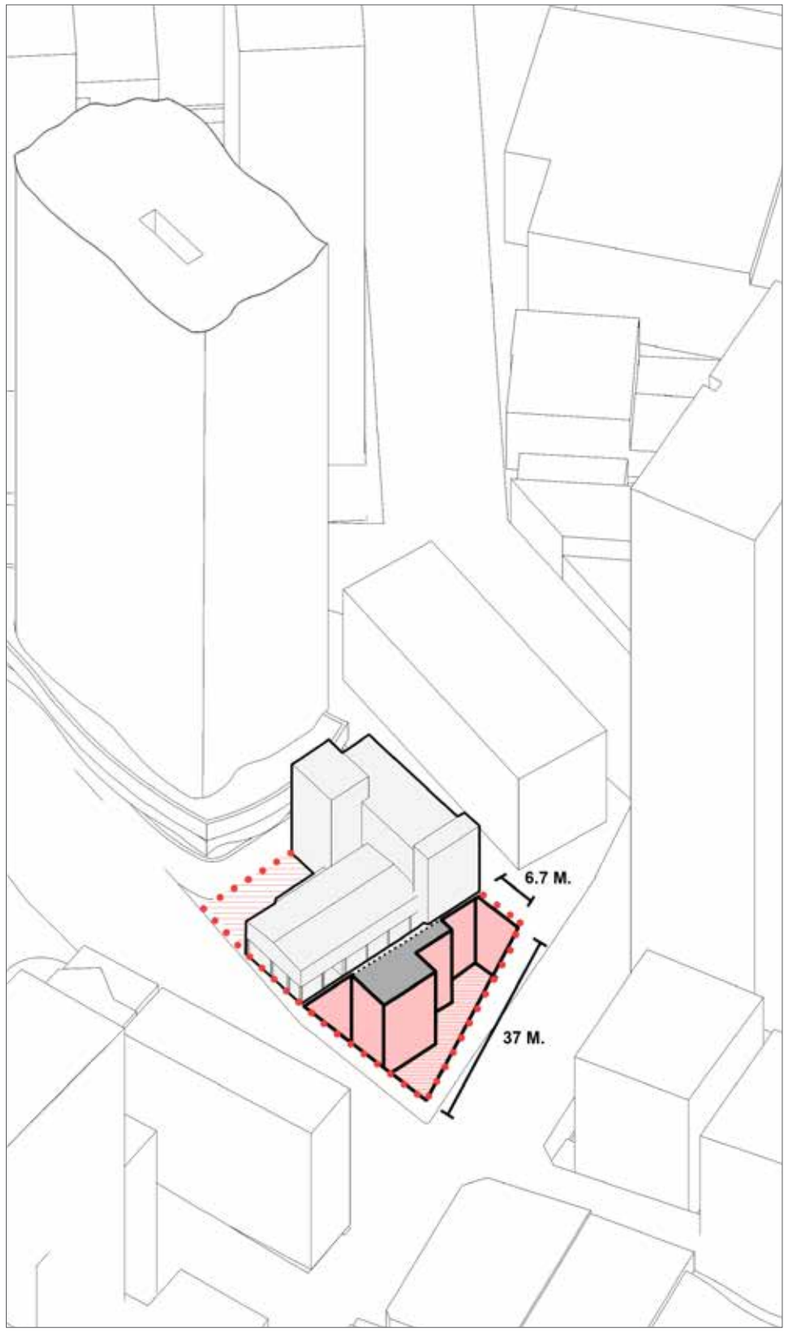
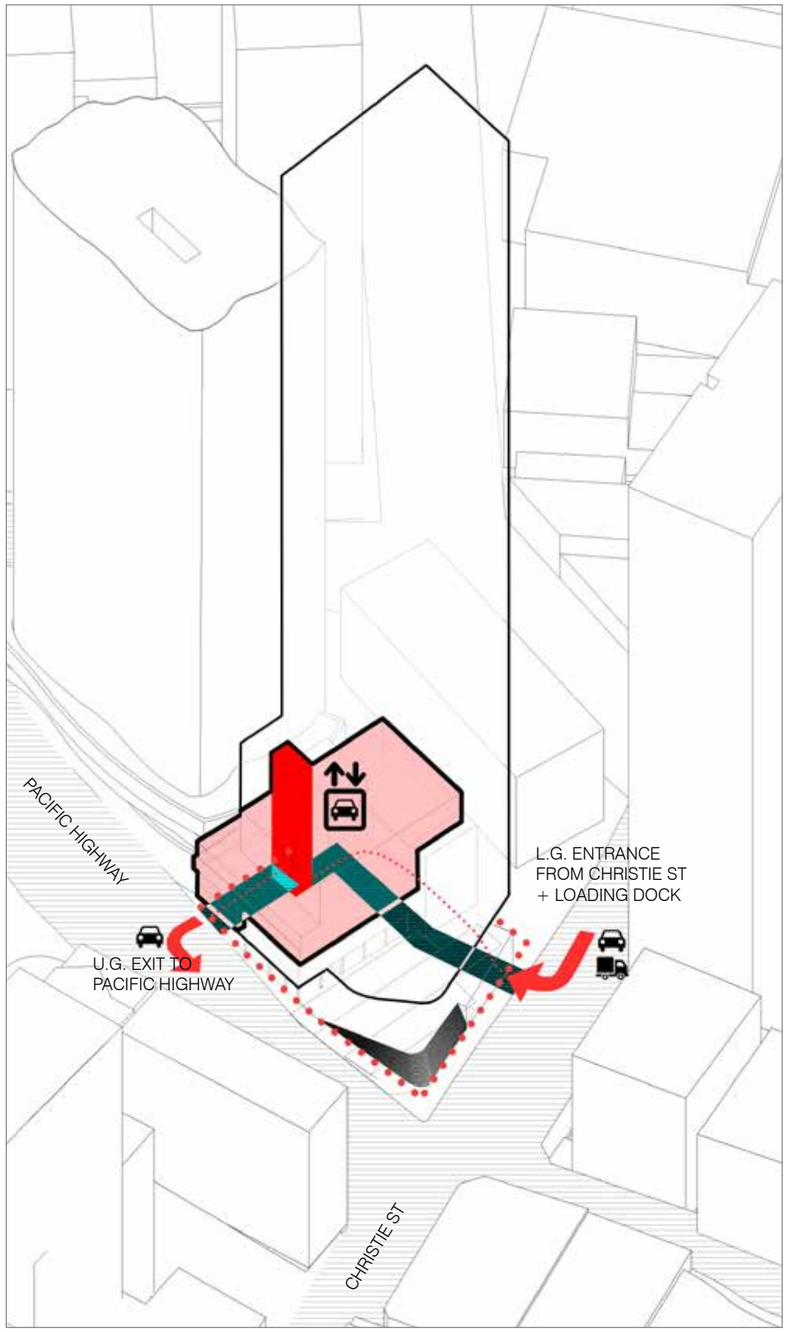


