

CITY OF WHITEHORSE

Date: 29/1/2019

RECEIVED

SPRING ST

DEVELOPMENT PLAN & URBAN CONTEXT REPORT RFI RESPONSE
16 SPRING STREET, BOXHILL
20.DECEMBER.2018

ELENBERG FRASER

16 SPRING ST PROPOSAL
PREPARED BY



PROJECT TEAM

CLIENT	ORION EAST	TRAFFIC ENGINEER	ONE MILE GRID
CLIENT	BOXHILL INSTITUTE	TOWN PLANNER	BMDA DEVELOPMENT ADVISORY
PROJECT MANAGEMENT	RCP	FIRE ENGINEER	WOOD & GRIEVE ENGINEERS
LEAD ARCHITECT	ELENBERG FRASER	BUILDING SURVEYOR	CHECK POINT
INTERIOR DESIGNER	ELENBERG FRASER	URBAN DESIGNER	DLA ASSOCIATES
NURSING FACILITY ARCHITECT	SILVER THOMAS HANLEY	LANDSCAPE ARCHITECT	TRACT
QUANTITY SURVEYOR	WT PARTNERSHIP	WASTE ENGINEER	LEIGH DESIGN
SERVICES ENGINEER	WOOD & GRIEVE ENGINEERS	ACOUSTIC ENGINEER	MARSHALL DAY
STRUCTURAL & CIVIL ENGINEER	WSP AUSTRALIA	WIND ENGINEER	MEL CONSULTANTS

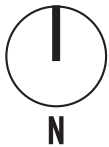
CONTEXT

01.1_SITE LOCATION



16 SPRING STREET, BOX HILL
SITE AREA: 2,626 SQM (APPROX.)
FRONTAGE: SPRING STREET
EXISTING: AT GRADE CAR PARK (PRIVATE), OPEN TO AIR

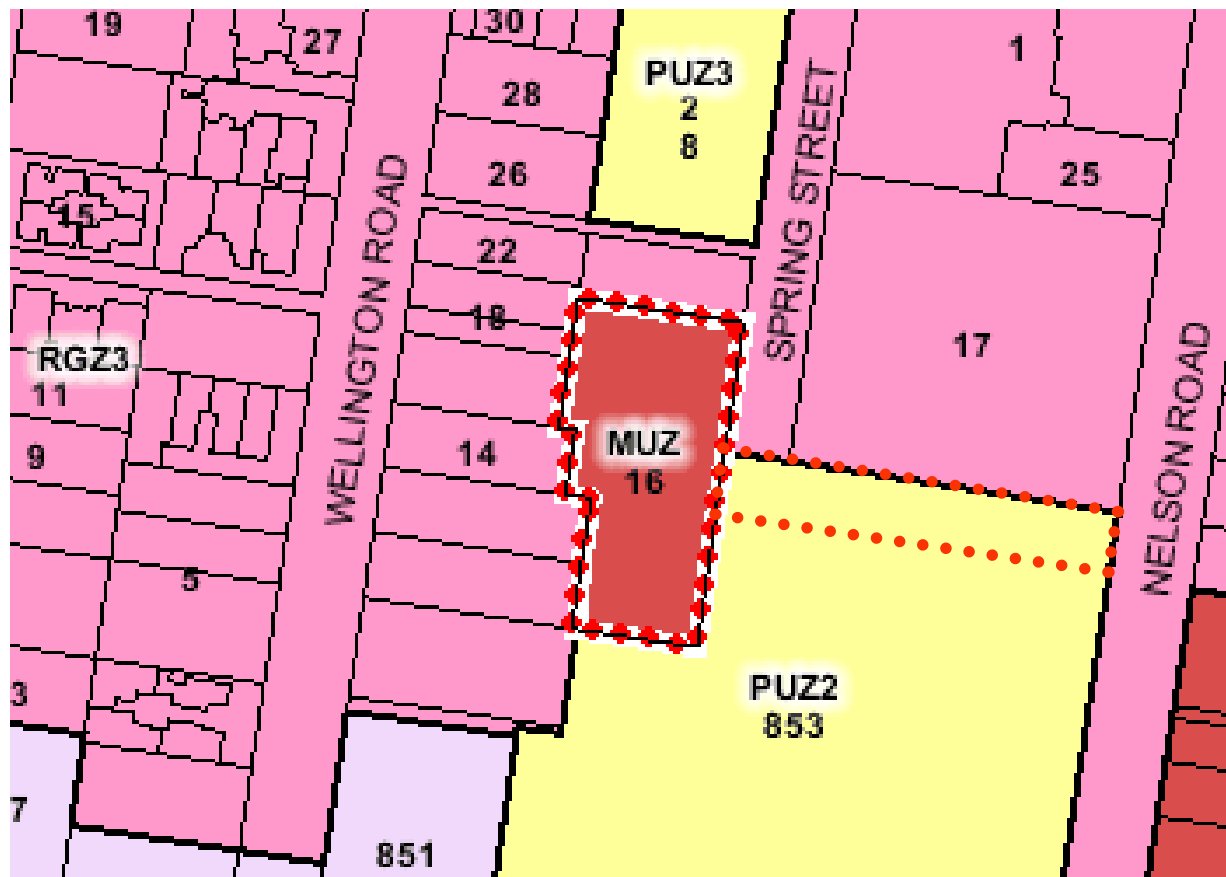
THE SUBJECT SITE 16 SPRING STREET IS LOCATED WITHIN THE HOSPITAL & EASTERN TAFE PRECINCT WITHIN THE BOX HILL METROPOLITAN ACTIVITY CENTRE. THE SITE IS IDEALLY LOCATED IN CLOSE PROXIMITY TO PUBLIC TRANSPORT NETWORKS, RETAIL, RECREATION, EDUCATION AND EMPLOYMENT OPPORTUNITIES.



01.2_SITE PLAN



01.3_TOWN PLANNING CONTROLS: WHITEHORSE PLANNING SCHEME



ZONE LEGEND

ACZ - Activity Centre	IN12 - Industrial 1	R12 - General Residential
B1Z - Commercial 1	IN22 - Industrial 2	R2Z - General Residential
B2Z - Commercial 1	IN3Z - Industrial 3	R3Z - General Residential
B3Z - Commercial 2	LDR2 - Low Density Residential	RAZ - Rural Activity
B4Z - Commercial 2	MUZ - Mixed Use	RCZ - Rural Conservation
B5Z - Commercial 1	NRZ - Neighbourhood Residential	RDZ1 - Road - Category 1
C1Z - Commercial 1	PCRZ - Public Conservation & Resource	RDZ2 - Road - Category 2
C2Z - Commercial 2	PDZ - Priority Development	RGZ - Residential Growth
CA - Commonwealth Land	PPRZ - Public Park & Recreation	RLZ - Rural Living
CCZ - Capital City	PUZ1 - Public Use - Service & Utility	RUZ - Rural
CDZ - Comprehensive Development	PUZ2 - Public Use - Education	SUZ - Special Use
DZ - Dockland	PUZ3 - Public Use - Health Community	TZ - Township
ERZ - Environmental Rural	PUZ4 - Public Use - Transport	UFZ - Urban Floodway
FZ - Farming	PUZ5 - Public Use - Cemetery/Crematorium	UGZ - Urban Growth
GRZ - General Residential	PUZ6 - Public Use - Local Government	
GWAZ - Green Wedge A	PUZ7 - Public Use - Other Public Use	
GWZ - Green Wedge	PZ - Port	

MIXED USE ZONE

Shown on the planning scheme map as MUZ

MUZ PURPOSE:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To provide for a range of residential, commercial, industrial and other uses which complement the mixed-use function of the locality.
- To provide for housing at higher densities. To encourage development that responds to the existing or preferred neighbourhood character of the area.
- To facilitate the use, development and redevelopment of land in accordance with the objectives specified in a schedule to this zone.

PUBLIC USE ZONE- EDUCATION

Shown on the planning scheme map as PUZ2

PUZ PURPOSE:

To recognise public land use for public utility and community services and facilities, to provide for associated uses that are consistent with the intent of the public land reservation or purpose.

01.4_TOWN PLANNING CONTROLS: WHITEHORSE PARKING OVERLAY

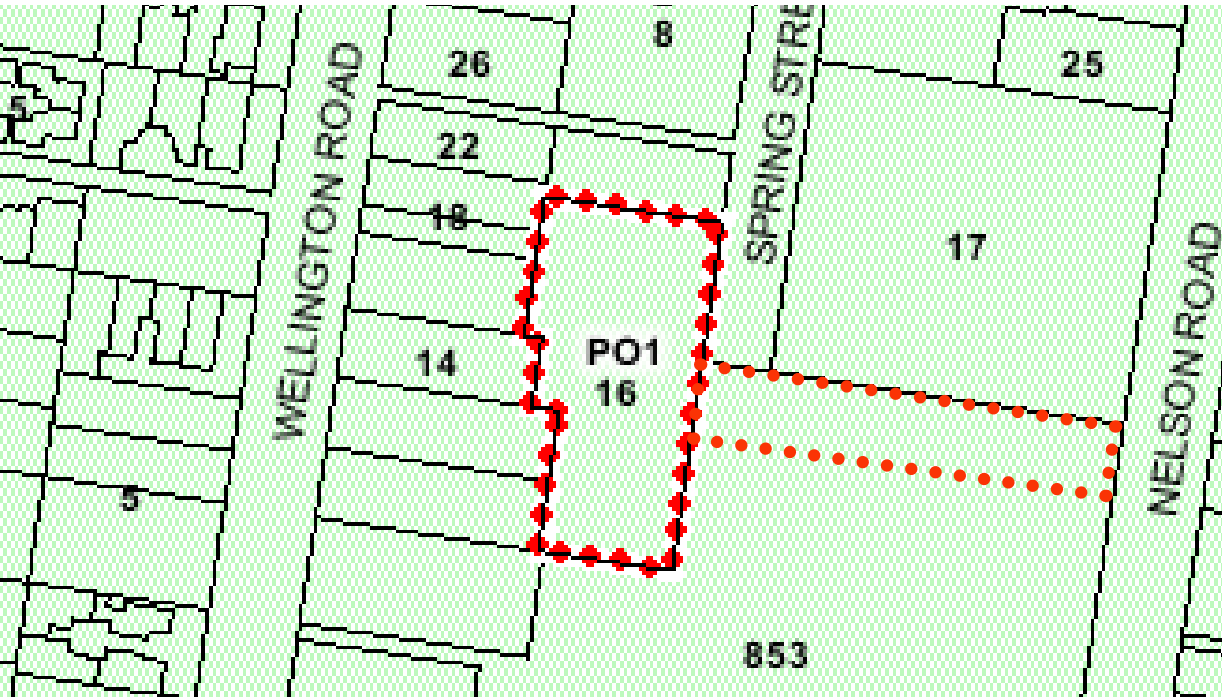


Table 1: Car parking spaces

Use	Rate	Measure
Dwelling	0.5	Resident spaces to each one bedroom dwelling, plus
	0.75	Resident spaces to each two bedroom dwelling, plus
	1.0	Resident spaces to each three or more bedroom dwelling (with studies or studios that are separate rooms counted as a bedroom), plus
	0.2	Visitor spaces to each dwelling for the first five dwellings, plus
	0.1	Visitor spaces to each dwelling for any subsequent dwellings
Office	2.0	To each 100 square metres of net floor area

For all other uses listed in Table 1 of Clause 52.06-5, the number of car parking spaces required for a use shall be calculated by using the *Rate* in Column B of that Table (representing a minimum rate).

PARKING OVERLAY

Shown on the planning scheme map as P01

P01 PURPOSE:

To facilitate an appropriate provision of car parking spaces, to identify areas and uses where local car parking rates apply, to identify areas where financial contributions are to be made for the provision of shared car parking.

1.0 CAR PARKING OBJECTIVES TO BE ACHIEVED

- Manage car parking demand and supply to satisfy user needs (with a focus on maintaining/increasing the viability of Box Hill).
- Locate and manage car parking so as to minimise traffic generated by the search for a parking space.
- Reduce vehicle trips through minimising parking provision where appropriate.
- Encourage the use of active and sustainable travel modes rather than increased private vehicle travel.
- Improve general amenity for pedestrians within Box Hill to increase the willingness for visitors and staff to walk to and within the Centre to their destination.

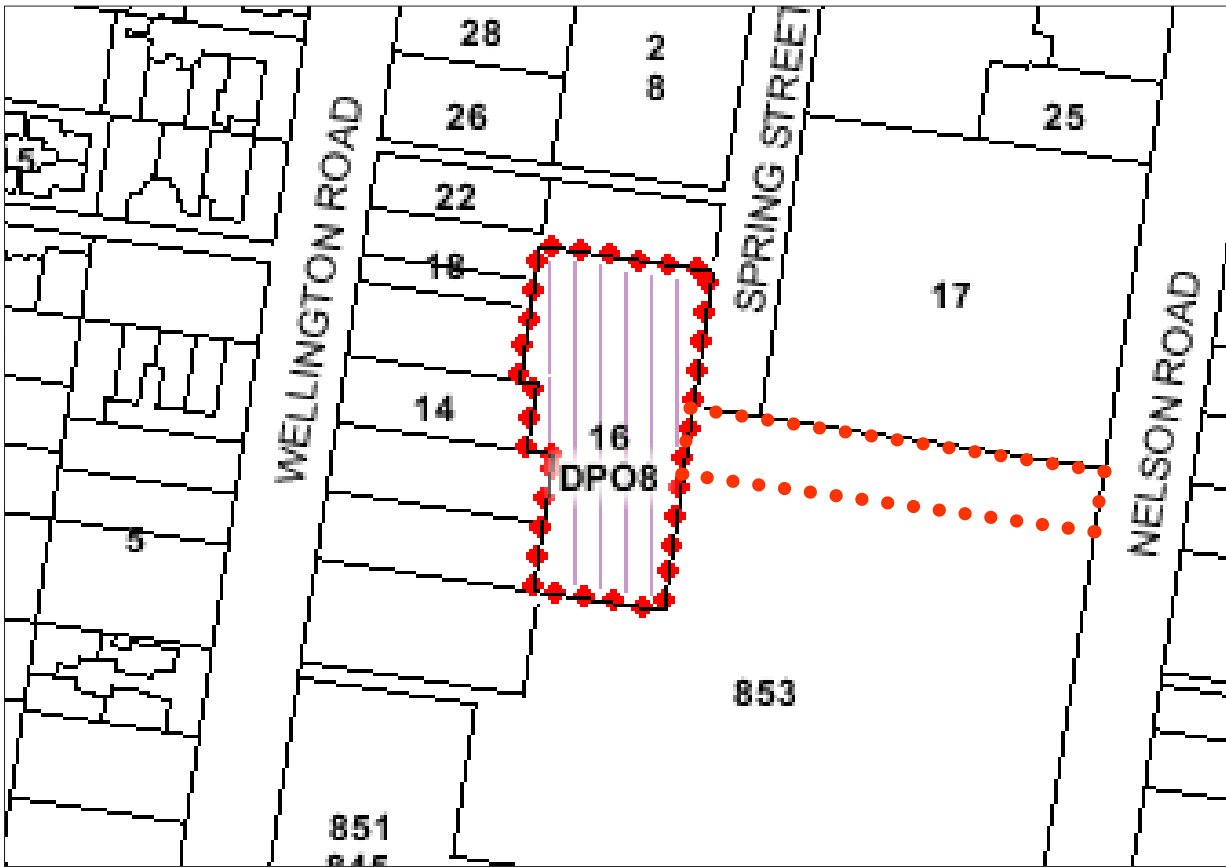
2.0 NUMBER OF CAR PARKING SPACES TO BE PROVIDED

If a use is specified in the Table below, the minimum number of car parking spaces required for the use is calculated by multiplying the Rate specified for the use by the accompanying Measure. (Table 1)

3.0 PERMIT REQUIREMENT

To recognise public land use for public utility and community services and facilities, to provide for associated uses that are consistent with the intent of the public land reservation or purpose.

01.5 DEVELOPMENT PLAN OVERLAY SCHEDULE 8



DEVELOPMENT PLAN OVERLAY - SCHEDULE 8
Shown on the planning scheme map as DPO8

DPO PURPOSE:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To identify areas which require the form and conditions of future use and development to be shown on a development plan before a permit can be granted to use or develop the land.
- To exempt an application from notice and review if it is generally in accordance with a development plan.

Overlays Legend

AEO - Airport Environs	IPO - Incorporated Plan
BMO - Bushfire Management	LSI0 - Land Subject to Inundation
CLPO - City Link Project	MAEO1 - Melbourne Airport Environs 1
DCPD - Development Contributions Plan	MAEO2 - Melbourne Airport Environs 2
DDO - Design & Development	NCO - Neighbourhood Character
DDOPT - Design & Development Part	PO - Parking
DPO - Development Plan	PAO - Public Acquisition
EAO - Environmental Audit	RO - Restructure
EMO - Erosion Management	RCO - Road Closure
ESO - Environmental Significance	SBO - Special Building
FO - Floodway	SLO - Significant Landscape
HO - Heritage	SMO - Salinity Management
ICPO - Infrastructure Contributions Plan	SRO - State Resource
	VPO - Vegetation Protection

01.6 DEVELOPMENT PLAN OVERLAY SCHEDULE 8

1.0 REQUIREMENT BEFORE A PERMIT IS GRANTED

A permit may be granted before a development plan has been approved for the following:

- Subdivision
- Minor buildings and works
- Removal or creation of easements or restrictions.

Before granting a permit, the responsible authority must be satisfied that the permit will not prejudice the preparation of a Development Plan and the future use and development of the land in an integrated manner.

2.0 CONDITIONS AND REQUIREMENTS FOR PERMITS

None specified.

3.0 REQUIREMENTS FOR DEVELOPMENT PLAN

The development plan must include the following:

A site analysis that identifies existing conditions plan, showing surrounding land uses and development, adjoining roads and pedestrian links, public transport routes and social infrastructure.

- Concept plans for the layout and development of the site, which show:
- The siting and orientation of built form.
- The proposed uses of each building.
- Three dimensional building envelopes for new buildings, including indicative building heights, the separation distances between buildings and the setback from street frontages and adjoining properties.
- Shadow diagrams for the equinox (22 September / 22 March) based on the building envelopes and arrangements.

Design Guidelines for the site, which reflect the following requirements:

- The building heights should not exceed 29 storeys in height and provide an appropriate graduation in height.
- A street wall of 4 storeys should be established with upper levels setback a minimum of 3 metres from Spring Street.
- A setback of at least 6 metres from the northern boundary should be provided to incorporate vehicle access to the site off Spring Street.
- The development should include a mixed use podium of 4 storeys, incorporating commercial and retail and other active uses at ground floor level and three levels of education facilities.
- All levels above the podium should provide for residential development.
- Car parking should be obscured from the public realm.
- Building services, including roof top services/elements should be screened or relocated away from the public realm.
- Sustainable design principles should be applied to address water management, solar access and energy conservation.

An indicative development schedule including the number, type and density of dwellings and the floor area of any proposed non-residential uses.

