

Uniting on Hawker

*2-10, 12, 14, 16, 18 Market Place &
105 Gibson Street, Bowden*

Architectural Planning Report



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Project Details

Client

UnitingSA

Date

20 March 2025

Description

2-10, 12, 14, 16, 18 Market Place & 105 Gibson Street, Bowden
Architectural Planning Report

Produced for



City Collective acknowledge the Traditional Owners of Kaurna land, the land where we work and live. We pay our respects to Elders past, present and emerging. We celebrate the stories, culture and traditions of Aboriginal and Torres Strait Islander Elders of all communities who also work and live on this land.

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01 Introduction & Site Context



Executive Summary

Vision & Principles

The 'Uniting on Hawker' Bowden housing project has the potential to be an **innovative, diverse and inclusive** housing development that **prioritises the local community** through **empathic & contextually responsive design**.

- UnitingSA has identified an opportunity for a **30-dwelling social and affordable housing** development for an amalgamated site in Bowden
- 'Uniting on Hawker,' targets a yield of **30 apartments** across two levels
- The **target cohort** for the social housing is women aged 55 and over who are experiencing or at risk of homelessness



Contextually responsive to the sites unique **characteristics & urban designed to enhance connections** to the broader precinct.



Community focused design that prioritise opportunities **high-quality** public & communal space & **fosters social cohesion**.



A contemporary, urban design that offers a **diversity** of housing types that are **accessible, inclusive & safe** for all ages & abilities.



A contemporary, urban design that is a **champion for holistic sustainability** that **reduces operating costs & improves user comfort**.


Our Understanding of the Site

- Amalgamated site area of 2,950sqm
- Interface with Market Place and Hawker Street
- Directly adjacent Gawler Railway Line

Legend

- 2 2 storey dwellings in the local context
- 3 3 Storey dwellings in the local context