DIAGRAM OF BUILDING FORM

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

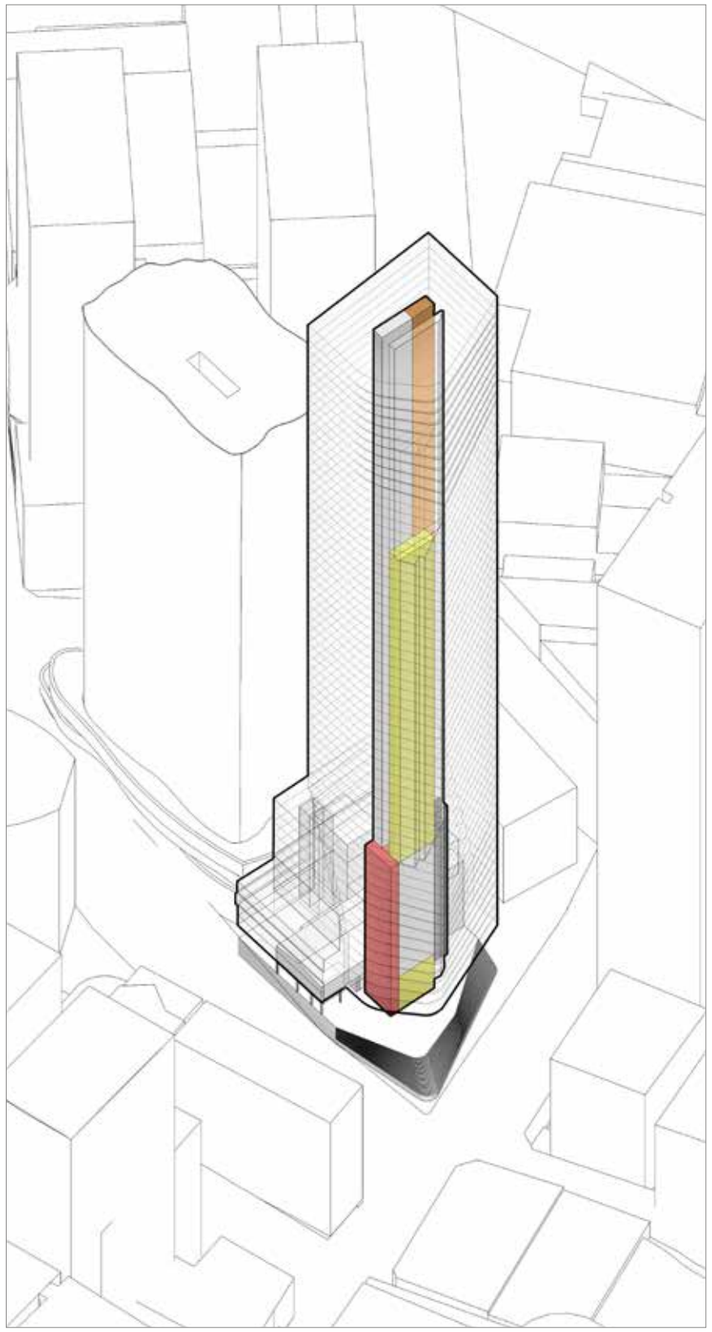
In response to this, the scheme proposes to provide parking for the residents in the form of an automated carstacker located above the Telstra Exchange.

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.

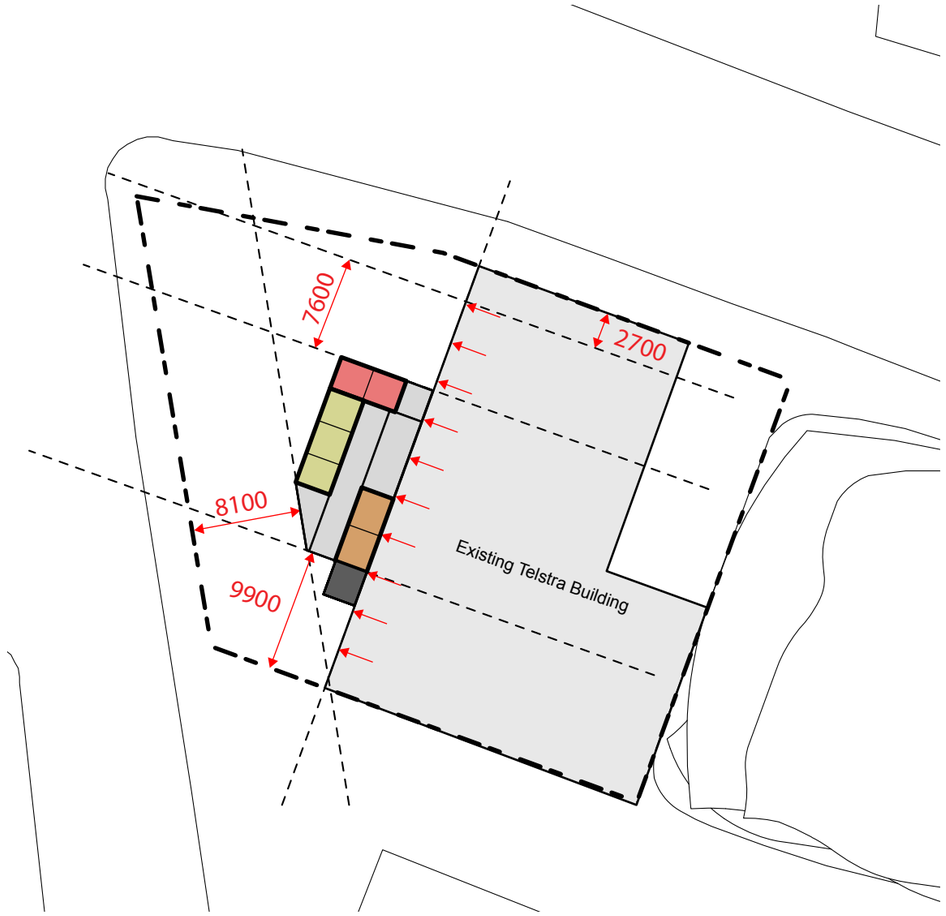
The impact of the carstacker lift for the adjacent eastern development is low as it is located next to the staircase tower of the Telstra Exchange not exceeding its height.

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.

TECHNICAL CONSIDERATIONS



LIFTS



SCHEMATIC UPPER GROUND PLAN WITH CORE

LEGEND

- LG, L42 to L62 (Residential)
- LG - L11 to L42 (Residential)
- LG - L11 Commercial
- LG - L11 Goods Lift
- Core constrains

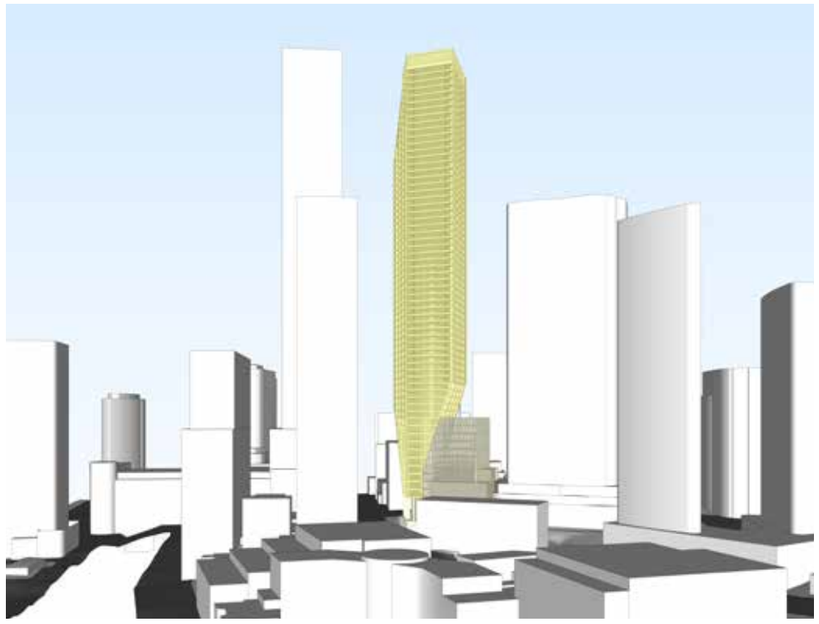
CORE DESIGN OPTIMISED FOR HIGH RISE

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

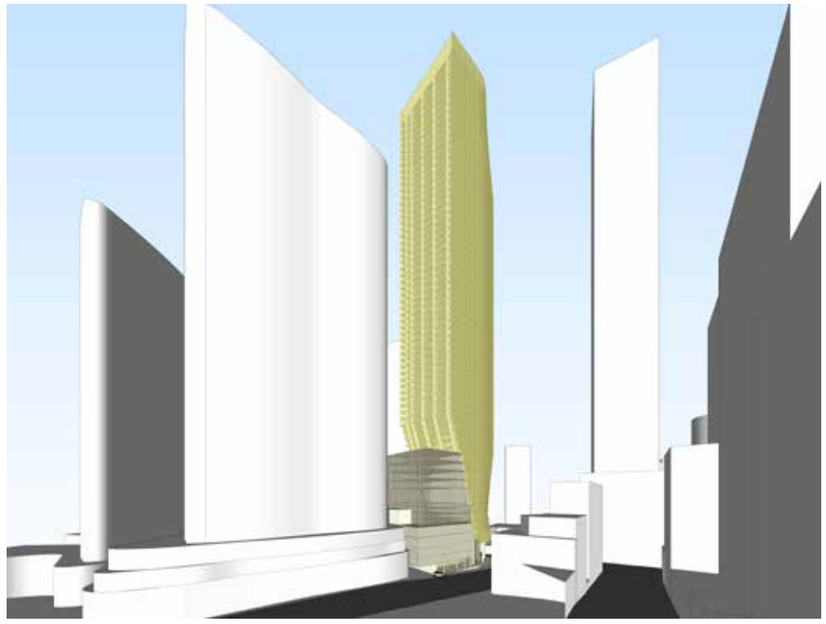
A lift consultant has been engaged to ensure optimal service to all residential apartments and commercial floors:

- Two lifts and a goods lift service the commercial areas with the possibility of a reception lobby on each floor towards Pacific Highway.
- Five conventional residential passenger lifts which split into low rise and high rise enable a fast service to all levels.