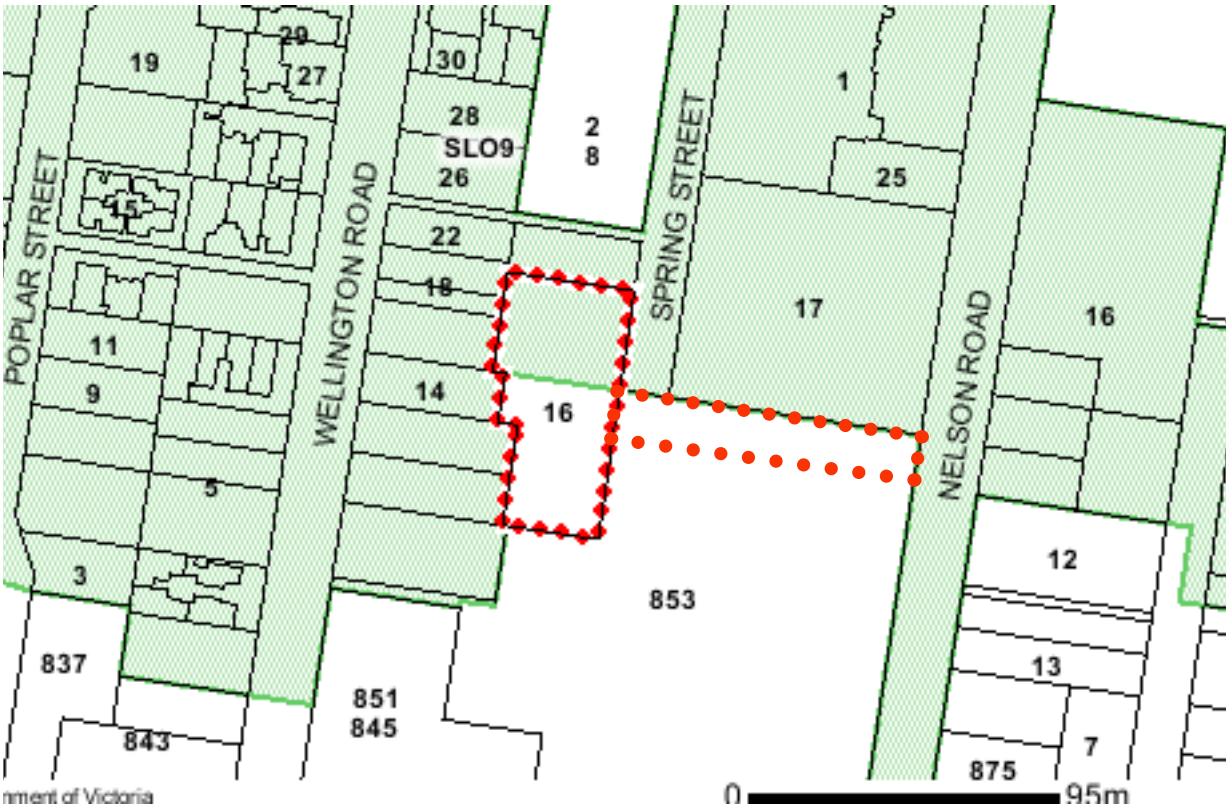
A transport plan and car parking plan, which provides:

- The existing capacity of the surrounding road network.
- An indication of roads, pedestrian, cyclist and vehicle access locations, including parking areas both internal and external to the site.
- An assessment of the impact of traffic and car parking generated by the use and development upon the surround road network.
- Car parking rates for all uses, including visitor car parking.
- The layout of accessways, car parking and loading areas.
- Separated areas for pedestrian movement throughout the site and linkages to the pedestrian network.
- The provision of convenient bicycle storage facilities.
- For the creation of a new road along the northern boundary of 853 Whitehorse Road, connecting Spring Street (as extended) to Nelson Road.

A landscape and public realm concept plan for the site.

A community infrastructure assessment to determine the impact of development on the demand for such facilities

01.7_SIGNIFICANT LANDSCAPE OVERLAY - SCHEDULE 9



Overlays Legend

AEO - Airport Environs	IPO - Incorporated Plan
BMO - Bushfire Management	LSIO - Land Subject to Inundation
CLPO - City Link Project	MAEO1 - Melbourne Airport Environs 1
DCPD - Development Contributions Plan	MAEO2 - Melbourne Airport Environs 2
DDO - Design & Development	NCO - Neighbourhood Character
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ESO - Environmental Significance	SBO - Special Building
FO - Floodway	SLO - Significant Landscape
HO - Heritage	SMO - Salinity Management
ICPO - Infrastructure Contributions Plan	SRD - State Resource
	VPO - Vegetation Protection

SIGNIFICANT LANDSCAPE OVERLAY - SCHEDULE 9

Shown on the planning scheme map as DP08

DPO PURPOSE:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To identify significant landscapes.
- To conserve and enhance the character of significant landscapes.

1.0 LANDSCAPE CHARACTER OBJECTIVE TO BE ACHIEVED

To encourage the retention of established and mature trees and to provide for the planting of new canopy trees.

2.0 PERMIT REQUIREMENT

Buildings and works

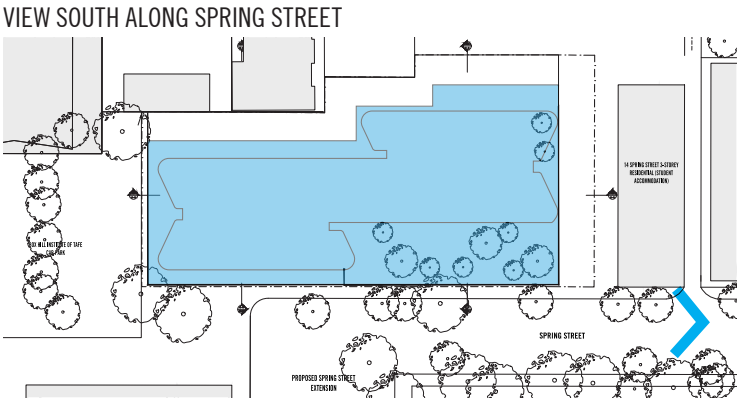
- A permit is required to construct a front fence that is within 4 metres of any vegetation that requires a permit to remove, destroy or lop under the provisions of this schedule. This does not apply to the like-for-like replacement of a front fence to the satisfaction of the responsible authority.
- A permit is not required to construct a building or carry out works provided the building or works are set back at least 4 metres from the base of any tree protected under the provisions of this schedule.

Vegetation removal

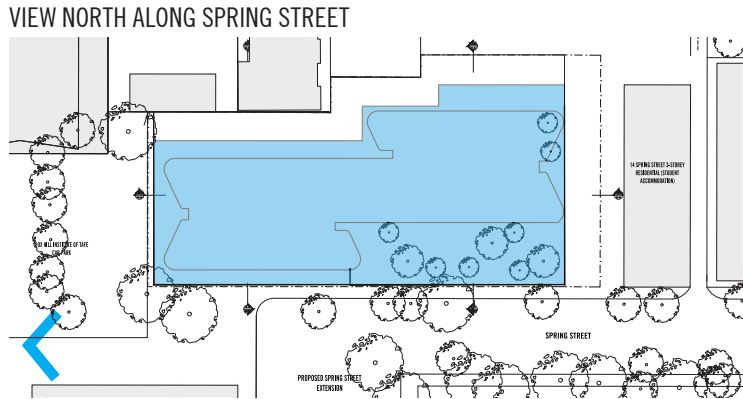
- A permit is required to remove, destroy or lop a tree. This does not apply to:
- A tree less than 5m in height and having a single trunk circumference of 1.0 metre or less at a height of one metre above ground level; or
- The pruning of a tree for regeneration or ornamental shaping; or
- A tree which is dead or dying or has become dangerous to the satisfaction of the responsible authority; or
- A tree outside the Minimum Street Setback in the Residential Growth Zone

The overlay affects the northern half of the site. The vegetation on this part of the site have been removed at sometimes in previous years. This means that this control will not impact on design options.

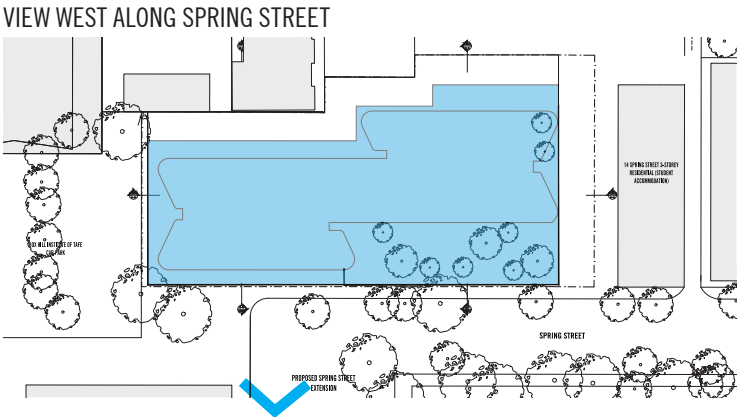
01.8_EXISTING CONDITIONS - SITE PHOTOS



01.8_EXISTING CONDITIONS - SITE PHOTOS



01.8_EXISTING CONDITIONS - SITE PHOTOS



01.9_DEVELOPMENT CONTEXT



LEGEND

- SITE
- PLANNING ASSESSMENT
 - 1 15 STOREYS - MEDICAL PLANNING ASSESSMENT
 - 2 16 STOREYS - RESIDENTIAL PLANNING ASSESSMENT
- UNDER CONSTRUCTION/RECENTLY BUILT
 - 3 8 STOREYS - RESIDENTIAL DEVELOPMENT
 - 4 7 STOREYS - RESIDENTIAL DEVELOPMENT
 - 5 4 STOREYS - RESIDENTIAL DEVELOPMENT
 - 6 9 STOREYS - RESIDENTIAL DEVELOPMENT
 - 7 20 STOREYS - MIXED USE UNDER CONSTRUCTION
- PLANNING PERMIT
 - 8 14 STOREYS - RESIDENTIAL PLANNING PERMIT
 - 9 5 STOREYS - RESIDENTIAL PLANNING PERMIT
 - 10 6 STOREYS - RESIDENTIAL PLANNING PERMIT
 - 11 37 STOREYS - RESIDENTIAL PLANNING PERMIT
 - 12 APPROVED 5 STOREYS BOX HILL RSL CAR PARK



01.10_LAND USE - BHI AND HOSPITAL

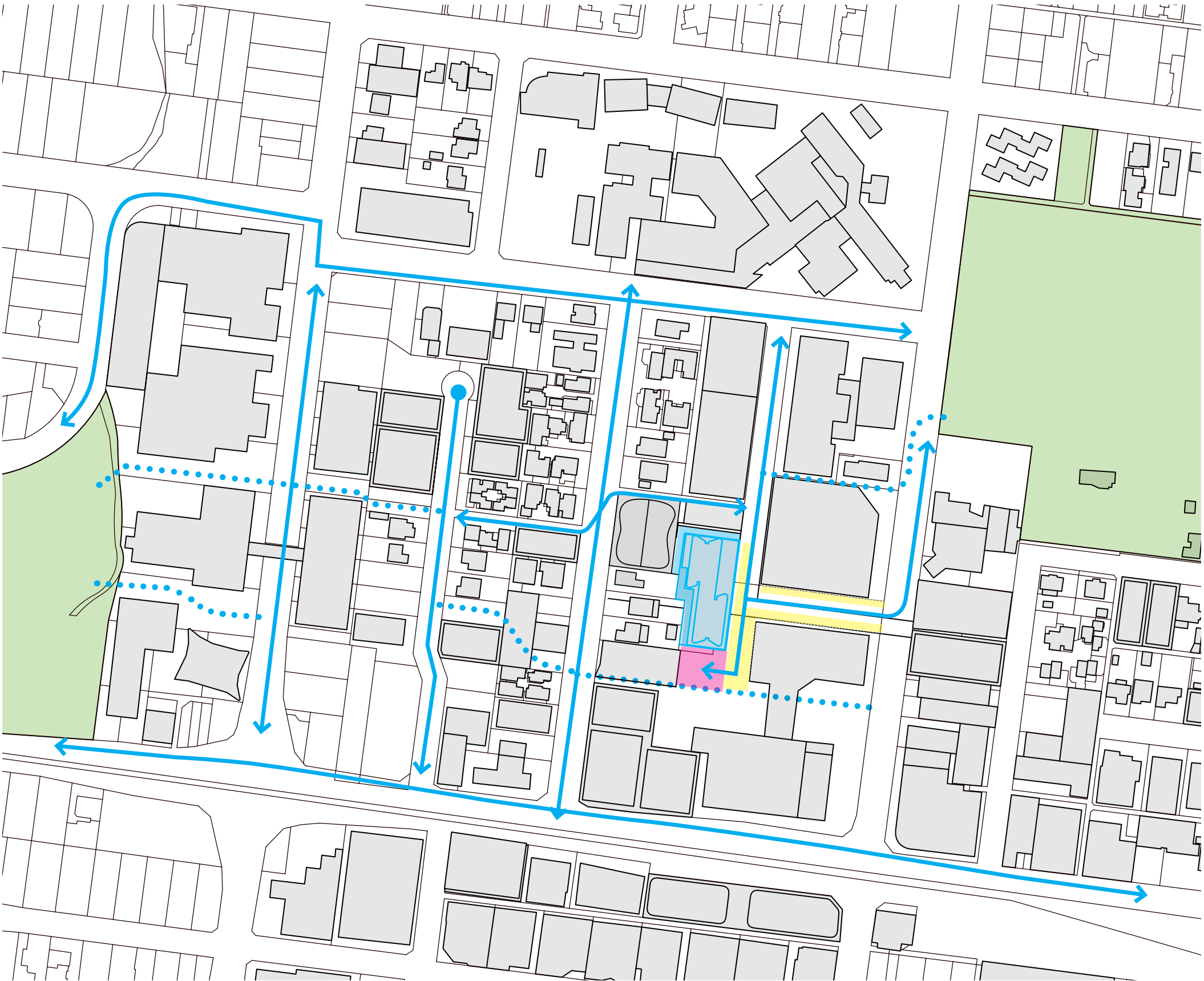


LEGEND

- SITE
- MEDICAL
- BOX HILL INSTITUTE
- GARDENS

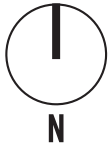


01.11_PEDESTRIAN CONNECTIVITY

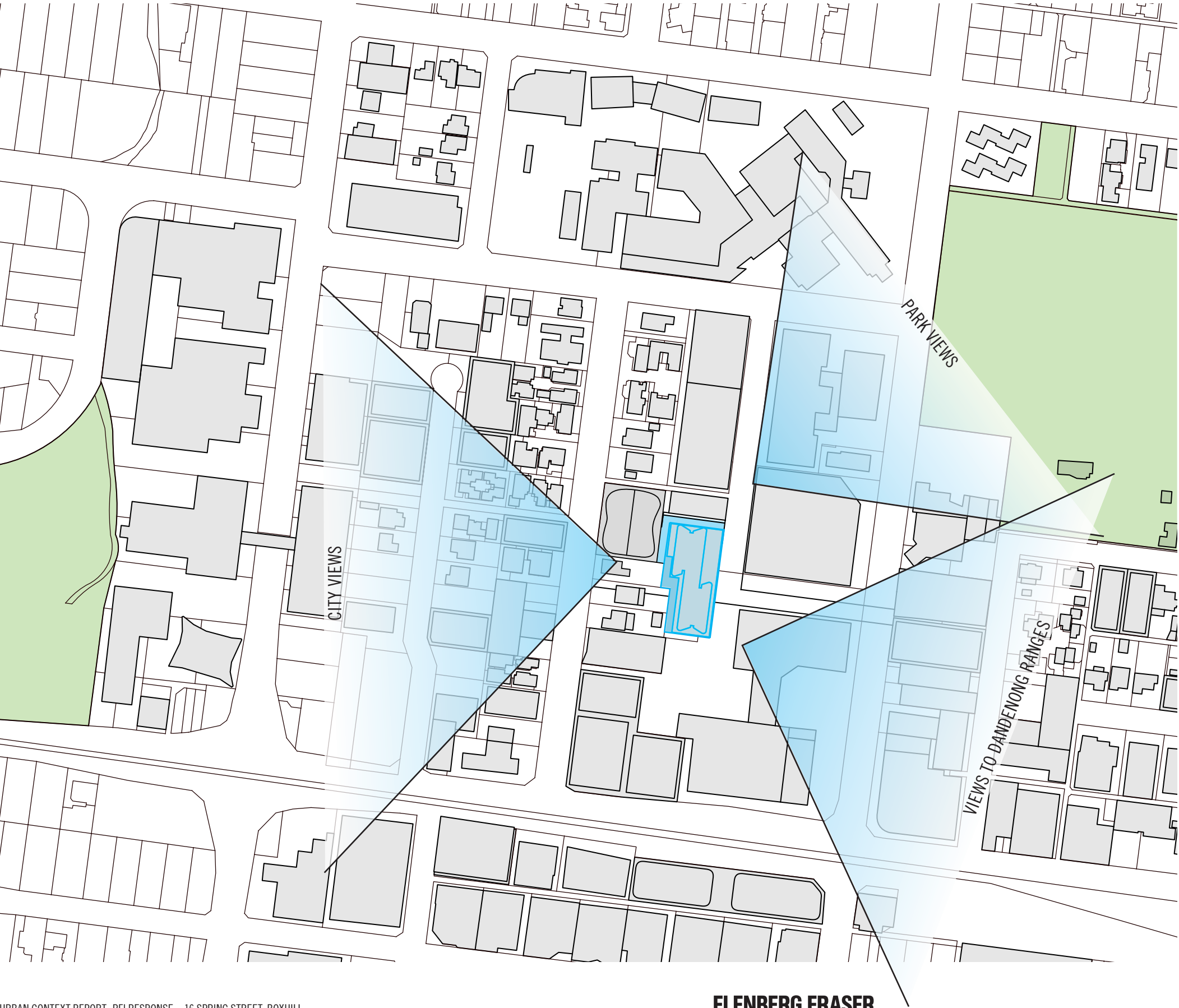


LEGEND

- SITE
- LANDSCAPE AREA
- POTENTIAL PLAZA
SUBJECT TO BHI
FUTURE PLAN
- GARDENS
- PRIMARY
PEDESTRIAN
ROUTES
- SECONDARY
PEDESTRIAN
ROUTES