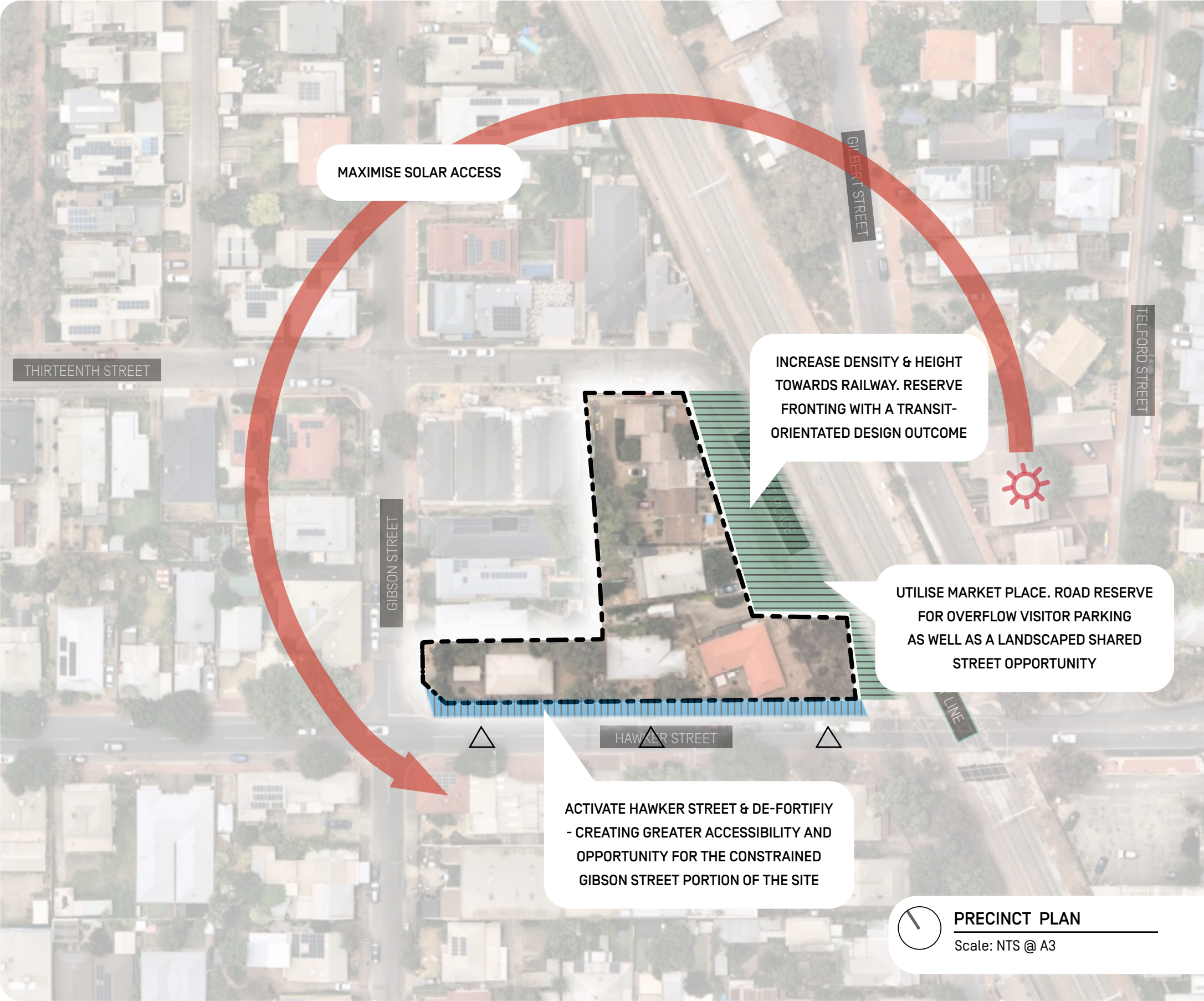




PRECINCT PLAN
Scale: NTS @ A3
NORTH ADELAIDE TO GAWLER RAIL LINE

What to Build On Opportunities

- **Maximise Hawker Street Frontage**
Replace solid brick fences with active residential frontages engaged with the street
- **Maximise Solar Access**
Site geometry creates opportunities for good solar access through the day
- **Capitalise on Rail Interface**
Existing road reserve creates separation from rail corridor, and an opportunity to focus density and height, mirroring the condition to the East



What Additional Parameters Exist?

Site Configuration

- Narrow pinch points
- Regulated Tree

Planning Policy

- Height limitations of planning overlay
- Height sensitivities to Thirteenth Street interface
- Area Minimum for Dwellings
- Rear Setbacks
- Representative Heritage Place

Interfaces & Rail Corridor

- Hawker Street Crossover



02 Design Response



Design Response

Our Vision for the Site

History & Context

- This area has a history of offering affordable housing for the local community, from traditional workers cottages from the early 1900''s, to housing trust townhouses from the 1970's - **This community has a history of reflecting the need for providing affordable housing**
- This reflects how the character of an area emerges, and how cities evolve and grow, by **developing housing that meets the needs of the community at a moment in time.**

Our Vision

- It is our goal to develop a design framework that reflects and responds to the current moment of time, to **define a new design approach that meets today's housing needs**, especially to those at risk-members of the community needing affordable accommodation
- This framework should reference and be contextually appropriate to the area, while employing **contemporary design solutions** - classic residential forms, in a contemporary expression

Key Interfaces

- We have 4 distinct interfaces, that take slightly different approaches to responding to the planning and heritage parameters:
 - **The Northern Market Place interface** - adjacent newly constructed 2 storey townhouses and older single storey housing stock
 - **The Eastern Railway interface** - opposite a 3 storey development in the immediate area
 - **The Southern Hawker Street interface** - the visual gateway to Hawker Street
 - **The Hawker Street Apartments** - Adjacent 2 storey dwellings



Design Response:

Addressing Historic Area Overlay Provisions

PO 1.1: All development is undertaken having consideration to the historic streetscapes and built form as expressed in the Historic Area Statement.

- Development has taken the formal and material characteristics expressed by the HAS statement, and incorporated them in a contemporary fashion, appropriate to the building typology.
- Materiality has been directly informed by the HAS statement, with colour choices making reference to specific examples in the area, reinterpreted through a more contemporary lens

PO 2.1: The form and scale of new buildings and structures that are visible from the public realm are consistent with the prevailing historic characteristics of the historic area.

- Lower level has been reinforced visually, with prominent articulation, use of heavier masonry materials, and datum lines specifically expressing height references in the locality
- Upper level has been set back and reduced in appearance to Market Place to the North through use of recessive elements and a change to lightweight metal cladding, and with increased setback to Hawker Street for additonal visual relief to the street

PO 2.2: Development is consistent with the prevailing building and wall heights in the historic area.

- Heights and setbacks are in alignment with adjacent two storey residential developments to the West and North.
- Hawker Street streetscape has similar setbacks to current brick fence, but with greater level of vertical setbacks, increased void to solid ratio, and increased capacity for landscaping at street edge.

PO 2.3: Design and architectural detailing of street-facing buildings (including but not limited to roof pitch and form, openings, chimneys and verandahs) complement the prevailing characteristics in the historic area

- The Two Storey apartment component on Hawker St, incorporates a contemporary interpretation of traditional gable end forms
- Balconies are expressed, and proportionally respond to traditional verandah forms
- Parapet roof forms are recessed back from the street to create visual relief, and mansard style forms used on upper levels on Market Place to introduce the appearance of sloped roof forms

PO 2.4: Development is consistent with the prevailing front and side boundary setback pattern in the historic area.