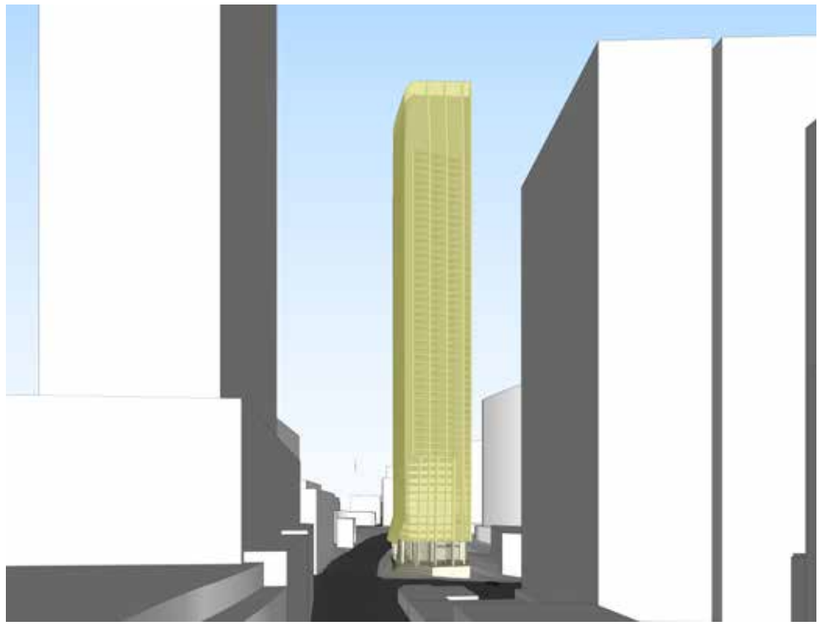
CONTEXTUAL IMAGES



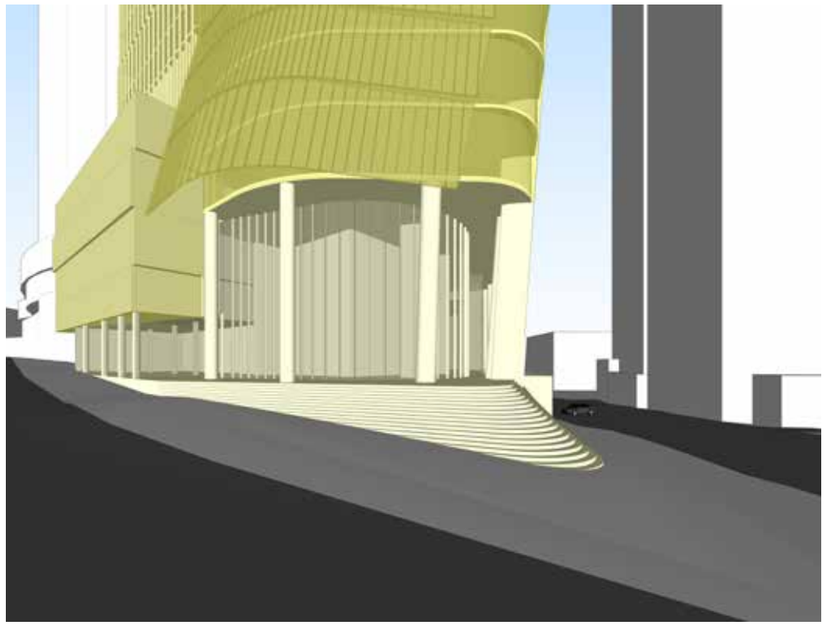
VIEW FROM THE SOUTH



VIEW FROM THE NORTH-EAST ALONG PACIFIC HIGHWAY



VIEW FROM THE WEST ALONG PACIFIC HIGHWAY



VIEW FROM THE CORNER CHRISTIE ST WITH PACIFIC HIGHWAY

THE BUILDING IN ITS CONTEXT

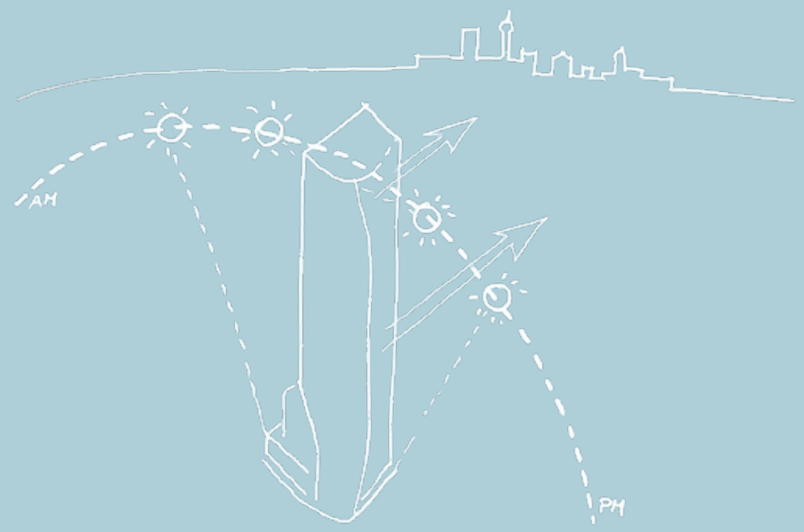
The building has been carefully designed and located on its site to respect and maintain the amenity of its neighbours whilst its curved and tapering form to respond to the bend of the Pacific Highway and the technical challenges of its site.

Its location along Pacific Highway and its pared composition with the tall tower proposed for 655 Pacific Highway diagonally opposite will create a gateway to the St Leonards CBD.

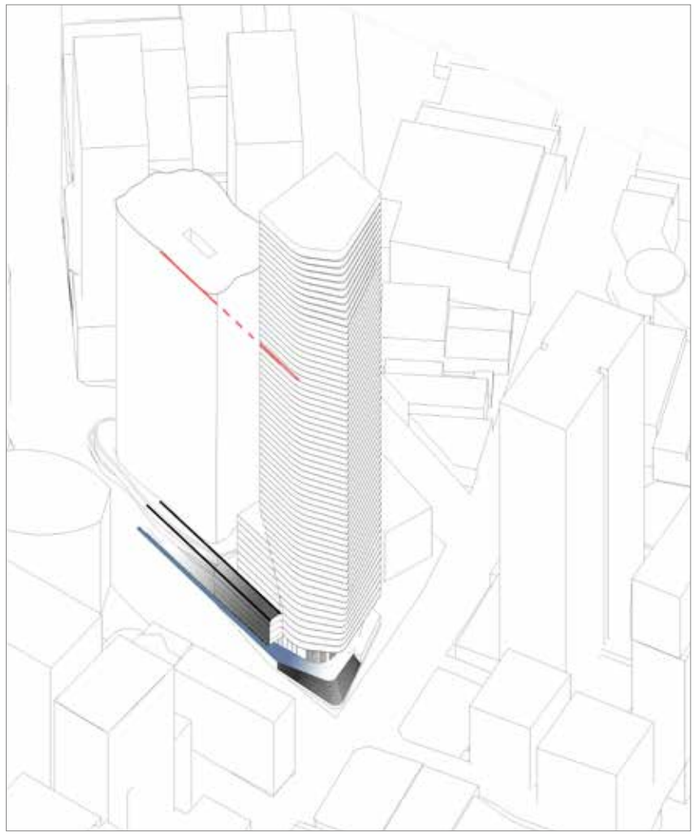
Thanks to the slender form and its distinctive and uplifting shape it will be perceived as a iconic landmark.