1.12_VIEWS



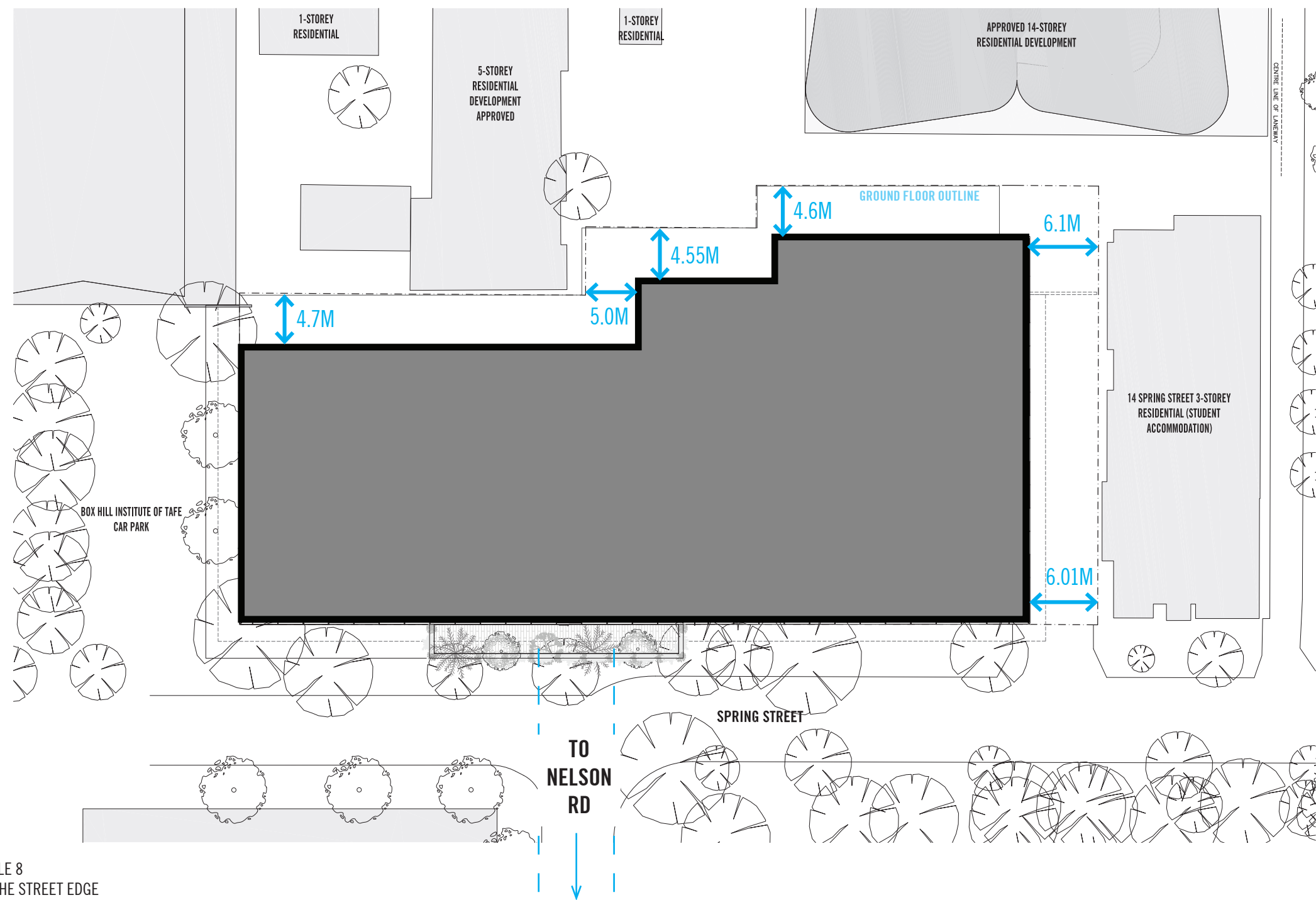
LEGEND

- SITE
- GARDENS



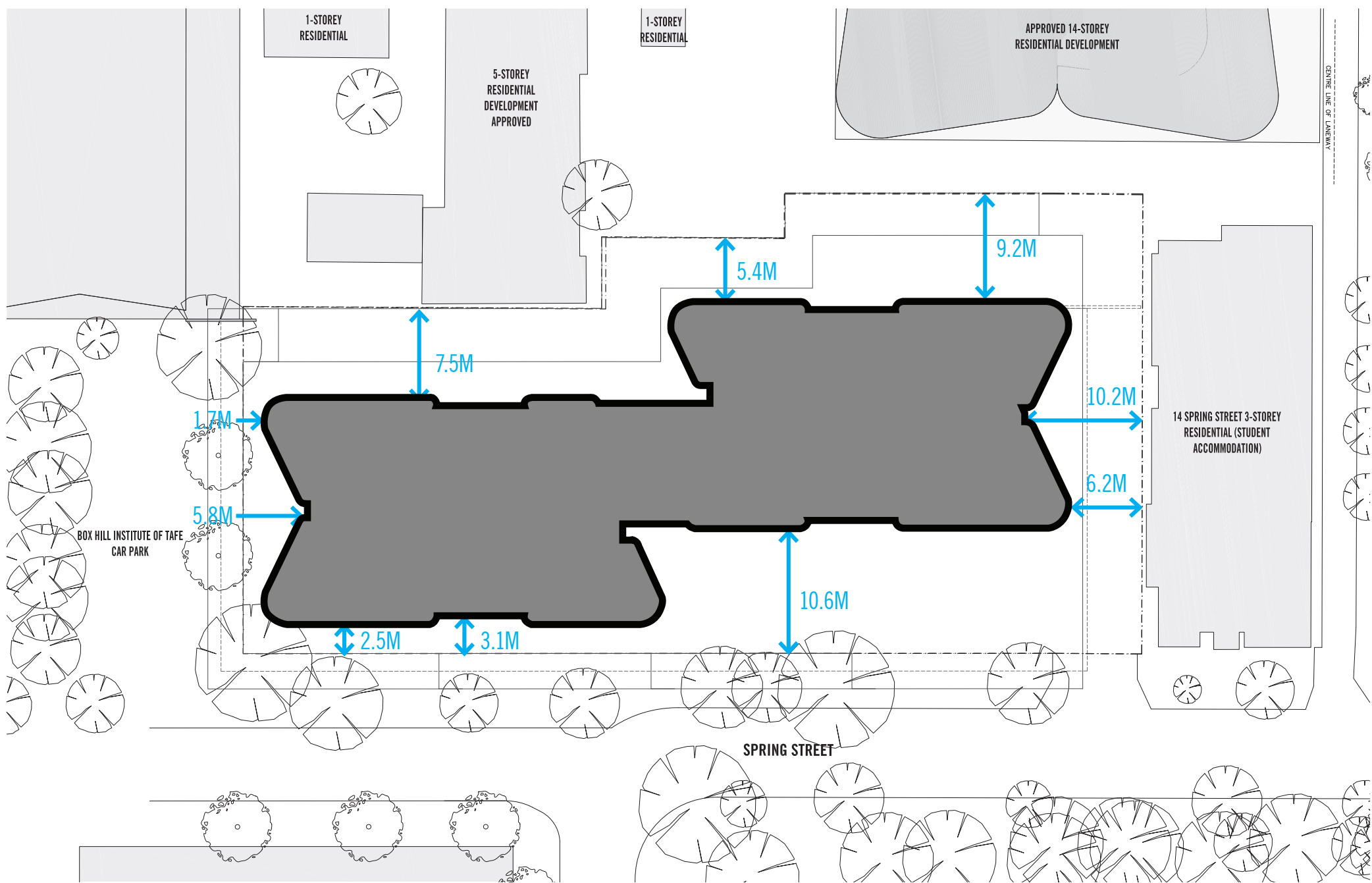
PLANNING CONTEXT

02.1_DEVELOPMENT PLAN OVERLAY SCHEDULE 8: BUILT FORM DIRECTIONS: PODIUM AND CONNECTIVITY



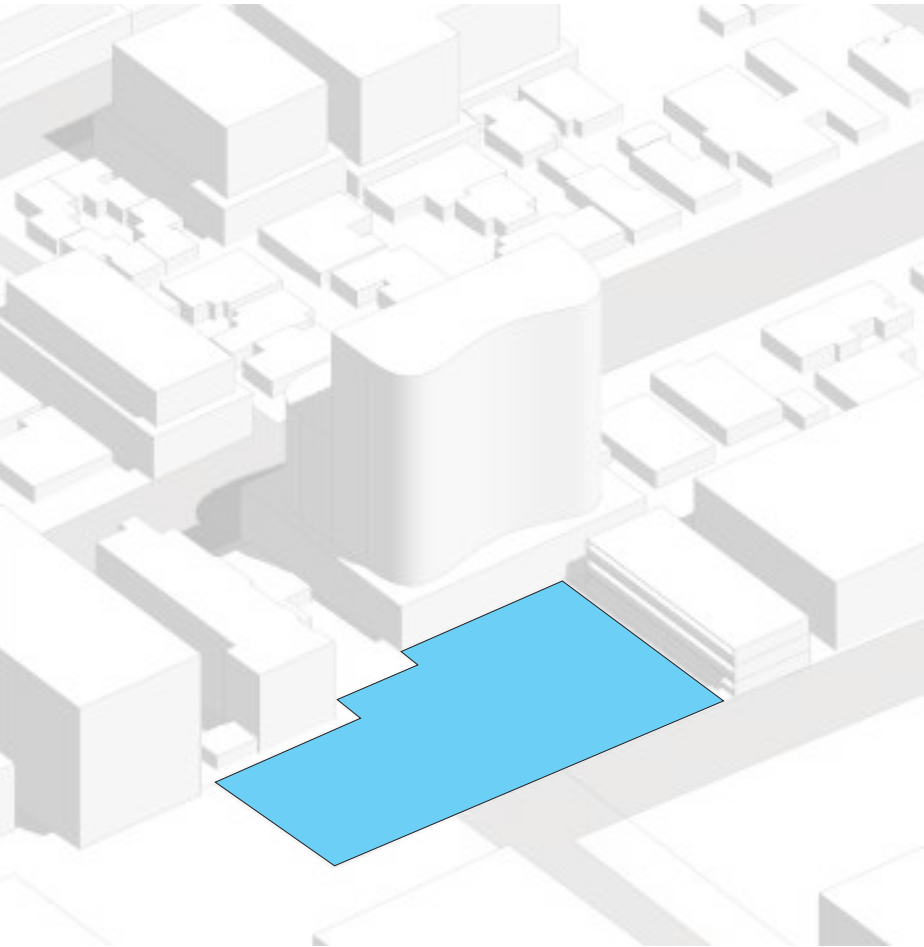
- DEVELOPMENT PLAN OVERLAY SCHEDULE 8
- FOUR STOREY PODIUM DEFINING THE STREET EDGE
 - STEPPED TOWER FORM
 - VEHICULAR LANEWAY ACCESS ALONG NORTHERN EDGE OF SITE
 - CREATION OF NEW ROAD ALONG THE NORTHERN BOUNDARY OF 853 WHITEHORSE RD CONNECTING SPRING ST (AS EXTENDED) TO NELSON RD
 - 6M SETBACK TO NORTH
 - MIN 4.5M SETBACK TO WESTERN BOUNDARIES

02.2_DEVELOPMENT PLAN OVERLAY SCHEDULE 8: BUILT FORM DIRECTIONS: TOWER



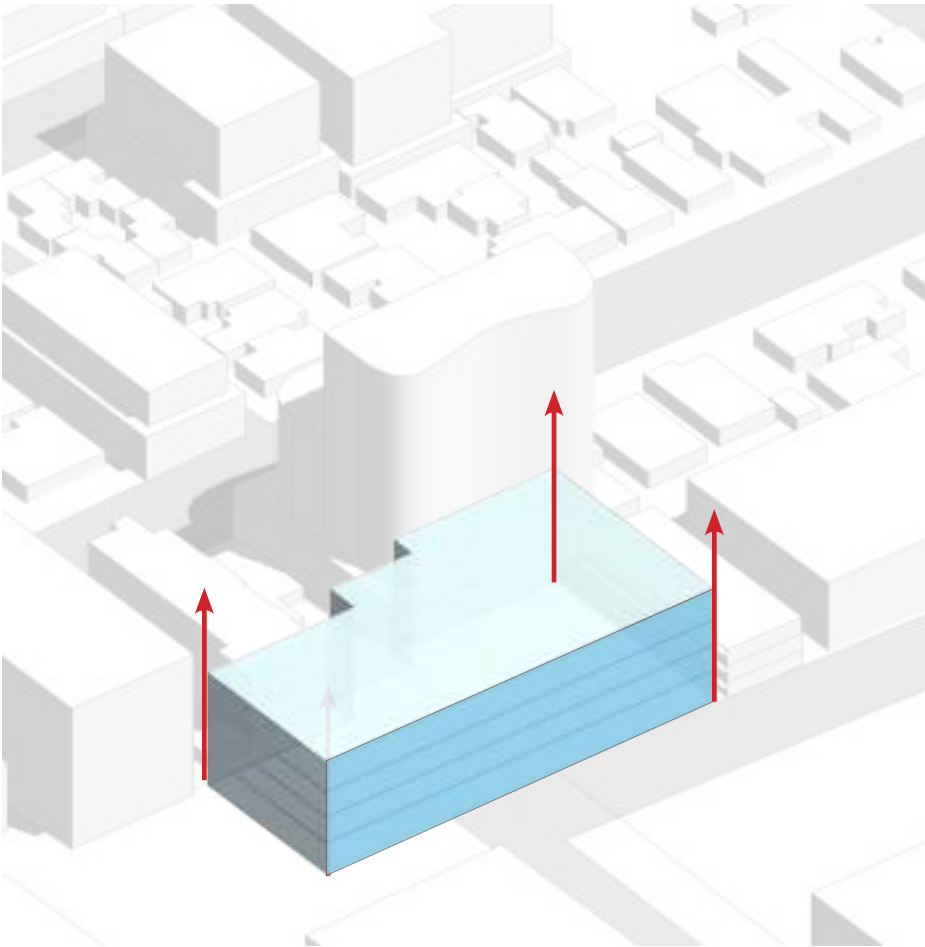
02.3_PLANNING FRAMEWORK ENVELOPE

SITE



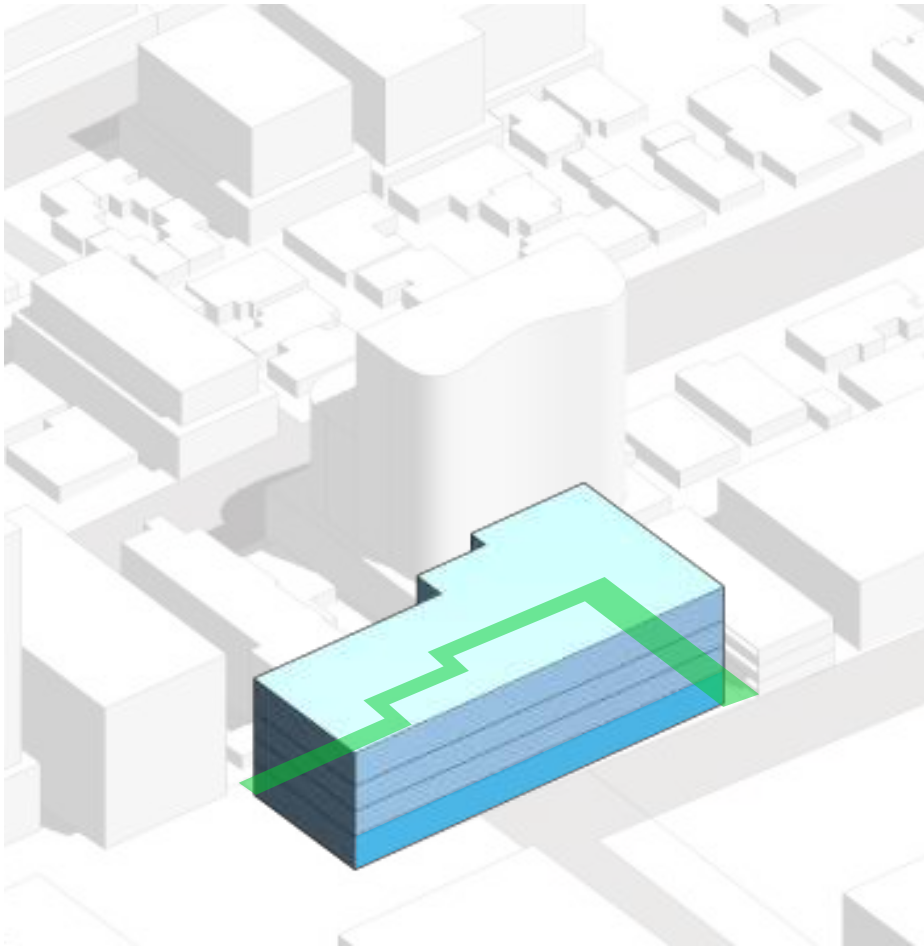
AN OPEN AIR CARPARK CURRENTLY OCCUPIES THE SUBJECT SITE.

PODIUM



THE ESTABLISHMENT OF A 4-STOREY PODIUM IN LINE WITH THE DEVELOPMENT PLAN OVERLAY SCHEDULE 8.

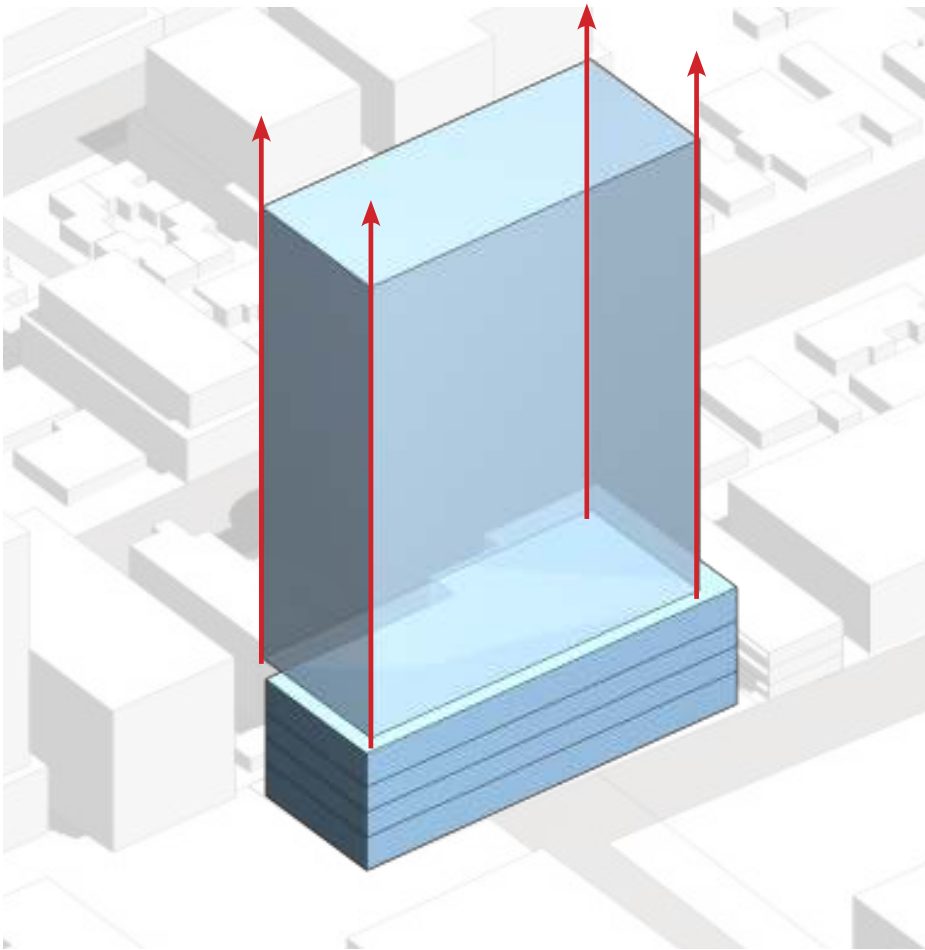
PODIUM SETBACKS



SETTING BACK THE NORTHERN END OF THE PODIUM AWAY FROM THE NEIGHBOURING SITE AND CREATING VEHICLE ACCESS TO BOH ZONES IN LINE WITH THE DEVELOPMENT PLAN OVERLAY SCHEDULE 8. A MINIMUM 4.5M SETBACK HAS BEEN APPLIED ALONG THE WESTERN BOUNDARY TO ALLOW FOR EQUITABLE DEVELOPMENT