- Heights and setbacks are in alignment with adjacent two storey residential developments to the West and North
- Proportionality of vertical masses reduce the appearance of long flat elevations, especially the stepped facade of the Railway interface, which has specific reference to the existing housing trust buildings on site.

PO 6.1: The width of driveways and other vehicle access ways are consistent with the prevailing width of existing driveways of the historic area.

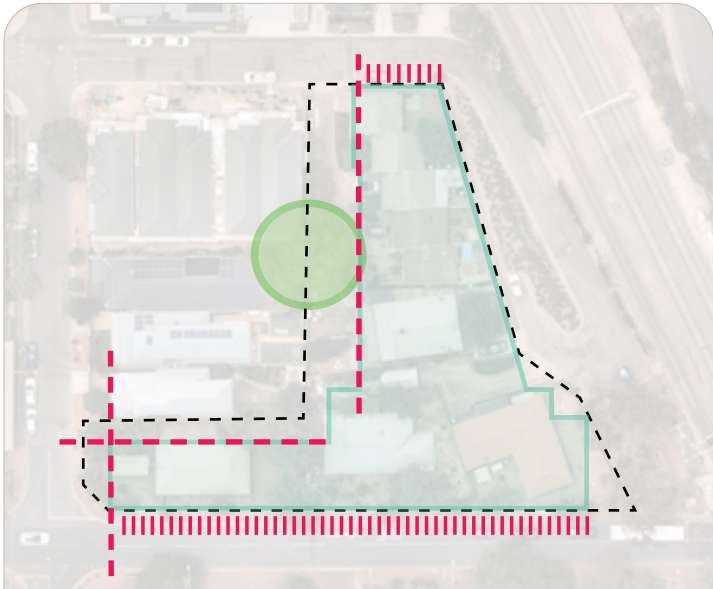
- Driveways and crossovers on site have been reduced to a minimum, and are generally kept to side boundaries of building forms

PO 6.2: Development maintains the valued landscape patterns and characteristics that contribute to the historic area, except where they compromise safety, create nuisance, or impact adversely on buildings or infrastructure.

- Generally, landscaped areas have been provided at street edge conditions in front of balustrades to private open space, to soften street edge, and provide additional opportunities for natural screening and privacy

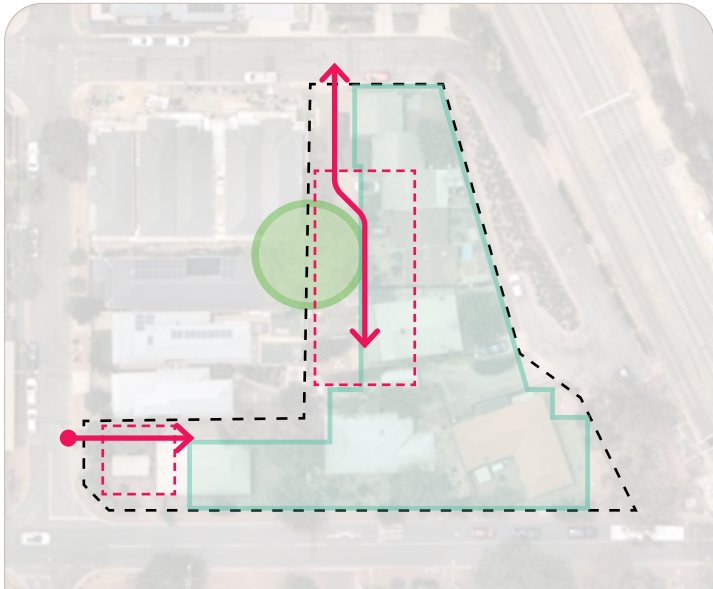
Design Response

Establishing Four Key Frameworks



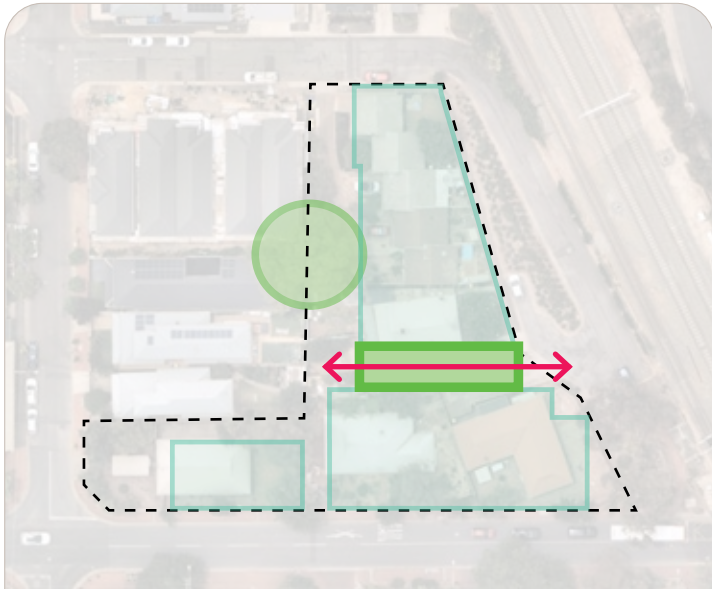
Step 1 : Setbacks and Interfaces

Establish setbacks and key interfaces with respect to adjacent properties, Heritage Area Statement, and preservation of Significant Tree