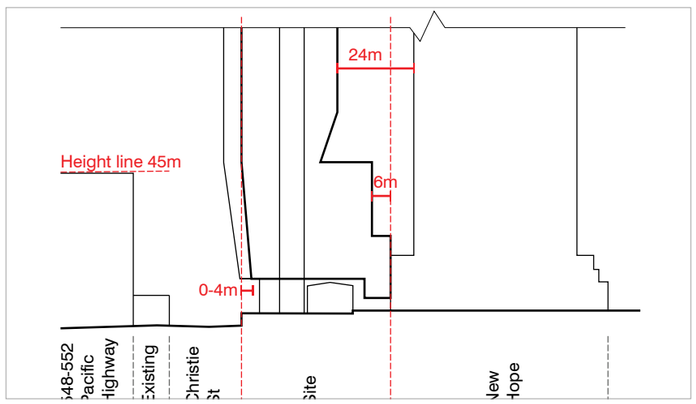

IBM

5. Amenity

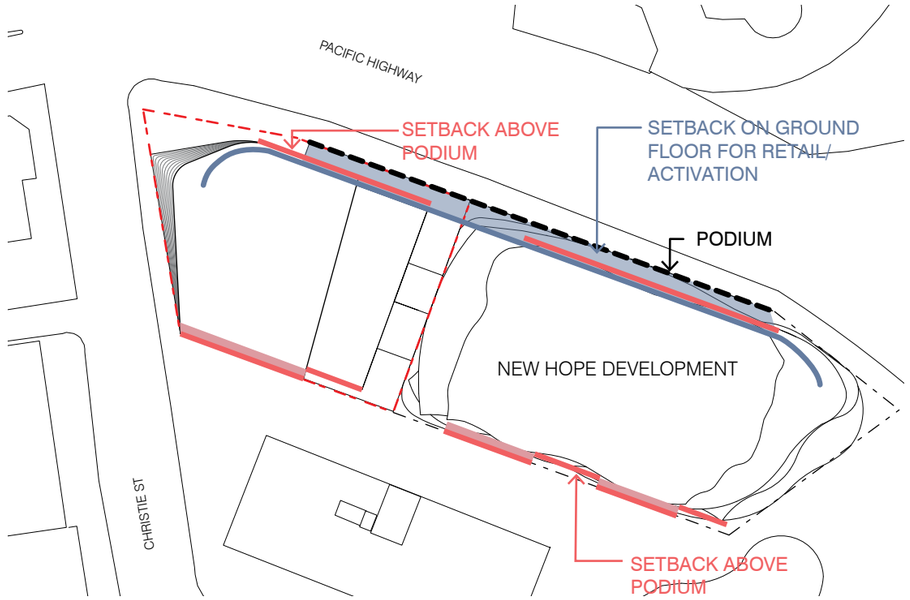


SETBACKS AND ALIGNMENTS WITH ADJACENT DEVELOPMENT





SETBACK SECTION



ALIGNMENT WITH ADJACENT DEVELOPMENTS

SETBACKS

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 them.

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 also incorporates the Telstra building. Its facade will be modified and set back at ground level.

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.

SETBACKS

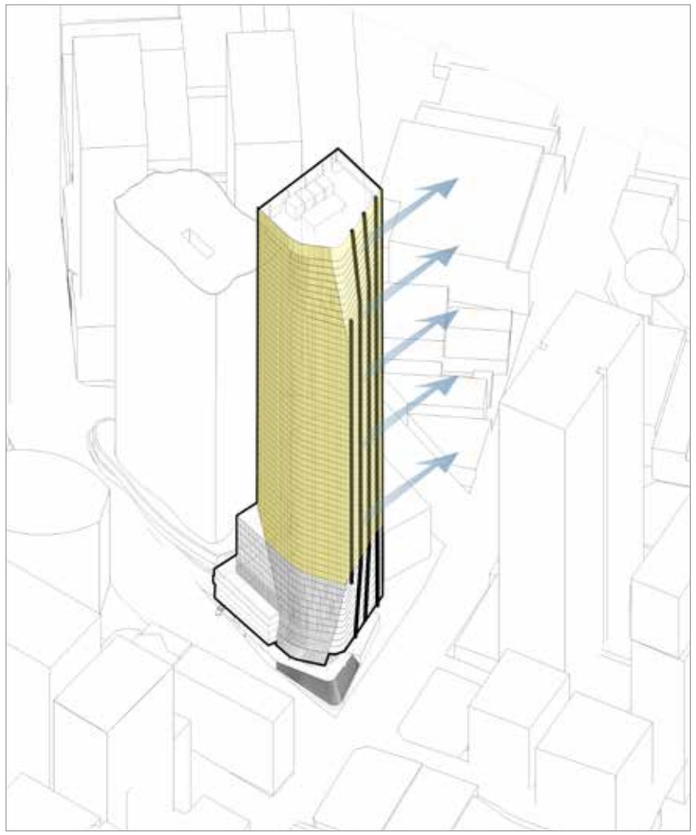
Building separation as required by the ADG can be achieved.

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.

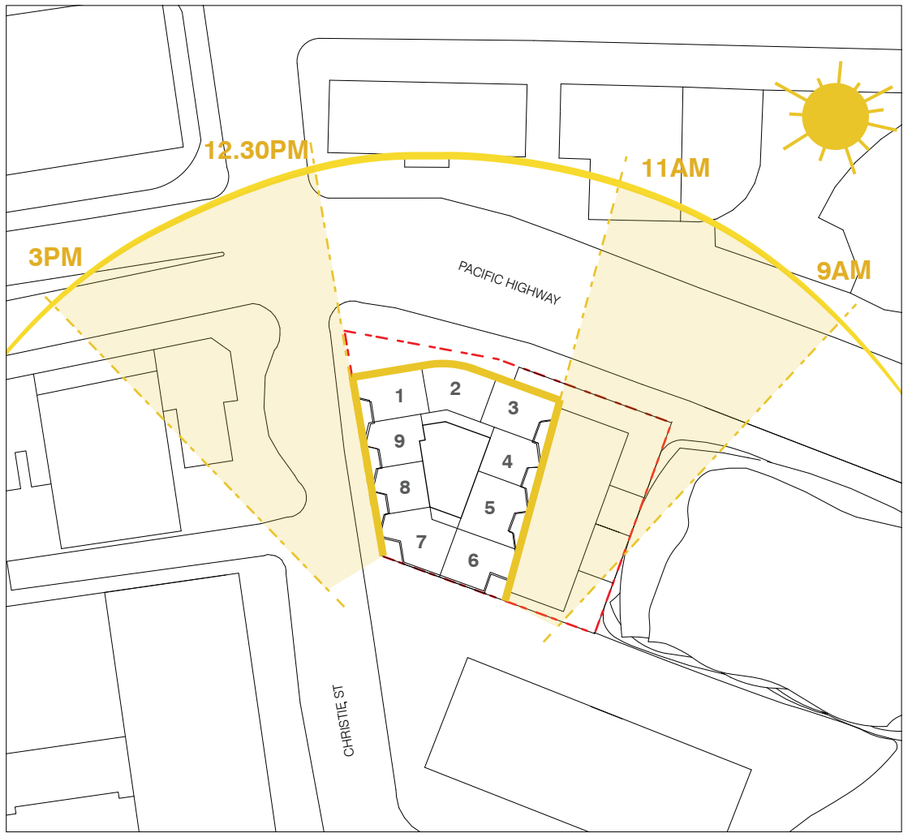
The setback towards Christie Street is guided by the objective to enlarge the street's public domain. Hence the average distance to the boundary is greatest at the lower levels. A recent DA application for 548-552 Pacific Highway suggests that the building west and directly opposite our site will not exceed 45m. This will provide the apartments facing Christie Street with great amenity and sufficient privacy.