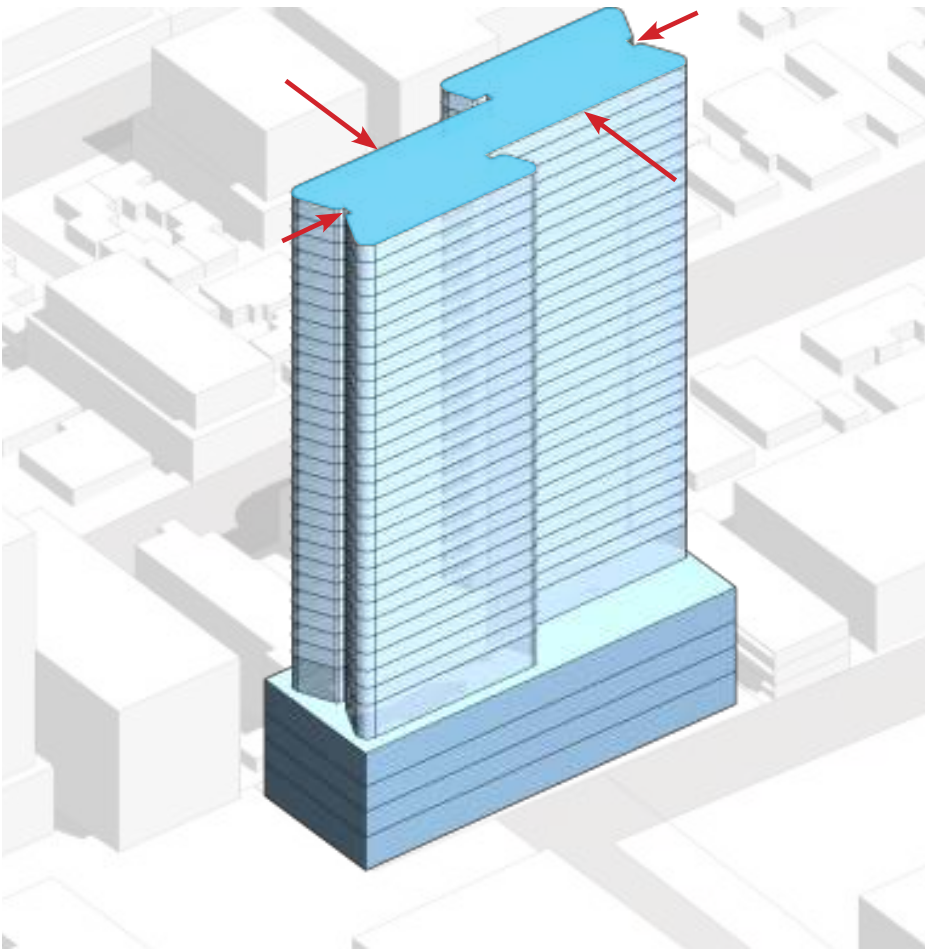
02.3_PLANNING FRAMEWORK ENVELOPE

TOWER EXTRUSION



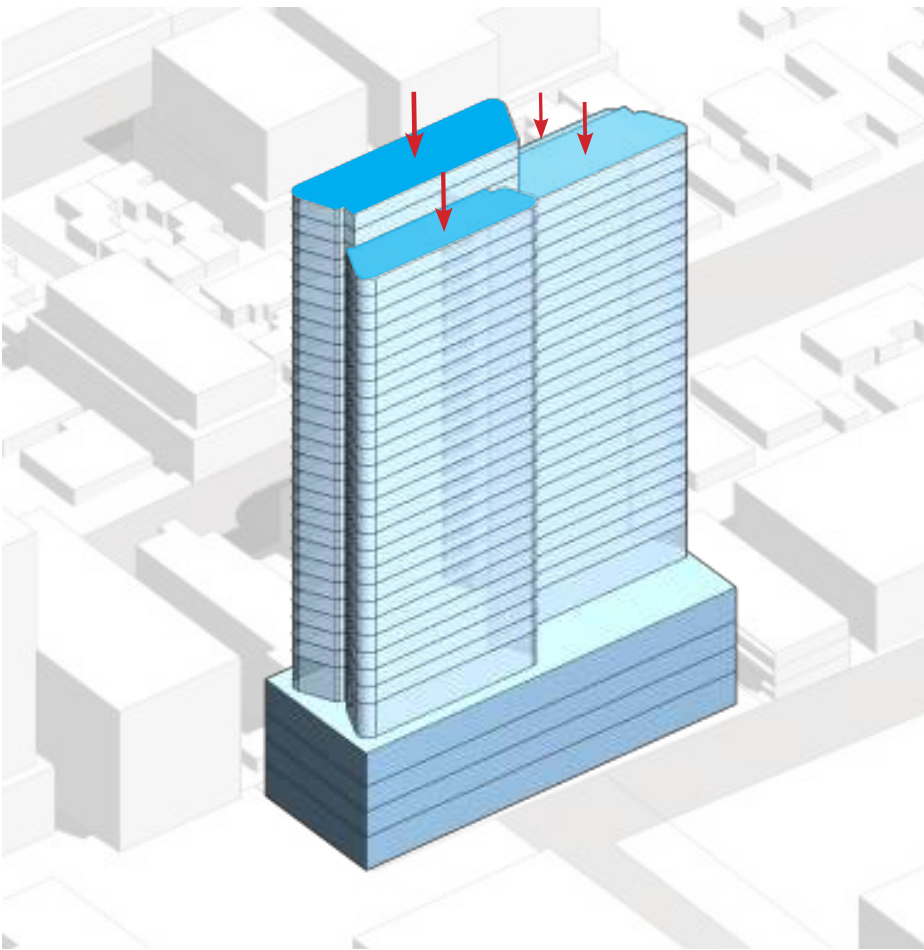
TOWER UP TO 29-LEVELS AS DESCRIBED IN THE DEVELOPMENT PLAN OVERLAY SCHEDULE 8.

TOWER SHIFT/ FORM/SETBACKS



SEPARATING THE TOWER FORM TO REDUCE VISUAL BULK AND MOULDING THE FORM TO CREATE MORE ORGANIC GEOMETRY TO FURTHER BREAK DOWN THE MASS

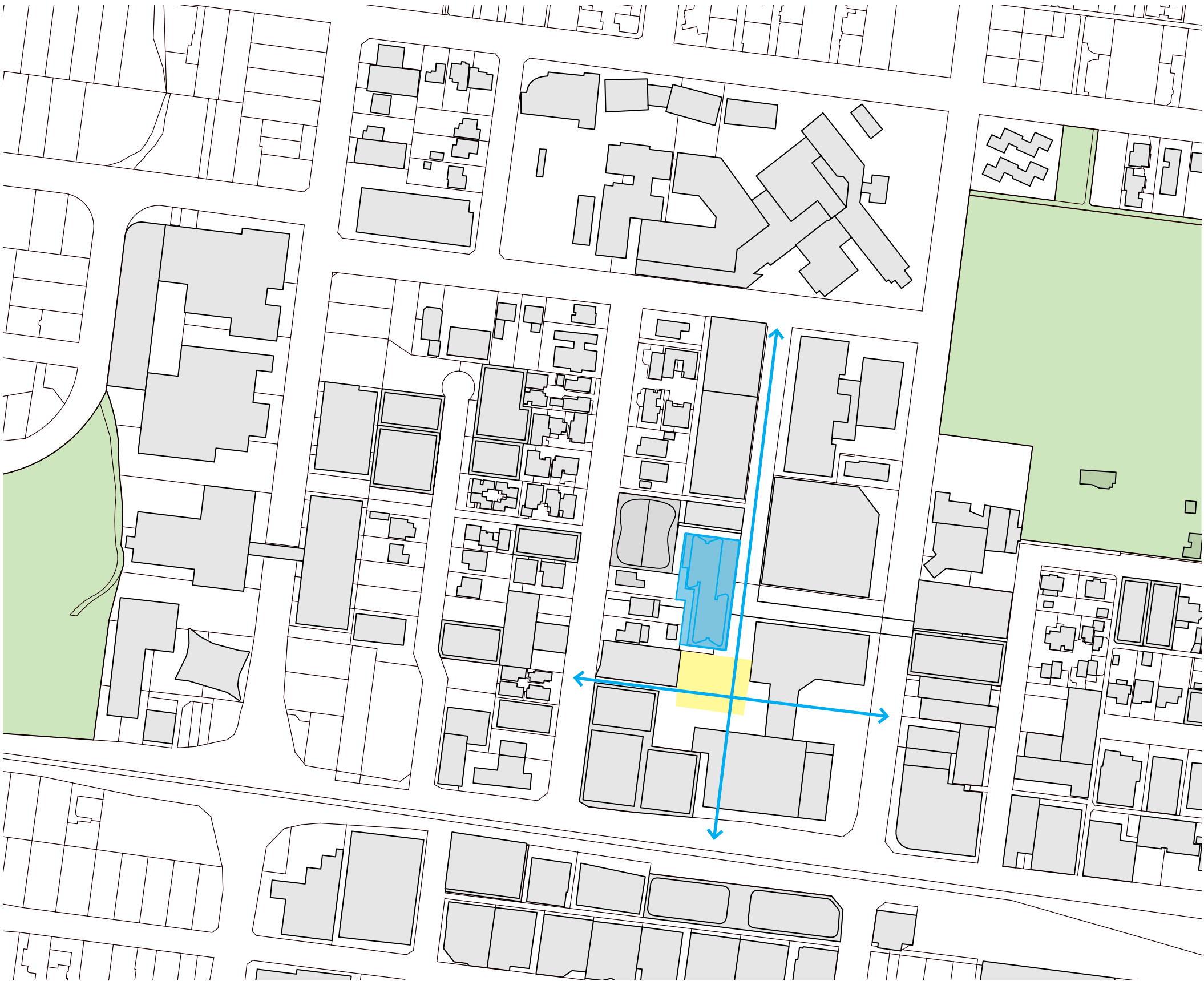
GRADATION IN HEIGHT



APPROPRIATE GRADATION IN HEIGHT AS REQUIRED BY THE DESIGN GUIDELINES NOMINATED IN THE DEVELOPMENT PLAN OVERLAY – SCHEDULE 8. THE BUILDING HAS BEEN DESIGN TO STEP FROM THE ROOF PLANT SCREEN DOWN TO 29 STOREYS AT THE SOUTHERN END, THEN STEP DOWN TO 27 STOREYS AND 25 STOREYS TO THE NORTHERN PORTION OF THE TOWER.

MASTER PLANNING RESPONSE

03.1_NEW CAMPUS CENTRE



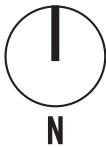
LEGEND

SITE

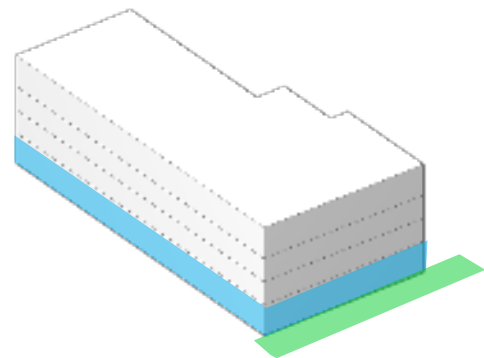
POTENTIAL PLAZA
SUBJECT TO BHI
FUTURE PLAN

GARDENS

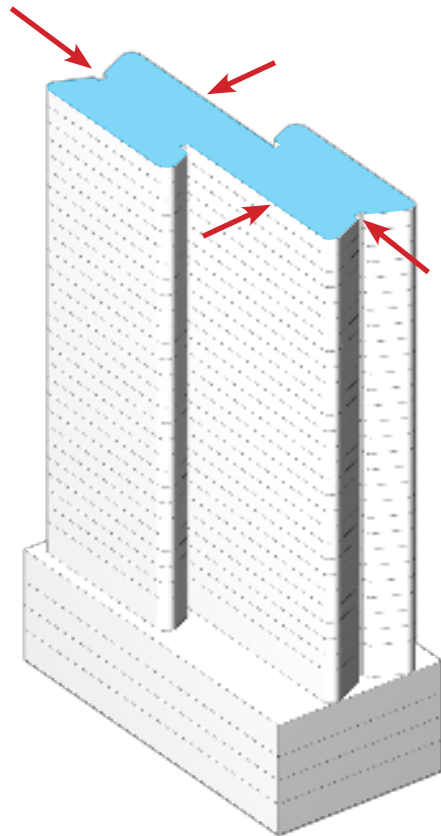
PROPOSED AXIAL
CONNECTION



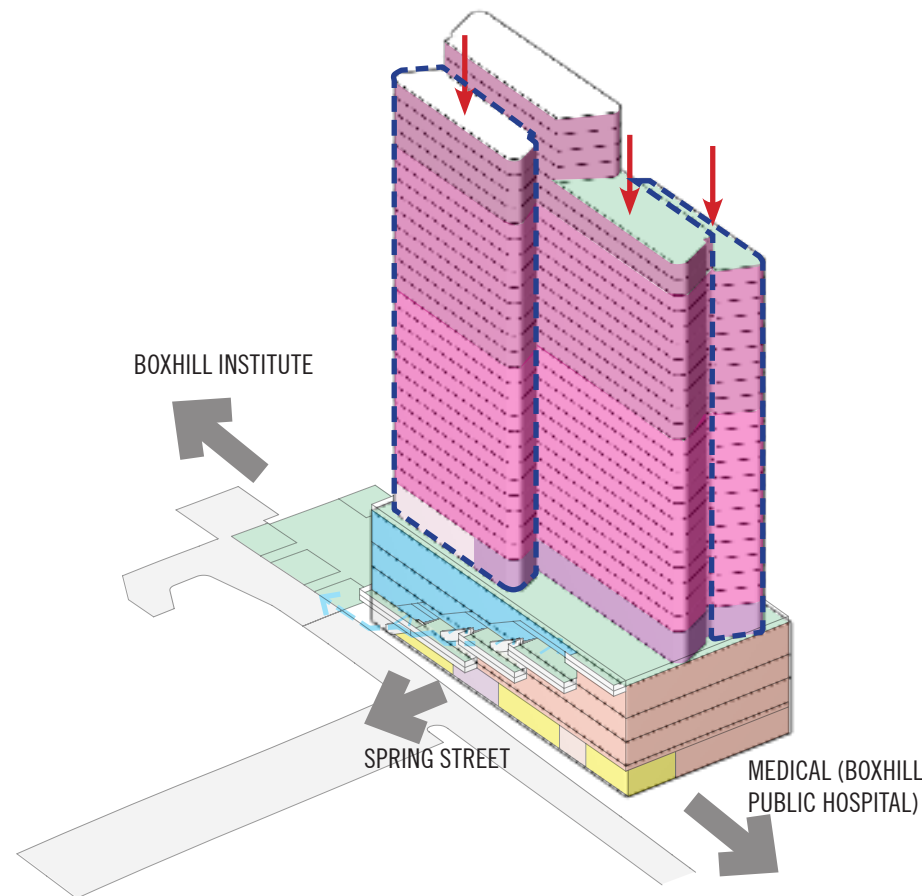
03.2_MASSING AND PROGRAMME



1. SETTING BACK THE NORTHERN END OF THE PODIUM AWAY FROM THE NEIGHBOURING SITE AND CREATING VEHICLE ACCESS TO BOH ZONES IN LINE WITH THE DEVELOPMENT PLAN OVERLAY SCHEDULE 8.



2. SEPARATING THE TOWER FORM AND INTRODUCE GRADATION IN HEIGHT TO REDUCE VISUAL BULK AND COMPLYING WITH SETBACKS TO BOUNDARIES.



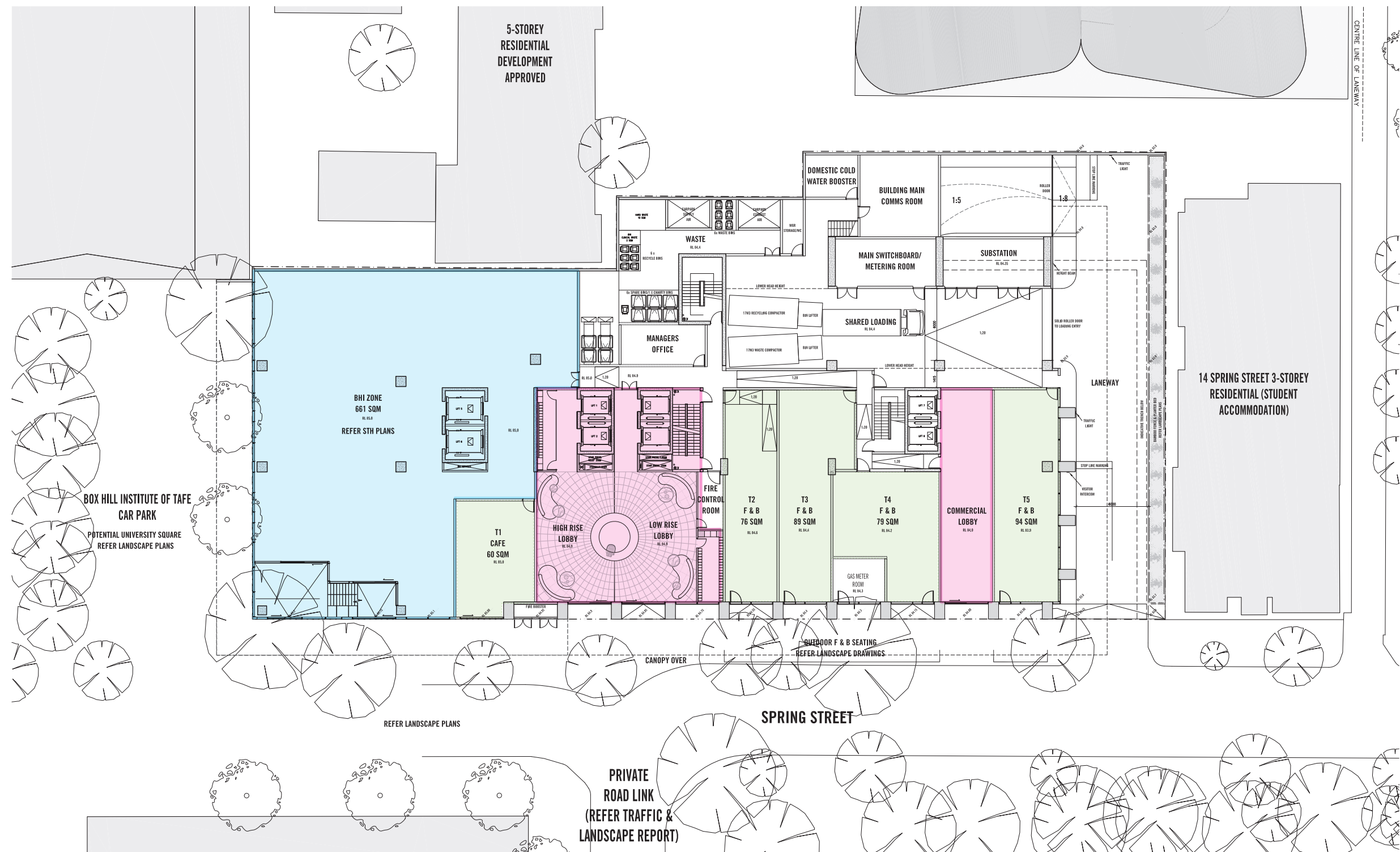
3. • GRADATION IN HEIGHT TO CUT THE TOWER FORM INTO 4 BLOCKS TO FURTHER REDUCE VISUAL BULK
• INTRODUCTION OF CASCADING WIND CANOPY GREEN TERRACES TO CONNECT THE GREEN SPINE ALONG SPRING STREET UP TO THE PODIUM TOP
• INTRODUCTION OF VARIATIONS IN DWELLING TYPES SUITED TO MIX OF STUDENTS, PROFESSIONALS AND FAMILY OCCUPANTS.

LEGEND

- LANDSCAPE/
TERRACES/
PLAZA
- BOXHILL
INSTITUTE
- COMMERCIAL
- RETAIL
- COMMUNAL
- STUDIO
- LOW RISE
- HIGH RISE
- PENTHOUSE



03.4_SITE OPPORTUNITIES_GROUND FLOOR SPRING STREET ACTIVATION



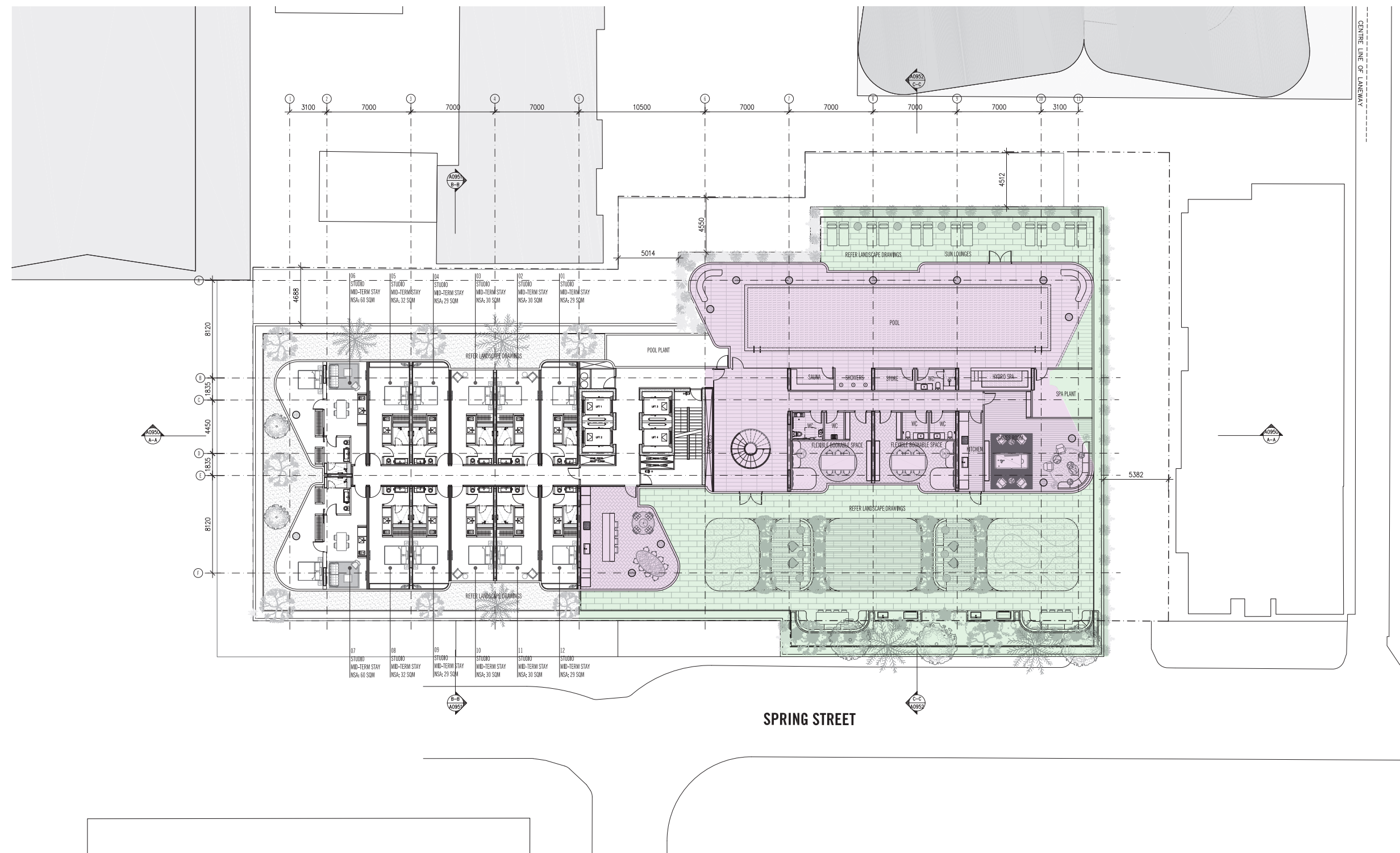
RETAIL ACTIVATION LOBBY ACTIVATION BOX HILL INSTITUTE STUDENT ACTIVATION

03.5_SITE OPPORTUNITIES_GROUND FLOOR ACTIVATION



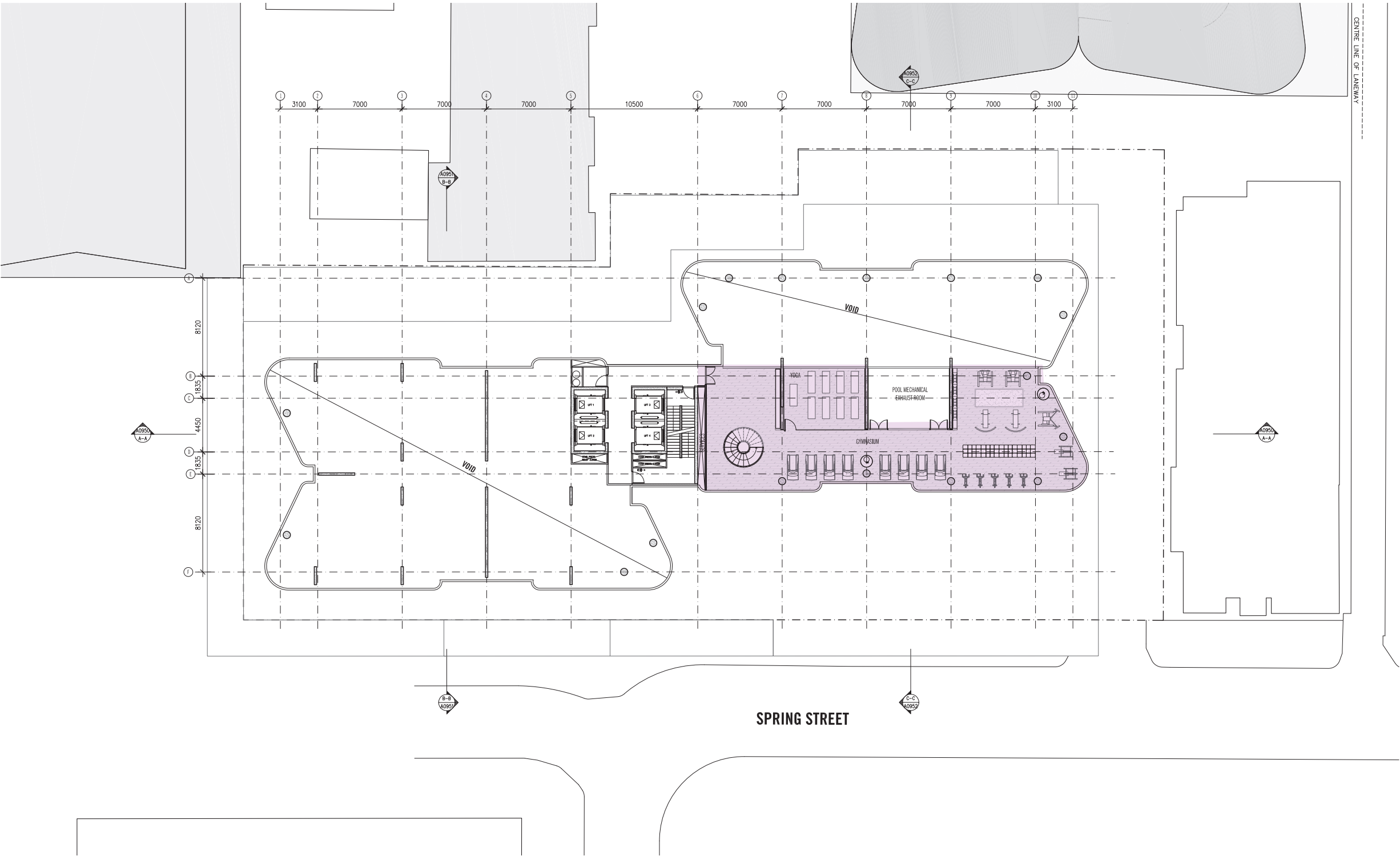
- OPEN AND TRANSPARENT GROUND FLOOR PRESENCE THAT WELCOMES STUDENTS & STAFF
- OPPORTUNITIES TO PRESENT BACK TO THE BROADER COMMUNITY THE ACTIVITIES WITHIN THE BHI
- PRESENT ACTIVE FRONTAGES THAT CONTRIBUTE TO THE STREETScape & PUBLIC REALM

03.6_SITE OPPORTUNITIES_PODIUM TOP COMMUNAL FACILITIES

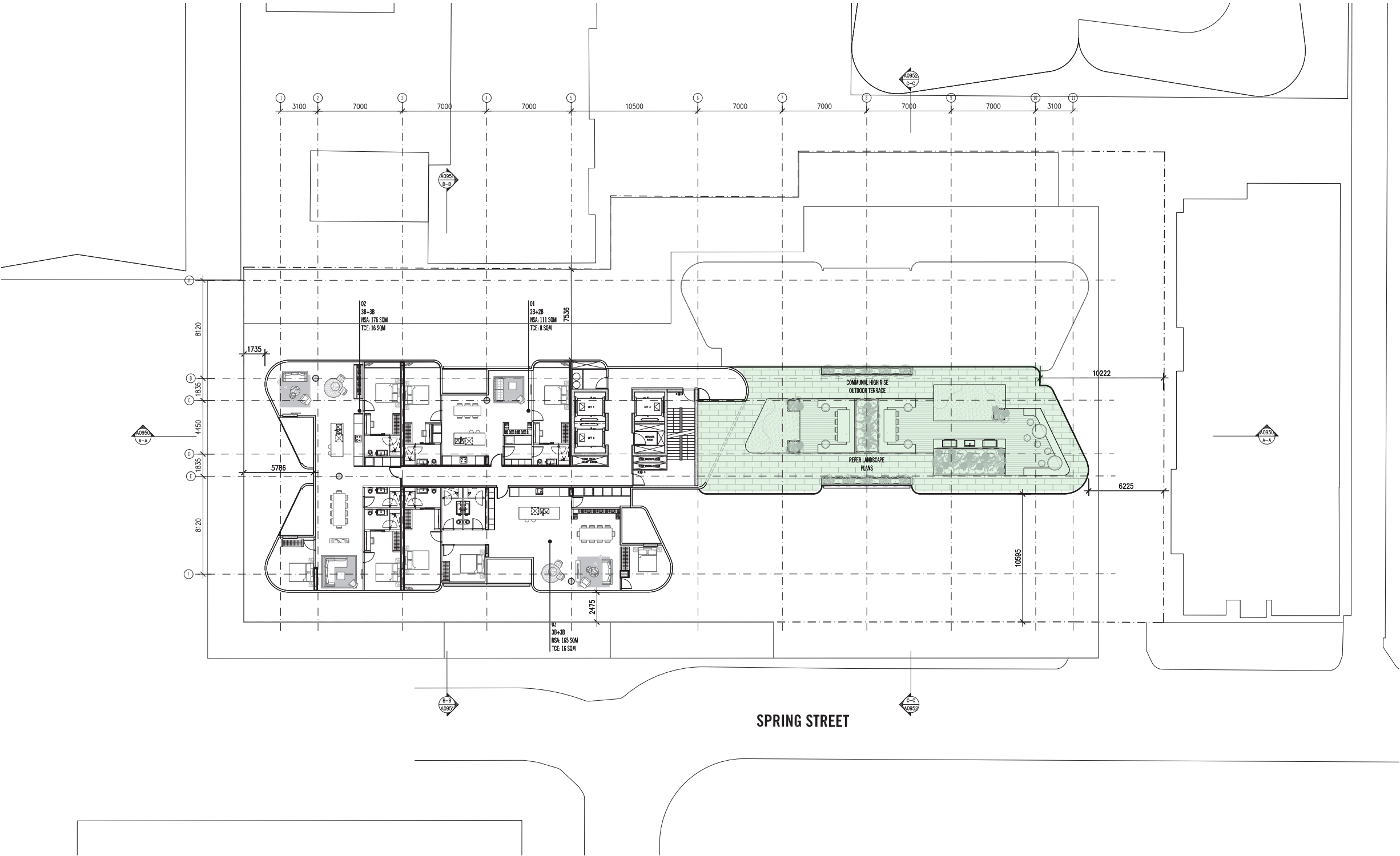


COMMUNAL FACILITIES COMMUNAL OUTDOOR SPACE

03.7_SITE OPPORTUNITIES_L04 MEZZANINE COMMUNAL FACILITIES



03.8_SITE OPPORTUNITIES_L27 HIGH RISE EXCLUSIVE OUTDOOR COMMUNAL FACILITIES



COMMUNAL OUTDOOR SPACE

EXISTING EXAMPLES

EQ TOWER

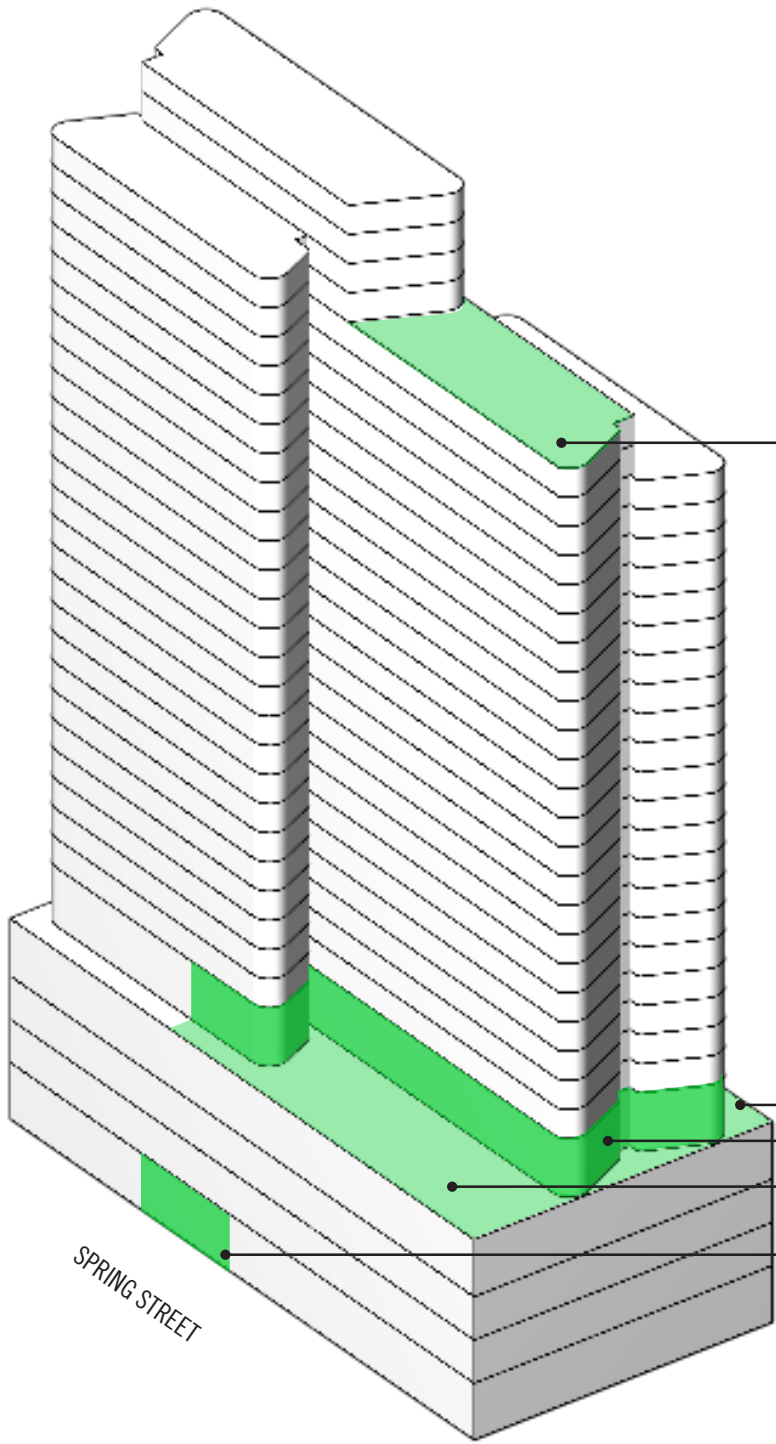
2.2M2 PER APARTMENT

APARTMENTS:	632
LOBBY	140M²
PODIUM TOP L07	1044M²
LEVEL 33	188M²
TOTAL COMMUNAL AREA:	1372M2

PREMIER TOWER

2.8M2 PER APARTMENT

APARTMENTS:	780
HOTEL ROOMS	186
LOBBY	
PODIUM TOP L07 + L07M	
LEVEL 46	
PENTHOUSE CLUB L76	
TOTAL COMMUNAL AREA:	2740M2



SPRING ST

299 APARTMENTS
1738sqm TOTAL COMMUNAL AREA
5.8sqm PER APARTMENTS

3.8 SQM INDOOR COMMUNAL PER APARTMENT
1.8 SQM OUTDOOR COMMUNAL PER LOW RISE APARTMENT
5.1 SQM OUTDOOR COMMUNAL PER APARTMENT (HIGH RISE & PENTHOUSE ONLY)

L27 RESIDENTIAL FACILITIES
OUTDOOR COMMUNAL: 308 SQM
(HIGH RISE AND PENTHOUSE ONLY)
BBQ
LOUNGE
GARDEN

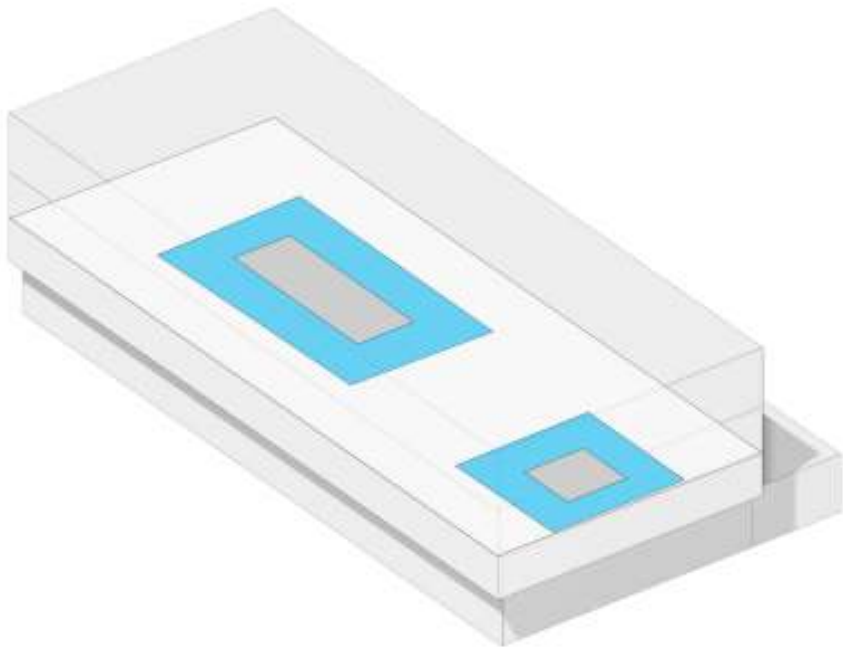
L04 & L04 MEZZ FACILITIES
INDOOR COMMUNAL: 666 SQM
POOL
GYM