SCALE: 1:1000

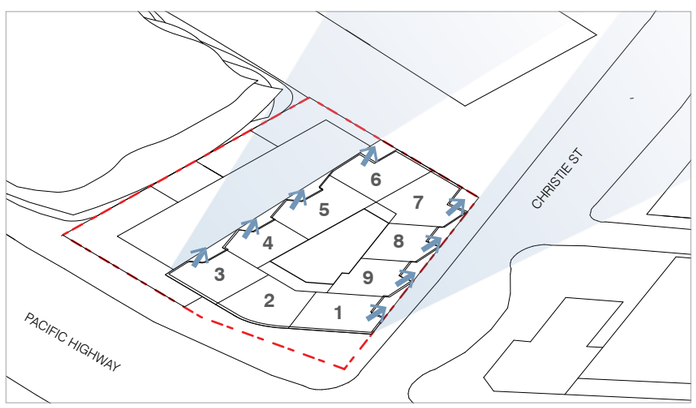
SOLAR ACCESS AND VIEWS



SOLAR ACCESS AND VIEWS



SOLAR ACCESS



VIEWS

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.

VIEWS

8 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:

- Roof terrace with pool on level 12, above commercial floors.
- Internal areas which provide space for communal amenities such as a gym.

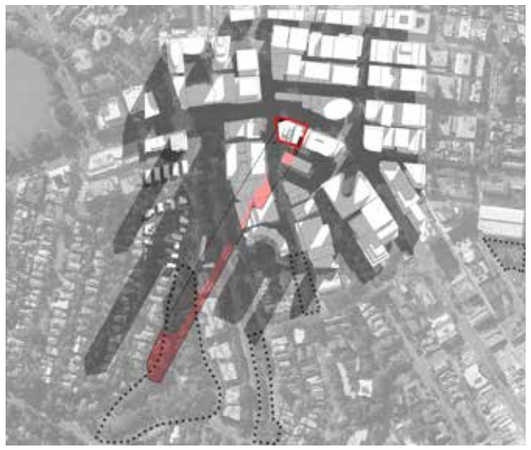
The built form provides excellent opportunities for high quality internal communal spaces such as multi storey rooms along the tapering facade.