OUTDOOR COMMUNAL: 536 SQM
SUN LOUNGES
MULTI PURPOSE SPACE
BBQ
OUTDOOR SPACE

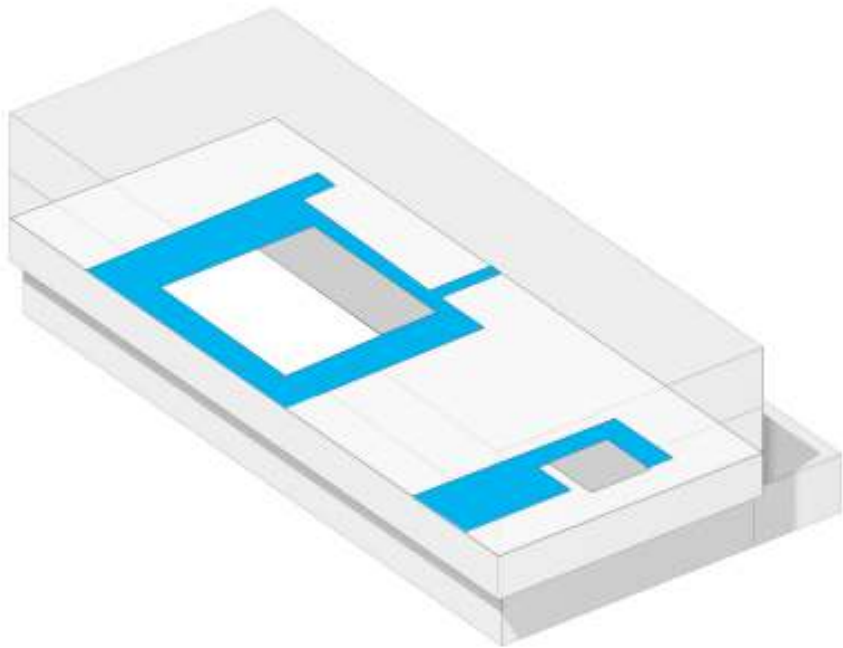
GROUND FLOOR & MEZZANINE
INDOOR COMMUNAL: 201 SQM
RESIDENTIAL LOBBIES

DESIGN RESPONSE

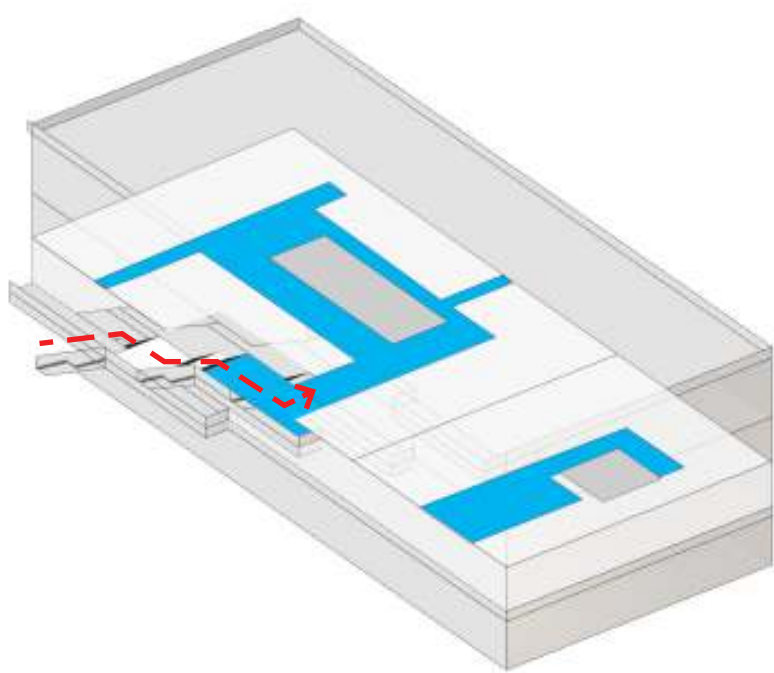
04.1_PODIUM CONCEPT - INSIDE OUT LEARNING



INBOARD CIRCULATION (STANDARD APPROACH)



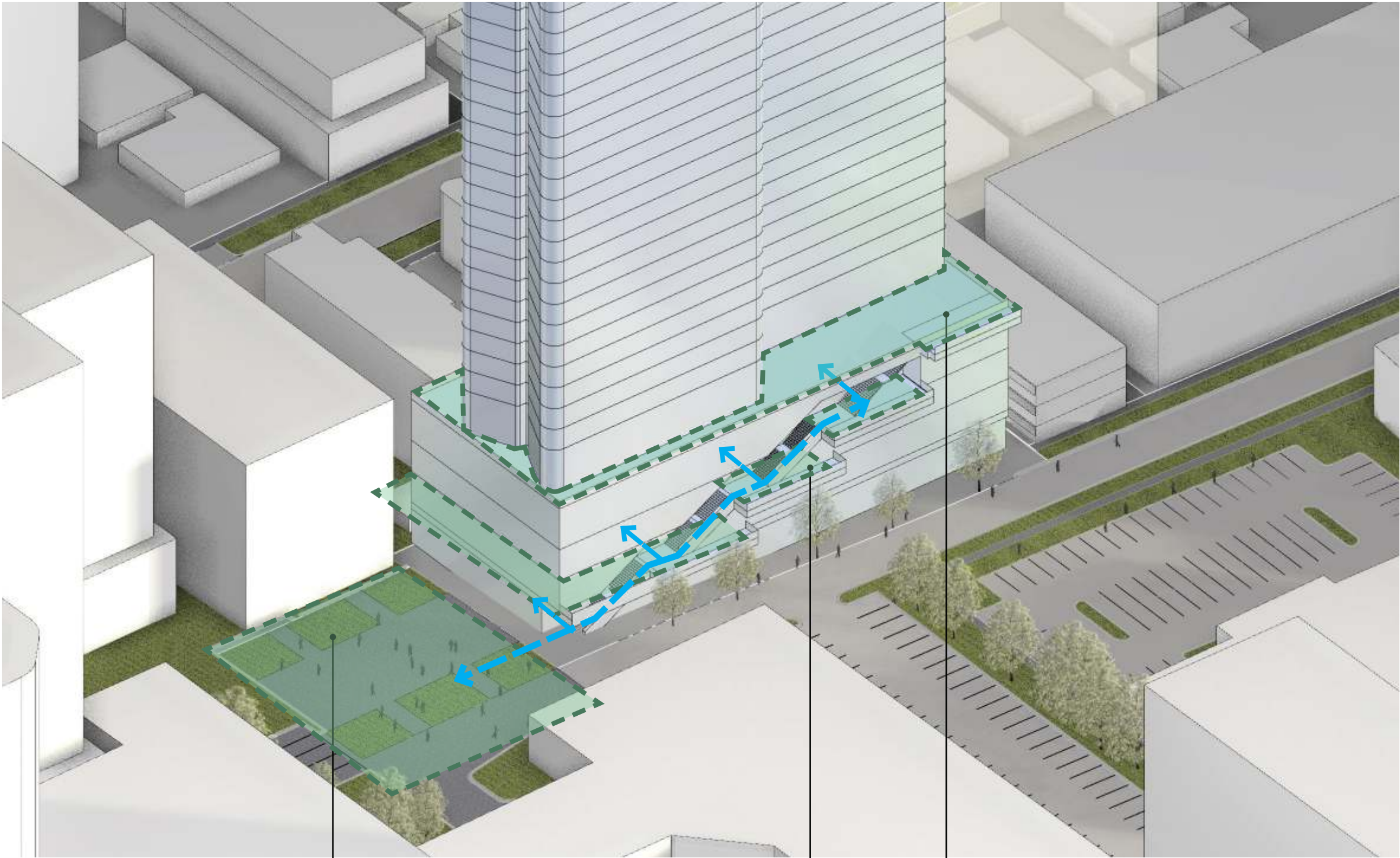
CIRCULATION PULLED ONTO FACADE
FOR BETTER AMENITY AND EFFICIENCY



INTRODUCTION OF STAIR ON EASTERN
SIDE FOR BETTER CONNECTIVITY AND
CIRCULATION EXPERIENCE



04.2_PODIUM CONCEPT - CONNECTING TO THE LANDSCAPE



POTENTIAL CENTRAL PLAZA BY BHI

LANDSCAPED
PLATFORM/WIND CANOPY

PODIUM TOP
LANDSCAPING



04.3_PODIUM ARCHITECTURE - MATERIAL RICHNESS





04.4_A NEW LANDSCAPED THOROUGHFARE



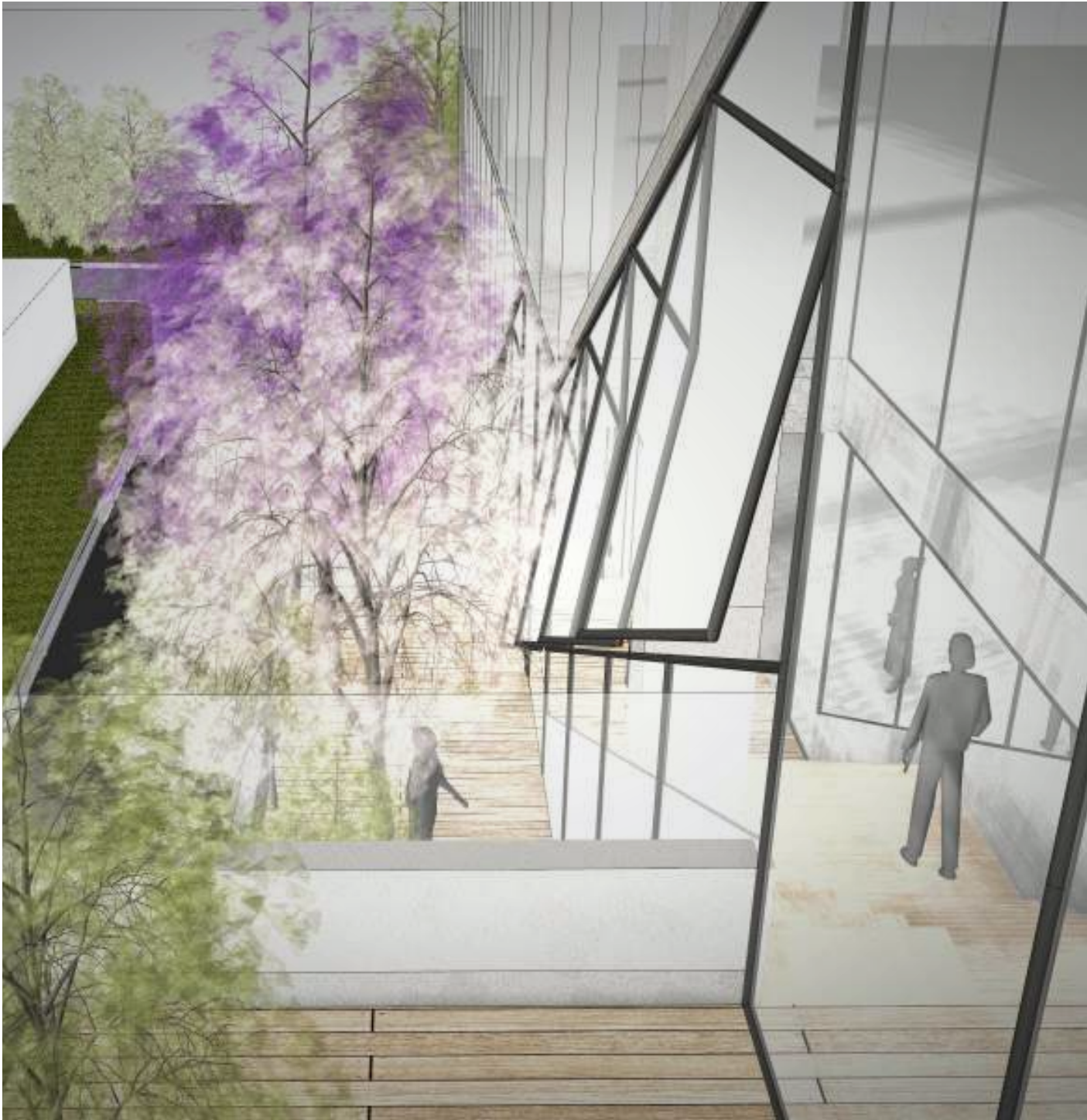
04.4_A NEW LANDSCAPED THOROUGHFARE



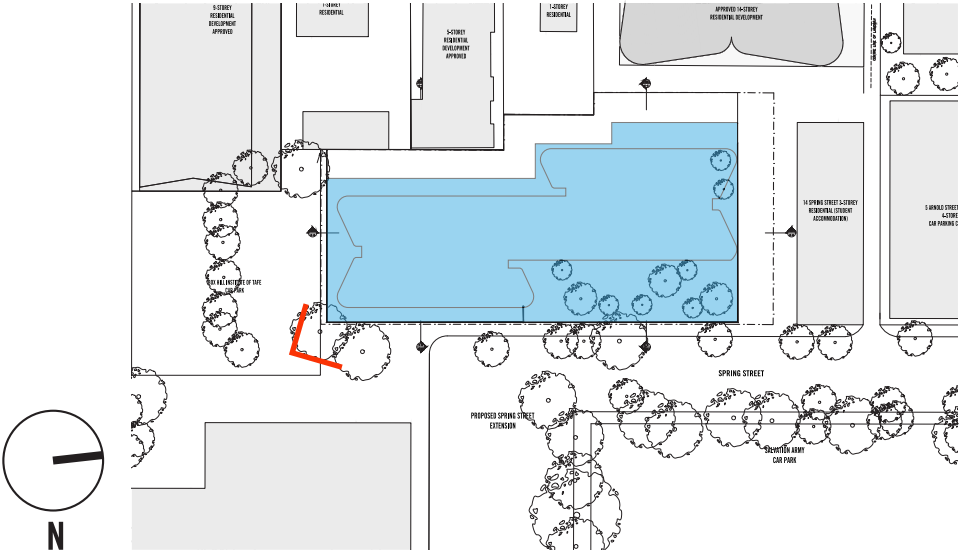
04.4_A NEW LANDSCAPED THROUGHFARE



04.4_A NEW LANDSCAPED THROUGHFARE



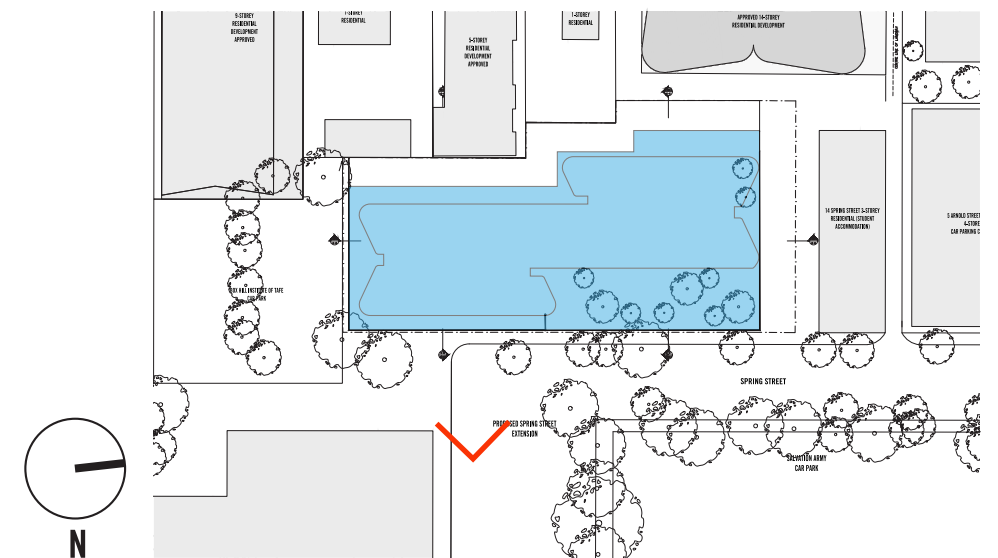
04.5_ARTIST’S IMPRESSION - PODIUM





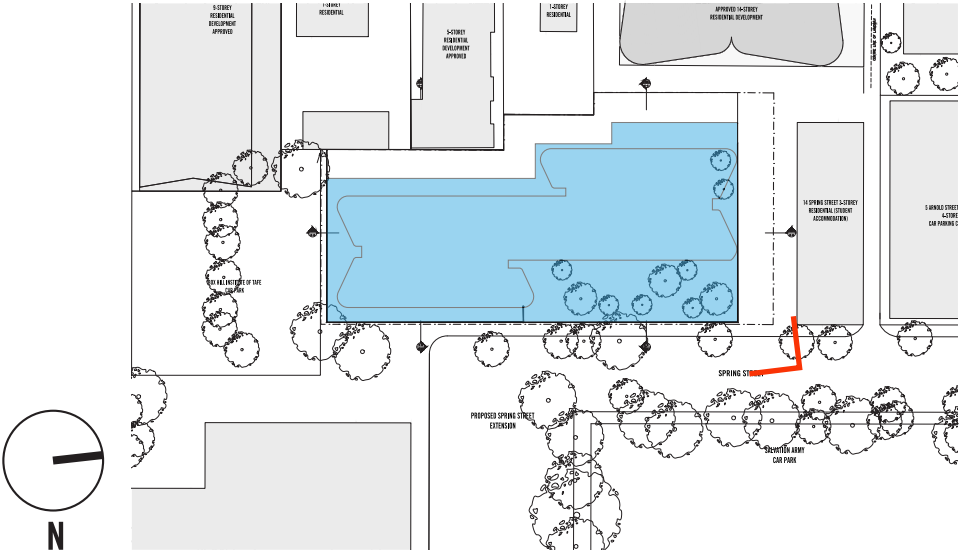
 BOXHILL INSTITUTE

04.6_ARTIST'S IMPRESSION - PODIUM





04.7_ARTIST’S IMPRESSION - PODIUM



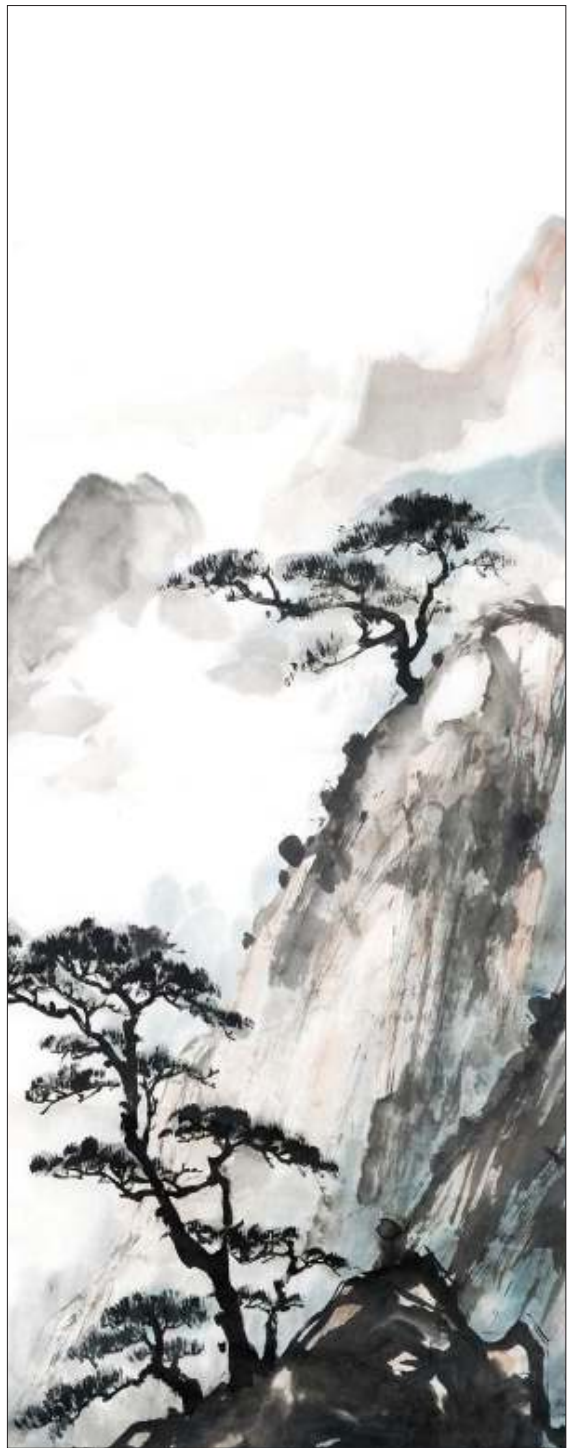


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*Shanshui
Waterfall*



04.8_TOWER CONCEPT



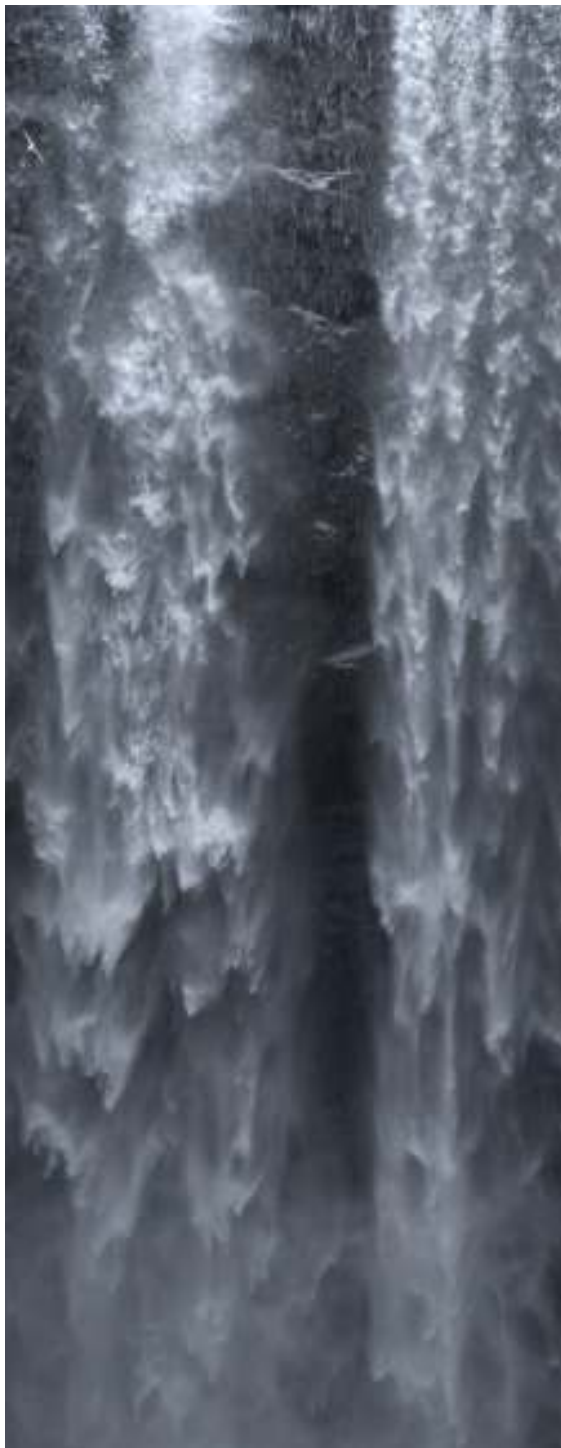
04.10_TOWER CONCEPT

Cascading Water

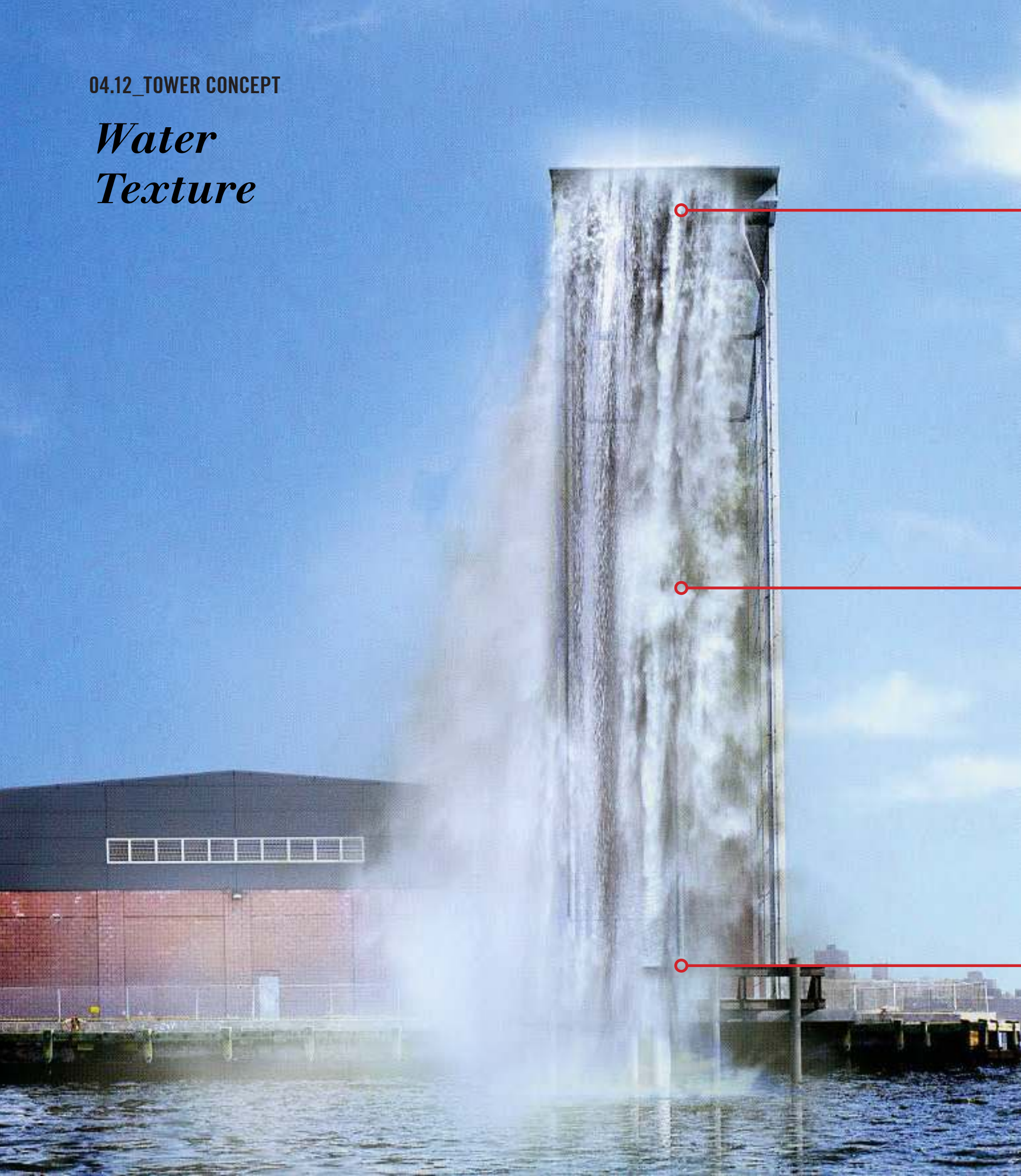
OLAFUR ELIASSON WATERFALL



04.11_TOWER CONCEPT



*Water
Texture*



FLOWING WATER
TEXTURE



CHANGING IN
SCALE



BLENDING INTO
THE GROUND

*Changing of
the Seasons*



WINTER



SPRING



SUMMER

04.14_TOWER CONCEPT

- BLUSH/SILVER DICHROIC GLASS REPRESENTING THE COLOURS OF SPRING
 - SILVER/CHAMPAGNE DICHROIC GLASS REPRESENTING THE SPRINGTIME SHOULDER SEASONS OF SUMMER AND WINTER
- THE BLUSH PANELS HAVE BEEN OUTLINED IN A THIN BLACK FRAME TO ACCENTUATE THEM AND ARRANGED IN THE PATTERN OF A CASCADING WATERFALL



- PRECAST TEXTURED BALUSTRADE TO HELP BREAK UP THE TOWER MASS AND REPRESENT THE ROCK FACES OF THE WATERFALL



LEGEND

TERRACES

FACADE TYPE 1

FACADE TYPE 2

UNIQUE FACADE TYPES ACCENTUATING THE EXPRESSION OF EACH TOWER MASSING INCORPORATING A GRADUATION IN TOWER HEIGHT.

THE GLASS



THE FRAME



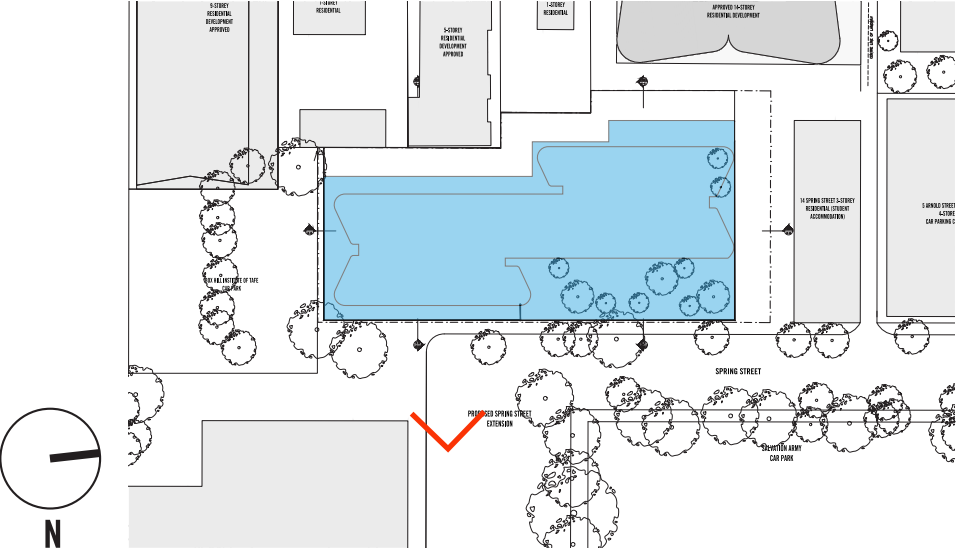
THE VERANDAH



THE MASSING

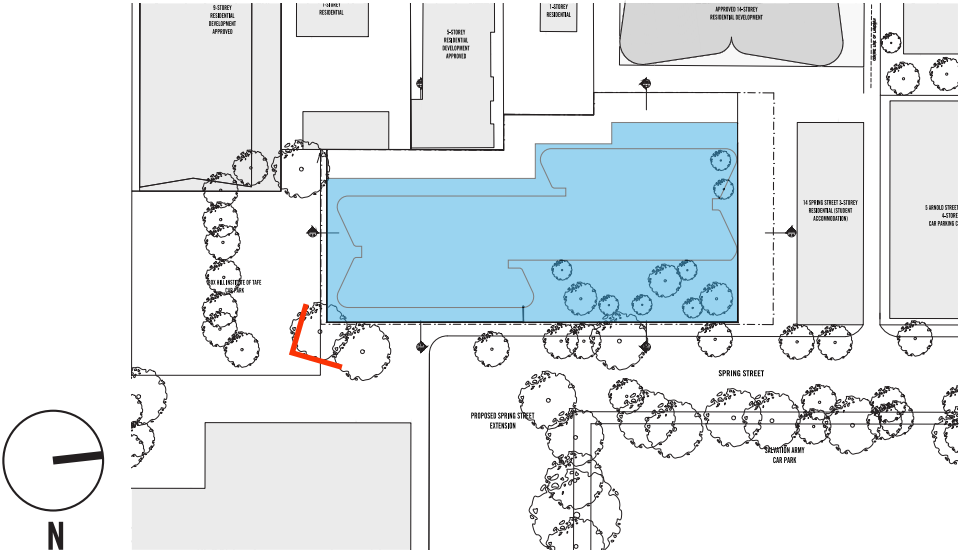


04.16_ARTIST’S IMPRESSION - TOWER



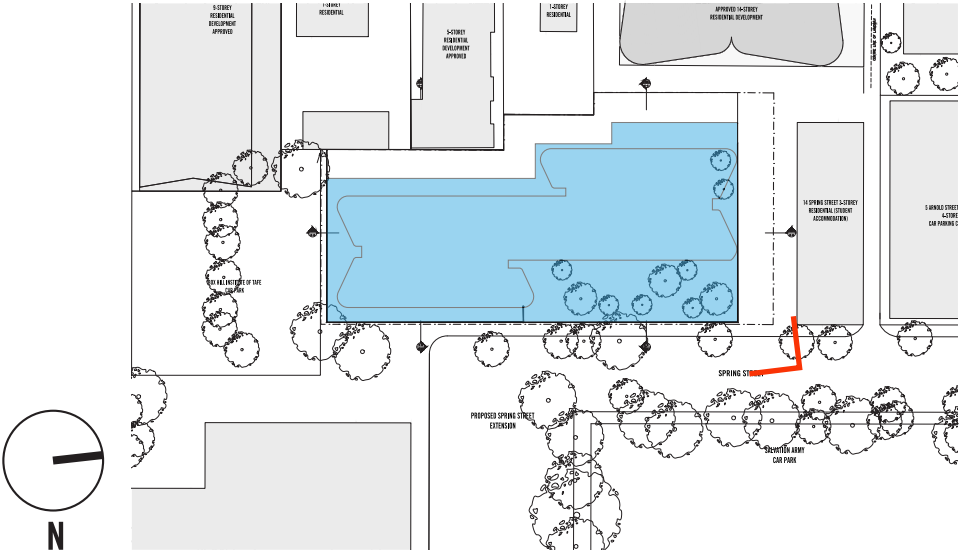


04.17_ARTIST’S IMPRESSION - TOWER





04.18_ARTIST’S IMPRESSION - TOWER





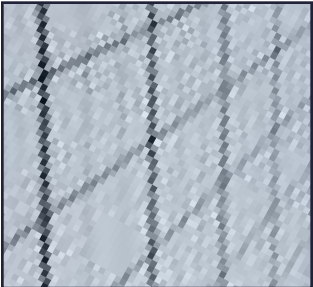
04.19_MATERIALS_PODIUM



CONC-01 - OFF FORM
TEXTURED PRECAST
CONCRETE



GL-04 - SILVER DOUBLE
GLAZING



GL01 - CLEAR VISION
GLAZING



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04.20_MATERIALS_TOWER



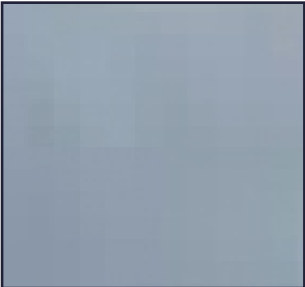
CONC-01 - OFF FORM
TEXTURED PRECAST
CONCRETE



GL-01 - BLUSH GLASS



GL-02 - SILVER/
CHAMPAGNE DICHROIC
DOUBLE GLAZING



GL-03 - SMOKE GREY
DOUBLE GLAZING



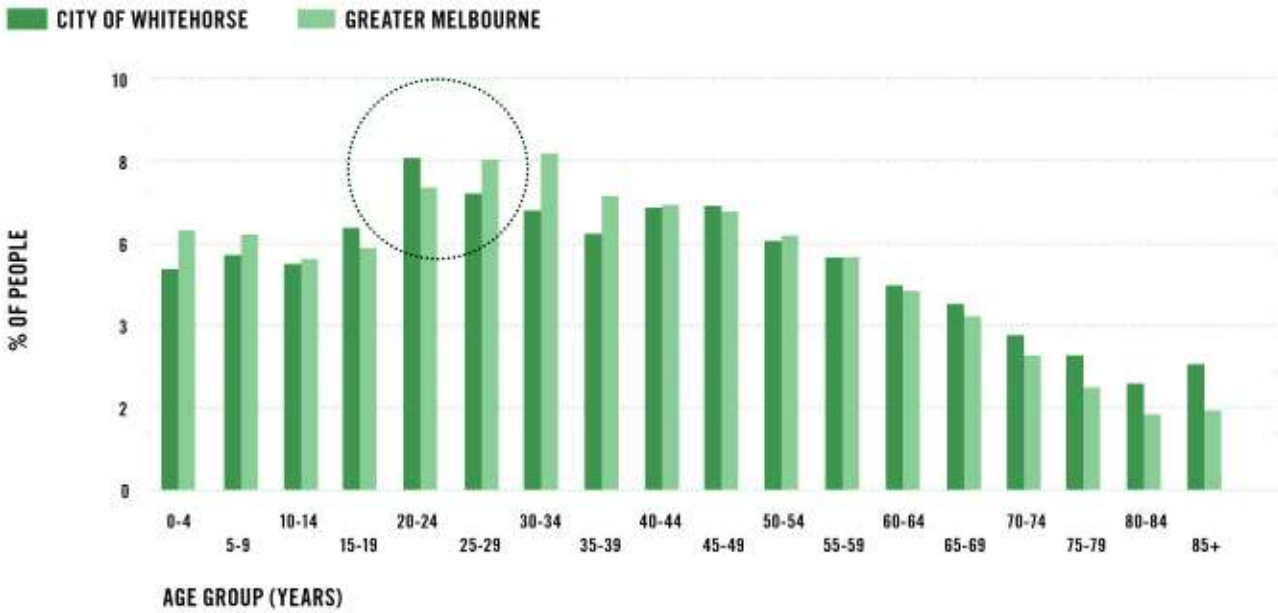
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APPENDIX

DEMOGRAPHICS

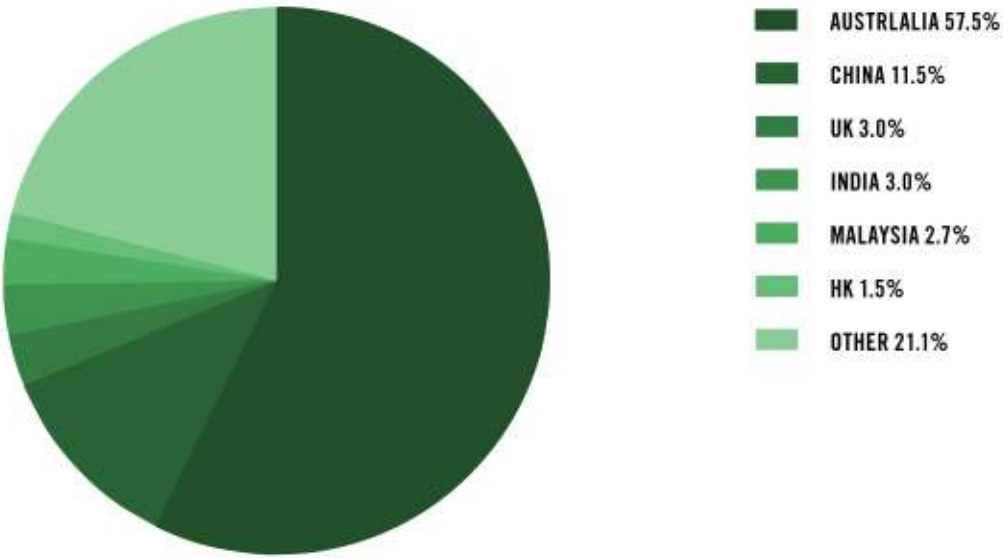
05.1_CITY OF WHITEHORSE DEMOGRAPHICS

WHITEHORSE AGE STRUCTURE (TOTAL PERSONS)