SCALE: 1:1000

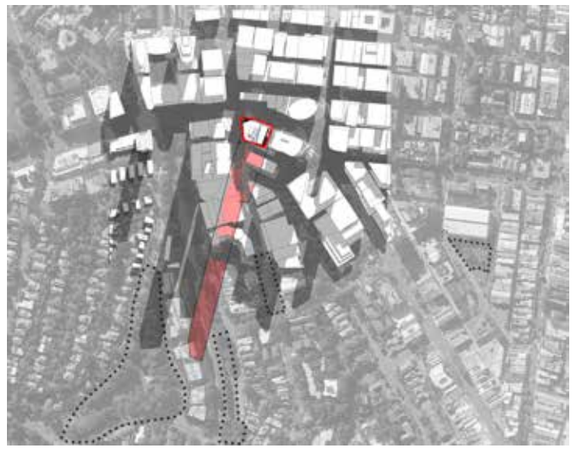
SHADOW STUDIES

09:00

10:00

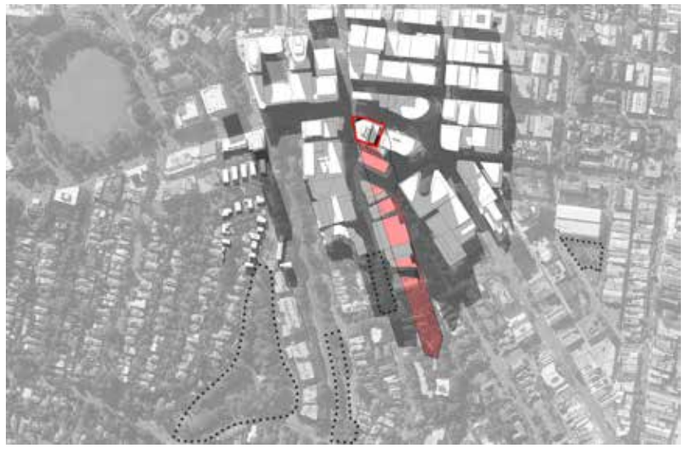


11:00

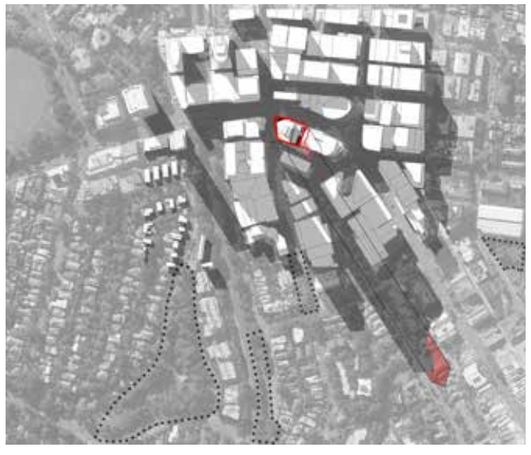


12:00

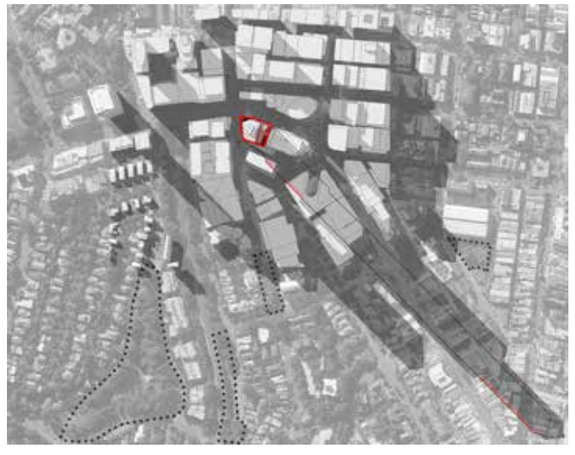
13:00



14:00

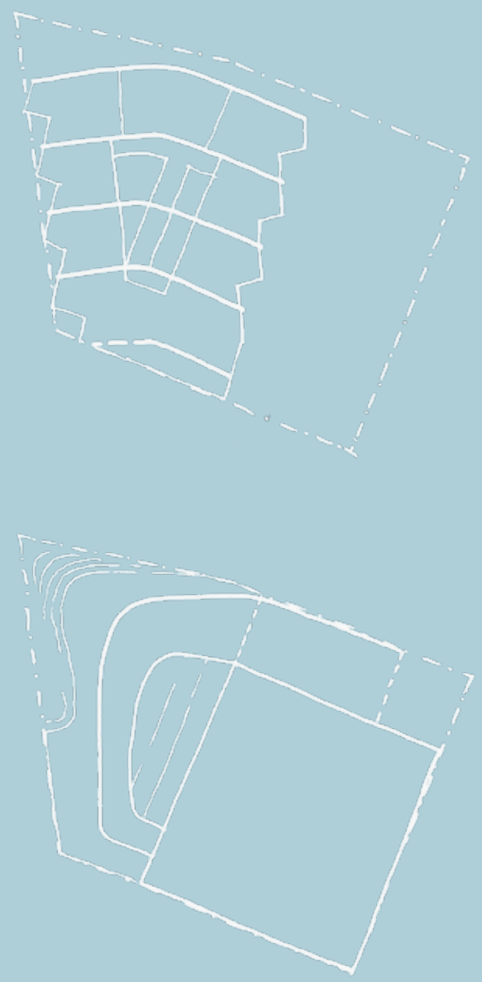


15:00



New Shadow

Special Open Areas

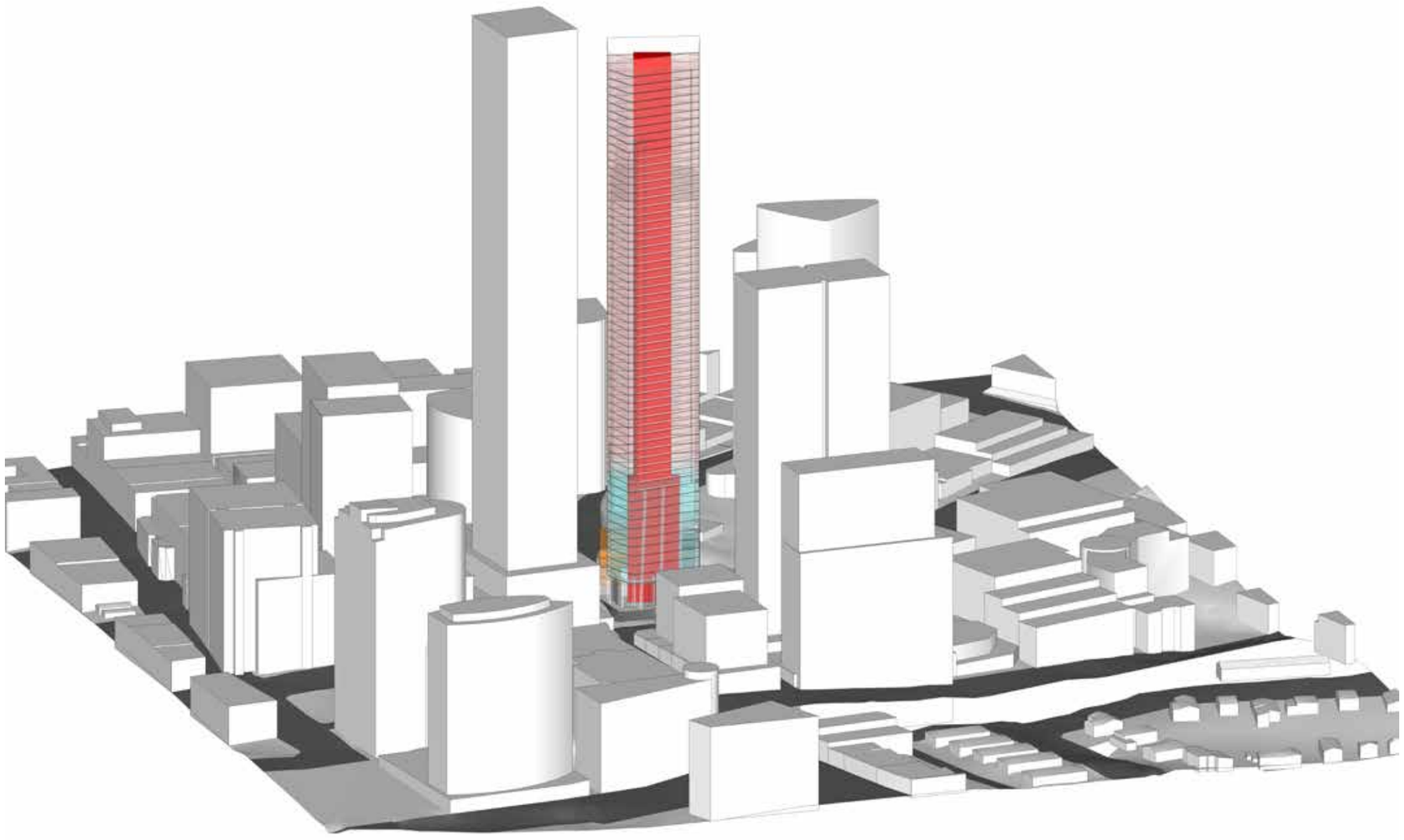


6. Appendices

SITE PLAN


ST LEONARDS TRAIN STATION
BUS RAIL INTERCHANGE
PLAZA
CHRISTIE LN
NICHOLSON LN
FRIEDLANDER PLACE

SITE ANALYSIS - GFA CALCULATIONS



Site Area (sqm)	**1671.7**
Building height with plant/ lift overrun (m)	**215.0**

	Comm*	Resi	Total
No. Floors	11	51	63
GFA (sqm)	7308.9	33867.9	41176.8
FSR	4.4	20.3	24.6
Apartment No.		**422**	

* comm include ground floor retail

SITE BOUNDARY
RESIDENTIAL
COMMERCIAL
RETAIL/ LOBBIES
CAR STACKER
EXISTING TELSTRA EXCHANGE

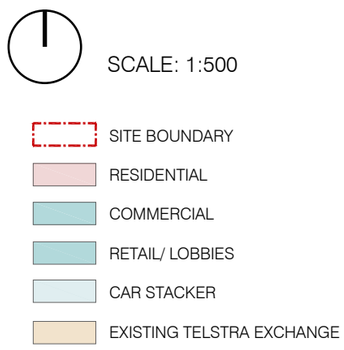
TYPICAL FLOOR PLATES

LOWER GROUND FLOOR PLAN
LG

UPPER GROUND FLOOR PLAN
UG

TYPICAL COMMERCIAL PODIUM
L2-3

TYPICAL COMMERCIAL WITH CAR STACKER
L4-6



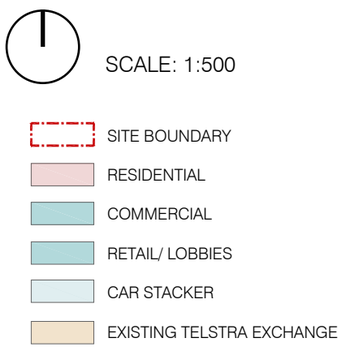
TYPICAL FLOOR PLATES

TYPICAL COMMERCIAL FLOOR PLAN
L7-11

RESIDENTIAL FLOOR PLAN WITH COMMUNAL SPACE
L12-13

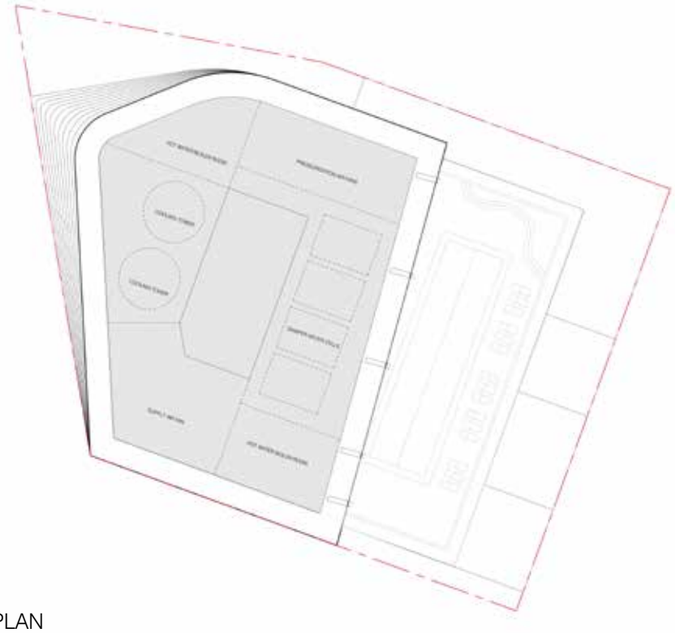
TYPICAL RESIDENTIAL TOWER PLAN A
NOMINAL L18-20