20-29
WHITEHORSE RESIDENTS PRIMARILY MILLENIALS

BIRTHPLACE RANKED BY SIZE 2016



57.5%
THE LARGEST BIRTHPLACE DEMOGRAPHIC IN WHITEHORSE ARE AUSTRALIANS

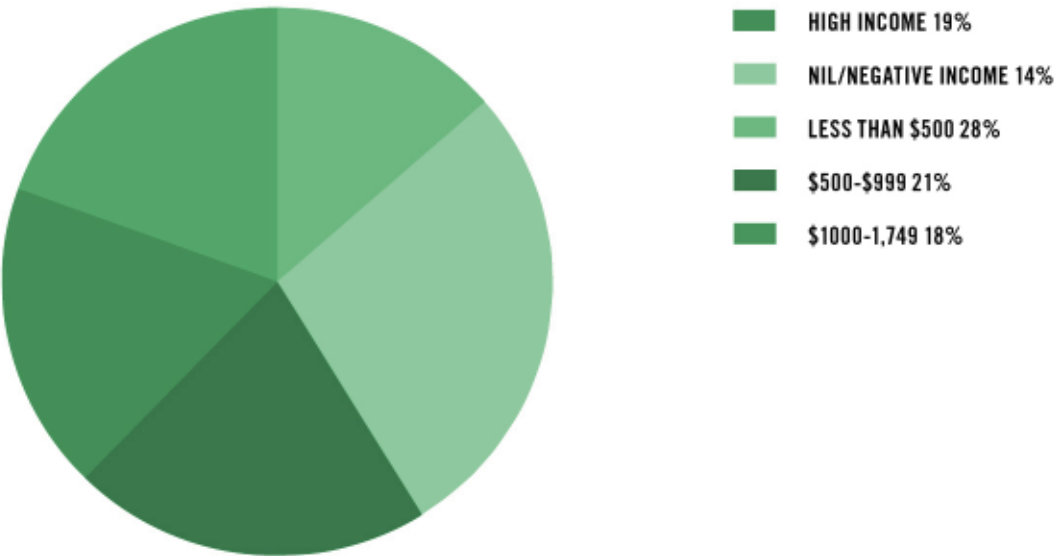
Source: Australian Bureau of Statistics, Regional Population Growth, Australia

UNDERSTANDING THE
WHITEHORSE POPULATION

WHITEHORSE EMPLOYMENT

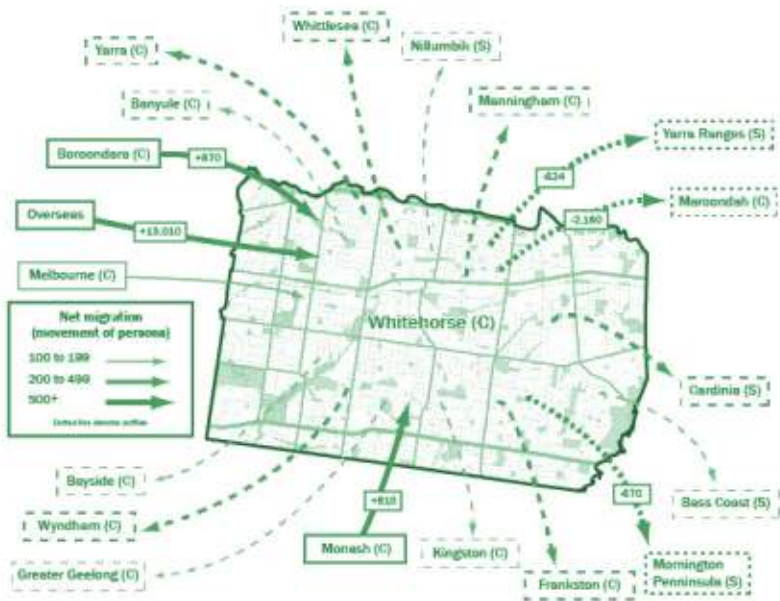


WEEKLY INDIVIDUAL INCOME 2016



05.1_CITY OF WHITEHORSE DEMOGRAPHICS

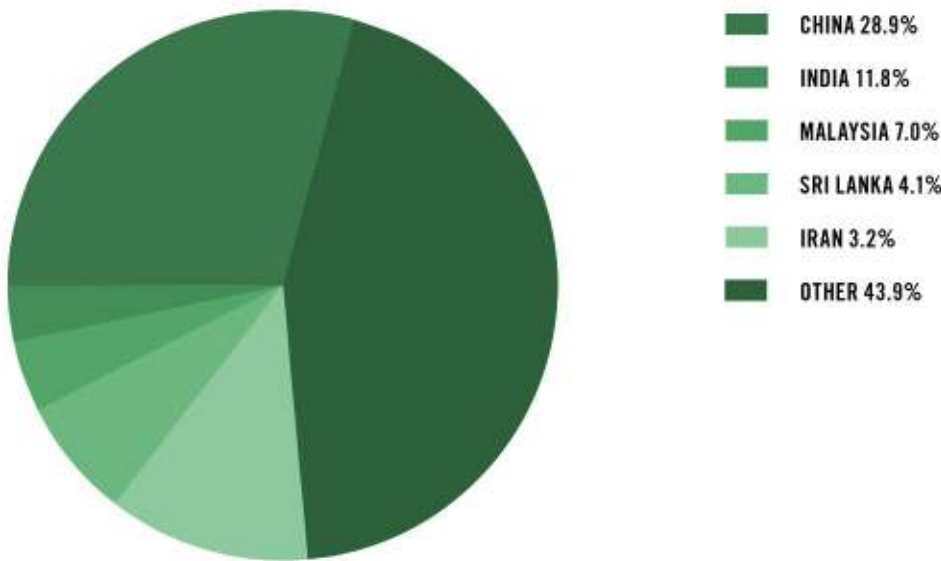
POPULATION FLOWS 2011-2016



+13,010

THE LARGEST MIGRATION INTO WHITEHORESE WERE FROM OVERSEAS

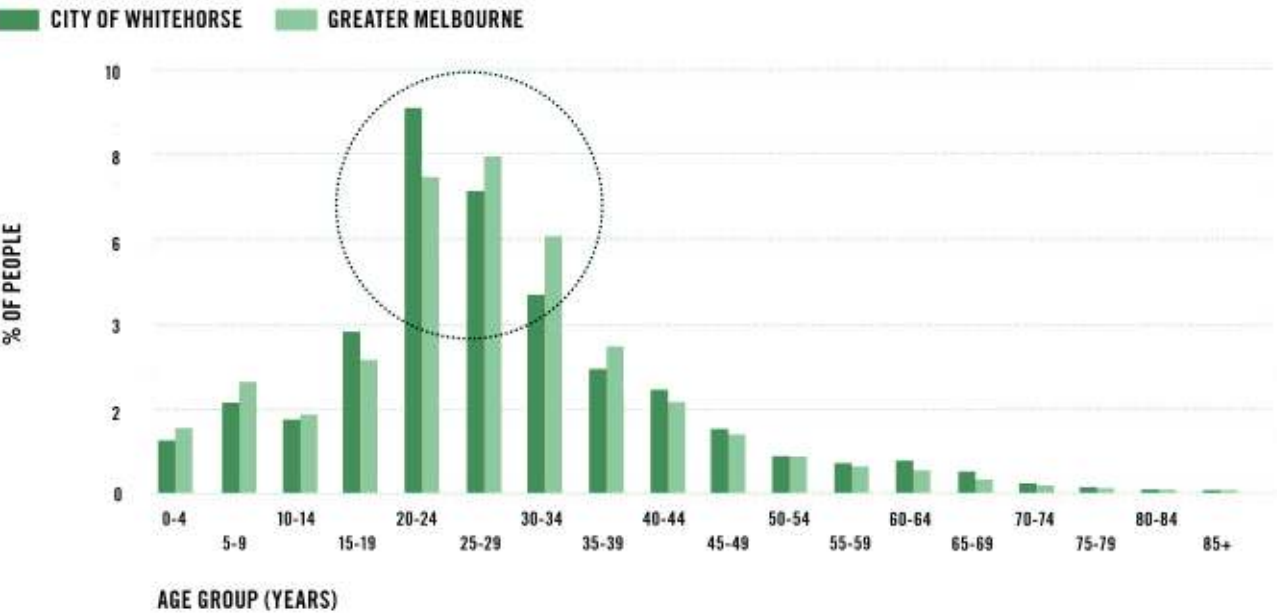
ARRIVALS BY BIRTHPLACE 2016



28.9%

CHINA WAS THE LARGEST DEMOGRAPHIC TO ARRIVE IN WHITEHORSE

WHITEHORSE AGE STRUCTURE (RECENT ARRIVALS)



20-29

MILLENIALS WITH A DEMAND FOR A PLACE TO WORK

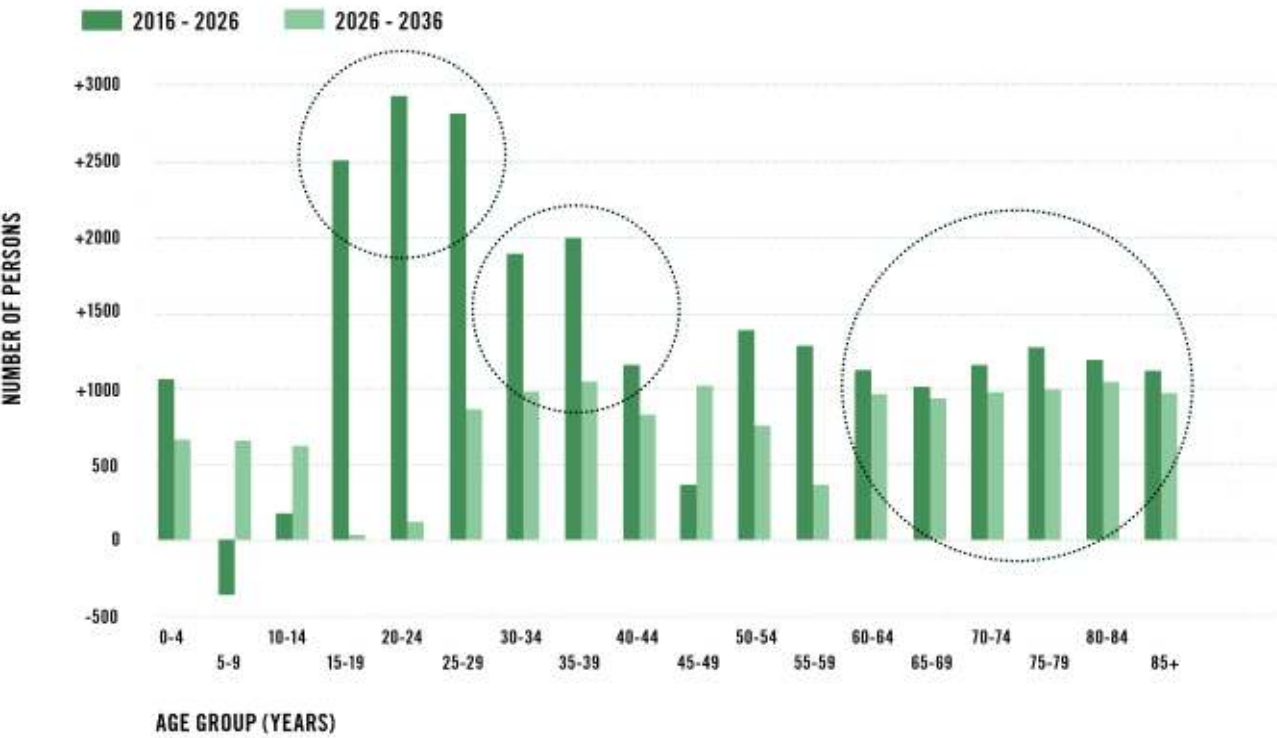
PRIMARYLY
YOUNG OVERSEAS
ARRIVALS

29-44

YOUNG PROFESSIONALS, IMMIGRATED, TERTIARY EDUCATED
DEMAND FOR ASSET ACQUISITION

MAJOR IMMIGRATION
FROM CHINA
28.9% INDIA 11.0%
MALAYSIA 7.0%

WHITEHORSE FORECAST CHANGE IN AGE STRUCTURE



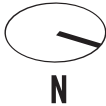
60-85+

AGING IN PLACE, EMPTY NESTER

FAST GROWTH IN
MILLENIAL, GLOBAL
CITIZEN & RETIREE
DEMOGRAPHICS

SITE SERVICES

06.1_SERVICES



SUSTAINABILITY



SHADOW STUDIES

08.1_SHADOW STUDIES



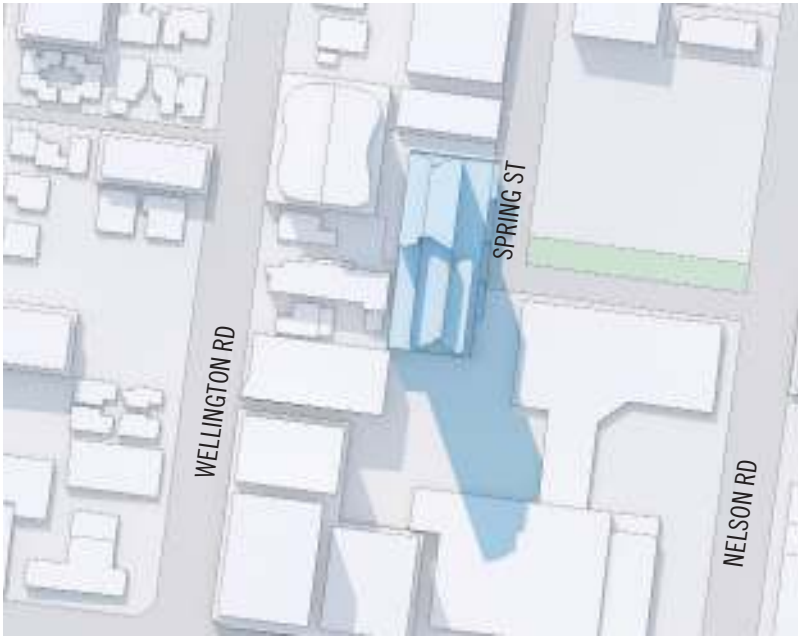
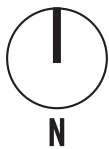
22 SEPTEMBER 10 AM



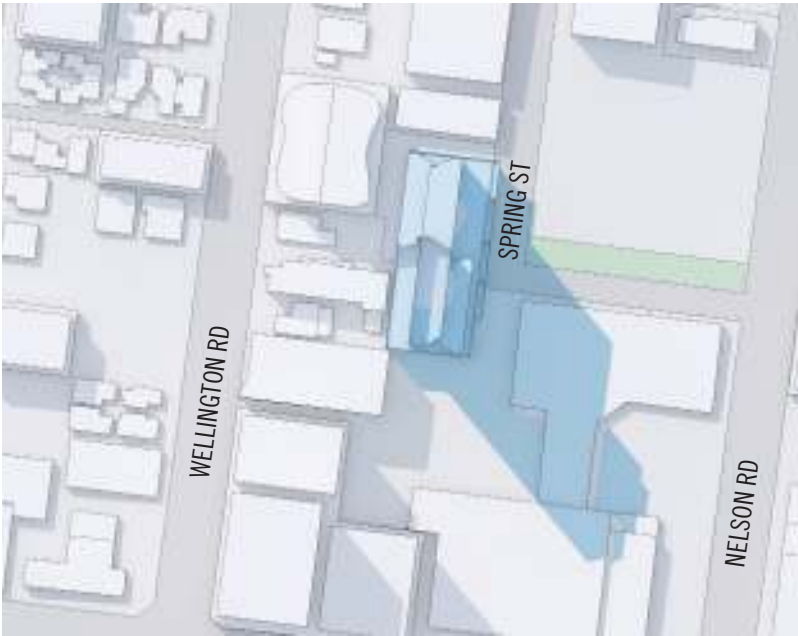
22 SEPTEMBER 11 AM



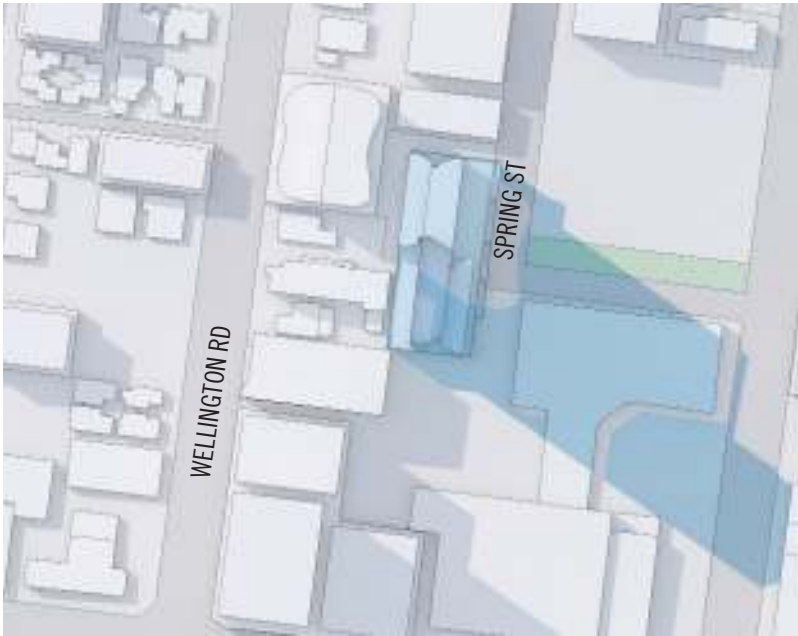
22 SEPTEMBER 12 PM



22 SEPTEMBER 1 PM



22 SEPTEMBER 2 PM



22 SEPTEMBER 3 PM

DEVELOPMENT SUMMARY

10.1_DEVELOPMENT SUMMARY

17106 16 Spring Street, Box Hill

DATE 14/12/2018
STAGE TP
REV B

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

DEVELOPMENT SUMMARY																																	
DEVELOPMENT SUMMARY_16 SPRING STREET, BOX HILL																																	
No.	LEVELS	APARTMENTS/ FLOOR	APARTMENTS/ TOTAL	GFA BHI /FLOOR	TERRACE/ CANOPY BHI /FLOOR	TOTAL BHI GBA	GIA RETAIL /FLOOR	GFA CONSULTING/F LOOR	GFA RESIDENTIAL /FLOOR	GFA SERVICES/BOH /FLOOR	TOTAL GFA	NLA RETAIL /FLOOR	NLA CONSULTING/FL OOR	NSA RESIDENTIAL /FLOOR	TOTAL NLA/NSA	EFFICIENCY /FLOOR	TERRACE AREA	TERRACE AREA / TOTAL	GFA CARPARK /FLOOR	TOTAL GFA CARPARK	TOTAL BIKES	BHI CAR SPACES /FLOOR	VISITOR CAR SPACES /FLOOR	COMMERCIAL STAFF CAR SPACES/ FLOOR	RETAIL STAFF CAR SPACES/ FLOOR	RESIDENTIAL CAR SPACES /FLOOR	TOTAL CARS SPACES	STUDIO	1 BED	2 BED + 1 BATH	2 BED + 2 BATH	3 BED	
3	B5-B3																		2575	7725						79	237						
1	B2																		2575	2575						31	77						
1	B1																		2575	2575	120	34	46	16	5		55						
1	L00			661		661	422	112	272	677	1483	398			398				64	64													
	L00 MEZZ			23		23				698	698																						
1	L1			1196	162	1358		760	67		827		670		670																		
1	L2			1204	68	1272		760	67		827		670		670																		
1	L3			1204	68	1272		760	67		827		670		670																		
1	L4	12	12						1258		1258			417	417													12					
	L4 MEZZ								418		418																						
8	L5-L12	15	120						1089		8712			908	7264	83%	120	960												7		8	
5	L13-L17	15	75						1089		5445			904	4520	83%	120	600												7		8	
7	L18-L24	11	77						1122		7854			936	6552	83%	88	616												2			
1	L25	4	4						878		878			749	749	85%	332	332														6	3
1	L26	5	5						878		878			724	724	82%	64	64														1	3
1	L27	3	3						593		593			452	452	76%	40	40														2	3
1	L28	3	3						609		609			452	452	74%	40	40														1	2
29																																	
TOTALS			299	4288	298	4586	422	2392	27536	1375	31307	398	2010	21130	23538		2652		12939		120	34	46	16	5	268	369	12	105	104	47	31	
																													4%	35%	35%	16%	10%

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