TYPICAL RESIDENTIAL TOWER PLAN B
NOMINAL L21-52



TYPICAL FLOOR PLATES

RESIDENTIAL TOWER PLAN
L62

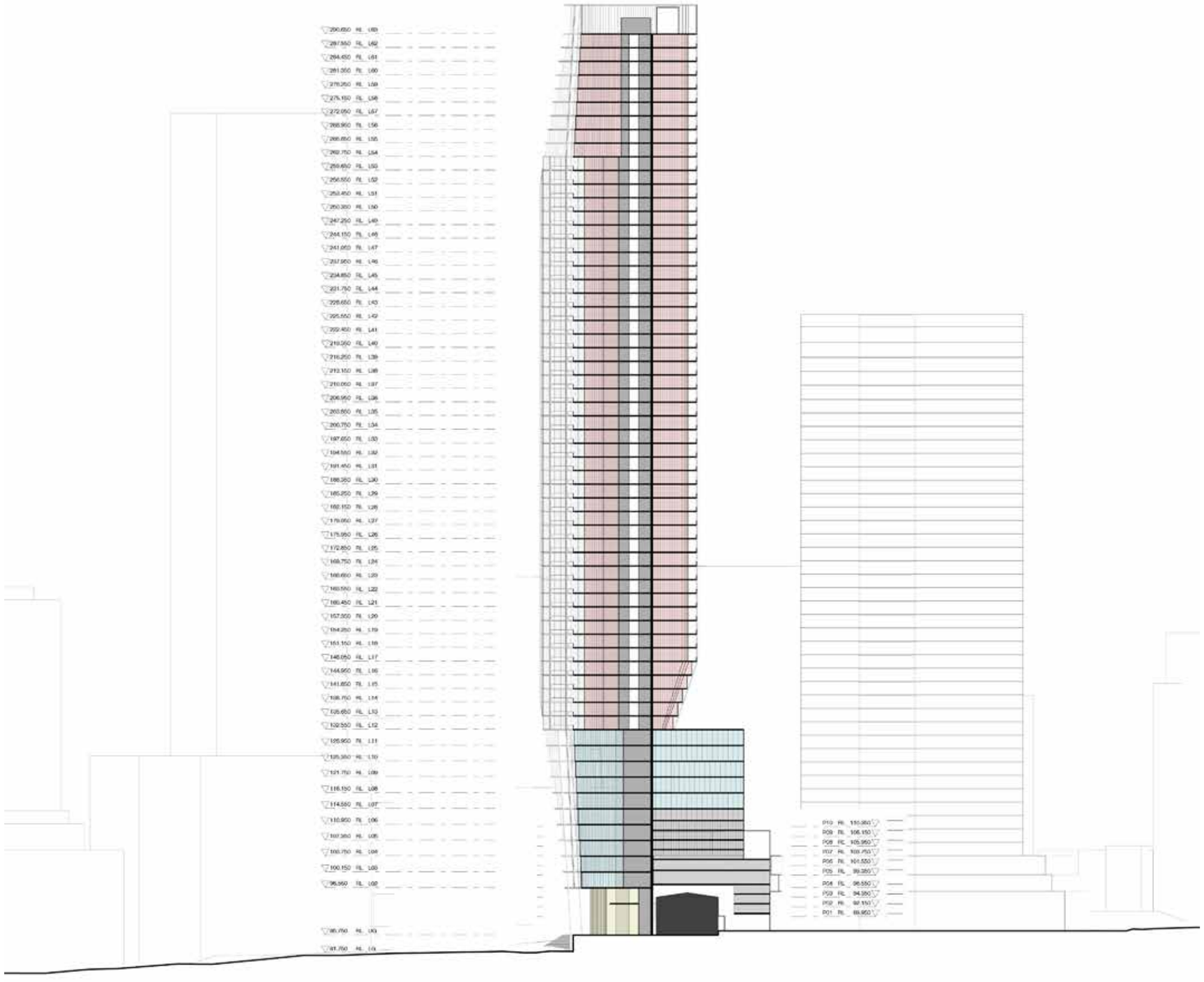


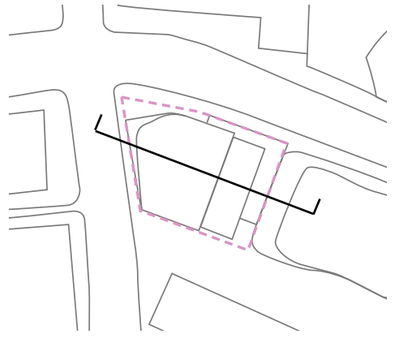
ROOF PLAN

SCALE: 1:500

- SITE BOUNDARY
- RESIDENTIAL
- COMMERCIAL
- RETAIL/ LOBBIES
- CAR STACKER
- EXISTING TELSTRA EXCHANGE

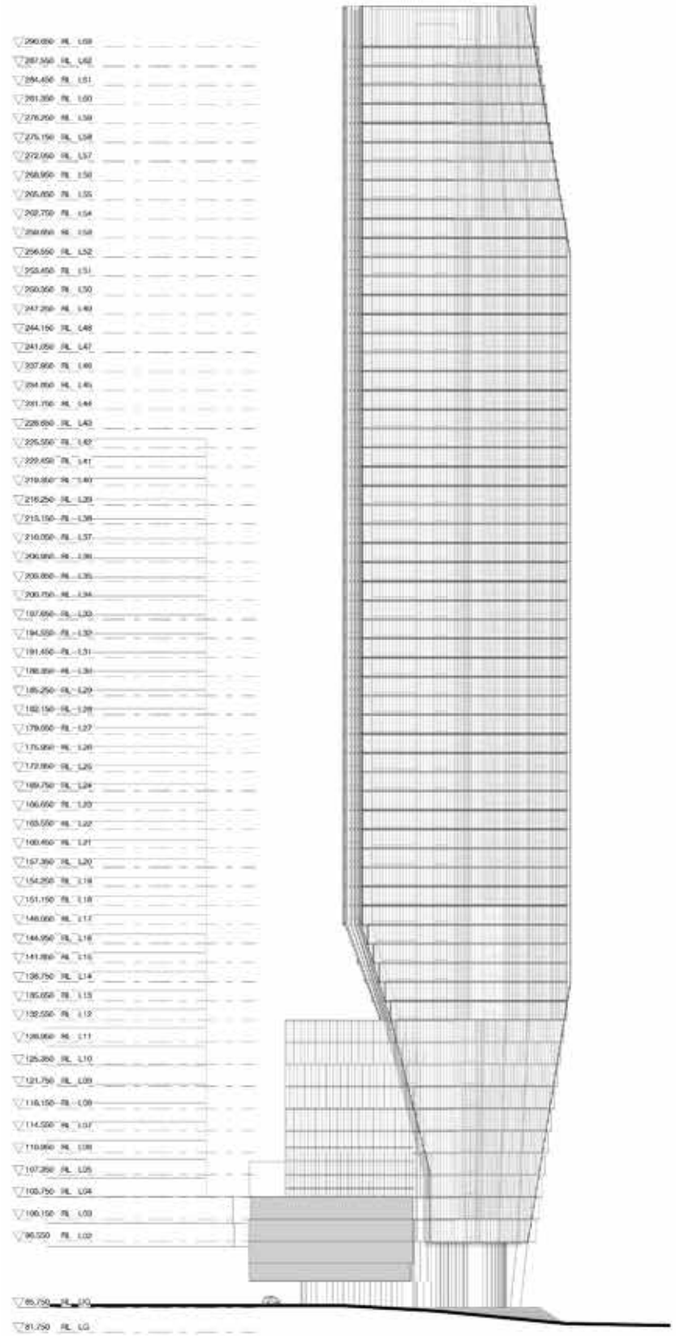
SECTION



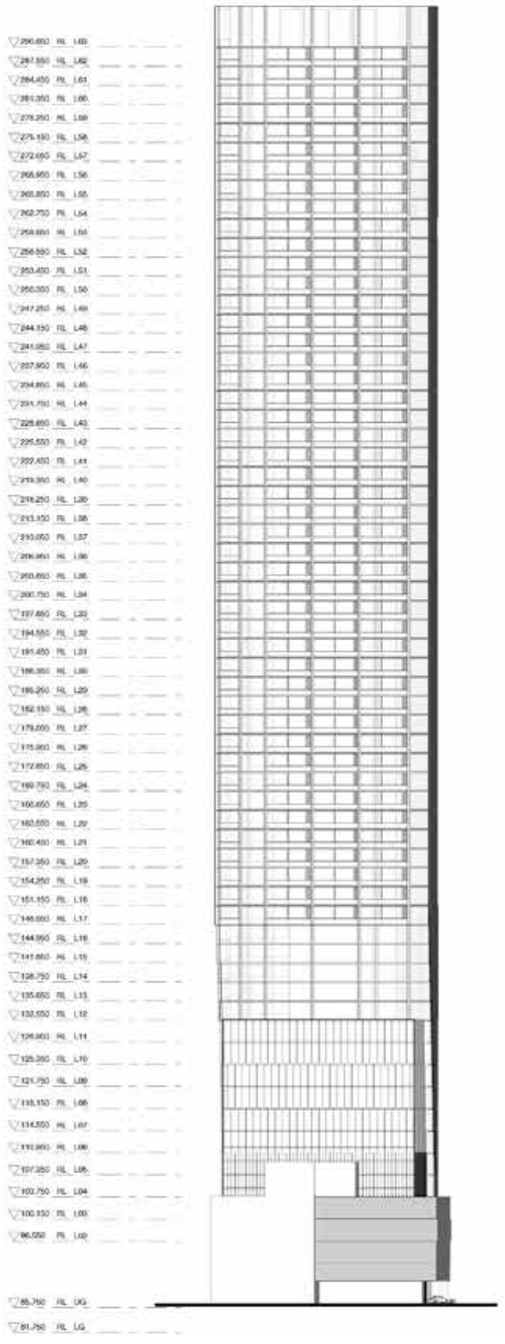


SCALE: 1:1000

- SITE BOUNDARY
- RESIDENTIAL
- COMMERCIAL
- RETAIL/ LOBBIES
- CAR STACKER
- EXISTING TELSTRA EXCHANGE



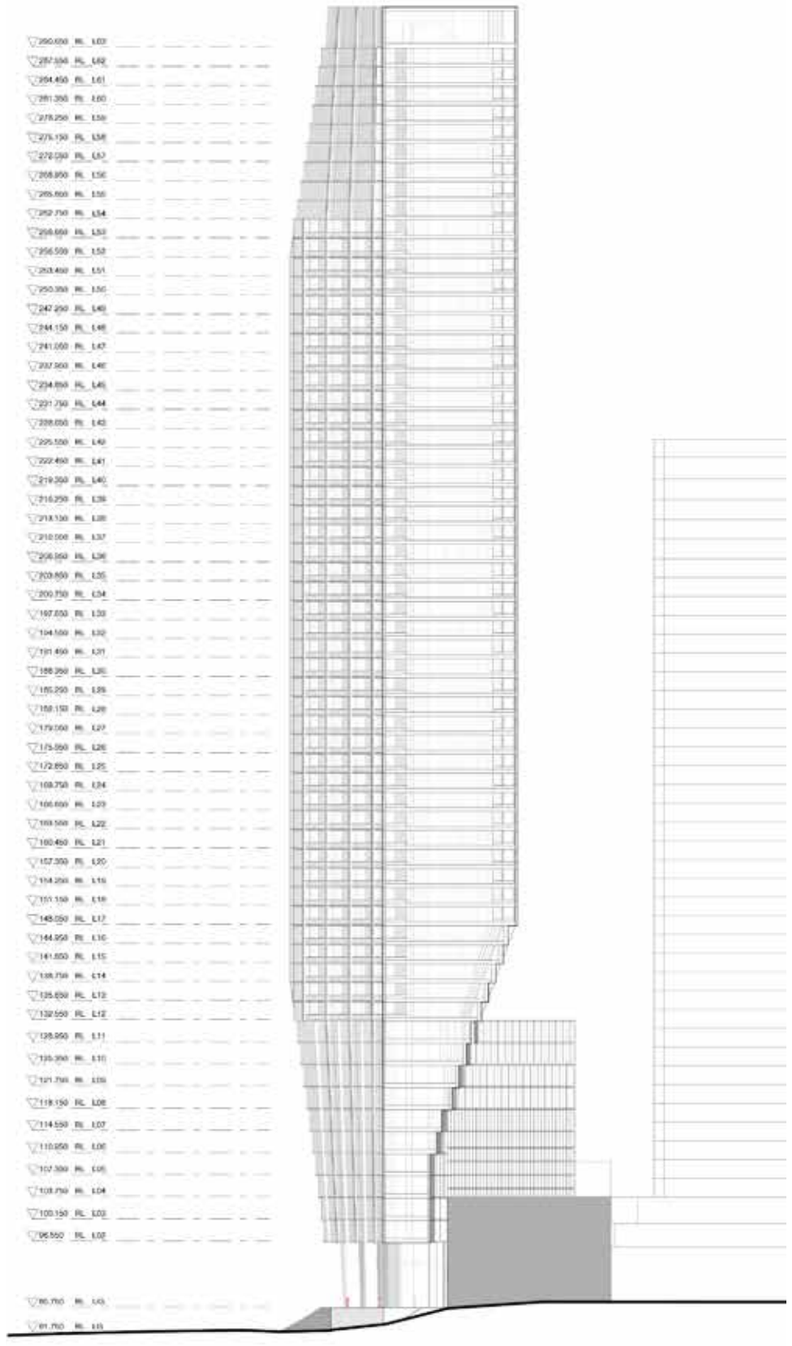
NORTH ELEVATION - PACIFIC HIGHWAY



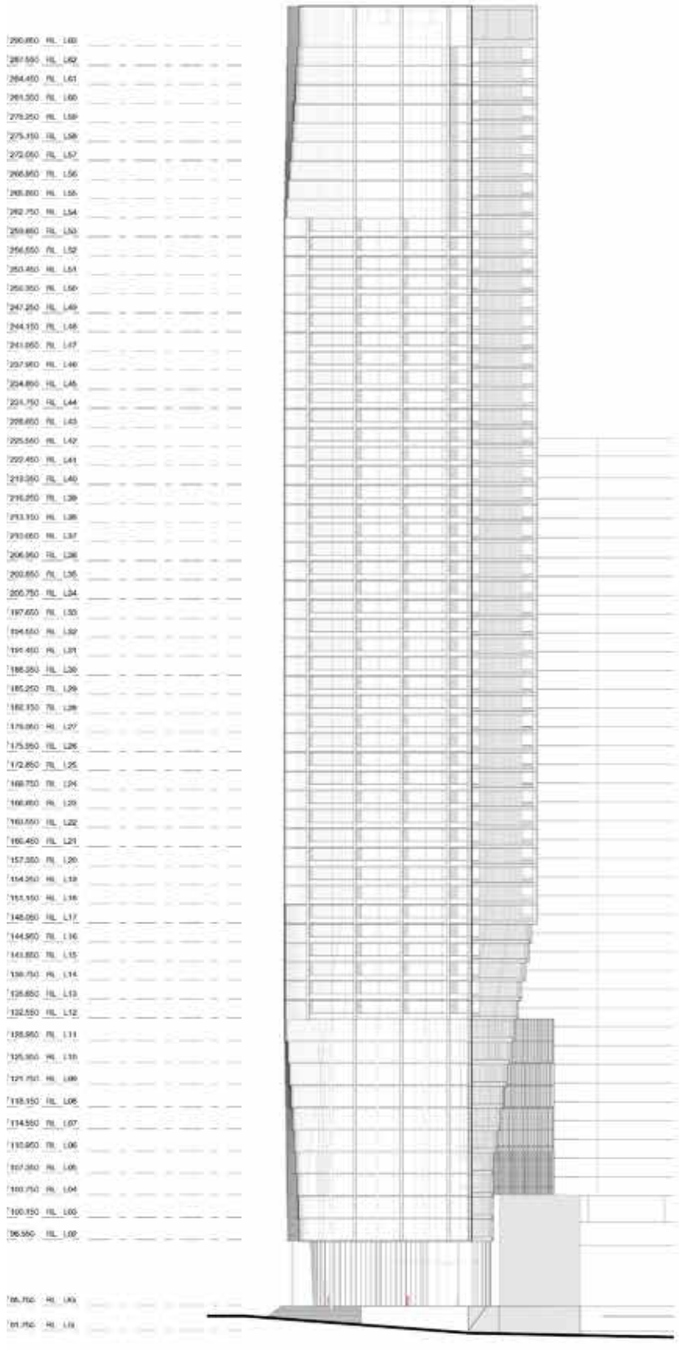
EAST ELEVATION - BOUNDARY LINE

SCALE: 1:1000

ELEVATIONS



SOUTH ELEVATION - PUBLIC LINK



WEST ELEVATION - CHRISTIE STREET

SCALE: 1:1000