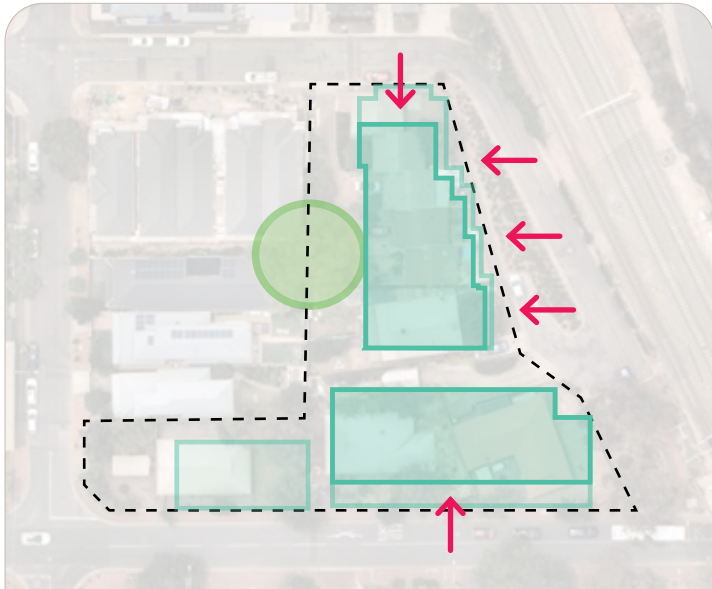
Step 2 : Carparking and Security

Consolidate and tuck parking to rear boundaries of site to create a secure parking compound that minimises crossovers, and reduces appearance of parking from street.



Step 3 : Divide Building Mass

Create separation between wings of built form to reduce appearance of scale contiguous building mass, and create opportunities for secure internalised community space.



Step 4 : Refine Building Mass

Sculpt building mass further to create setbacks, articulation, and geometries that serve to reduce the appearance of building scale, and increase visual setback of upper levels from the street.

Design Response: Materiality

Responding to History and Context

- Our material palettes have been **developed in line with the heritage advice provided**, and kept to simple and robust choices.
- Generally, **brickwork and lighter coloured textural panels have been used to articulate lower levels**, and the **darker coloured corrugated sheet** has been used to denote the **recessive upper level elements**
- **Timber has been used in select areas** to provide a textural break along façades, especially at junctions between building masses

Hawker Street Southern 2 Storey Interface



This palette takes cues from typical colour schemes found in the trust housing currently on site, and throughout the locality, as a reference to the history of the site, as well as the colour qualities of the stonework found on local character examples.



Hawker Street Northern 2 Storey and Railway Interface



This palette is more specifically inspired by the appearance of the representative building, and several other character homes in the area, which have a contrast of green metalwork, to light coloured finishes. The pale green and white brick is a more contemporary interpretation



Design Response:

Streetscape Context



Street Elevation - Hawker Street

Scale: 1:500 @ A3



Street Elevation - Market Place / Thirteenth Street

Scale: 1:500 @ A3

Design Response:

Massing and Interfaces

General Response

1. Ground Floor setbacks with landscaping to provide softening and relief at street edge
2. Articulation at corners to address key gateway views along Hawker Street
3. Reinforcement of vertical recessed elements to create appearance of single dwelling proportionality and rhythm along streetscape

Hawker Street Apartments South [2 Storey]

4. Heights aligning to typical adjacent two storey developments
5. Progressive increasing setbacks to balustrades and parapet forms to increase visual relief from street edge

Hawker Street Apartments North [2 Storey]

6. Heights and setbacks in alignment with adjacent two storey residential developments
7. Gable end roof forms as contemporary application of traditional roof form



Design Response:

Massing and Interfaces

General Response

1. Heights aligning to typical adjacent two storey developments
2. Additional setbacks and mansard-style forms to upper level in darker contrasting colours to further reduce appearance of upper level, and reduce the appearance of parapet forms to give more unique identity to this part of the site
3. Large separation between wings of building to create appearance of multiple unique smaller building forms on site
4. Expressed balconies to provide greater articulation to façades, in reference to historic verandah forms typical to the character of the area

Market Place North

5. Height and facade articulation of primary mass in alignment with adjacent new two storey residential developments
6. Increased setback of upper level to provide greater visual relief at street edge

Railway interface East

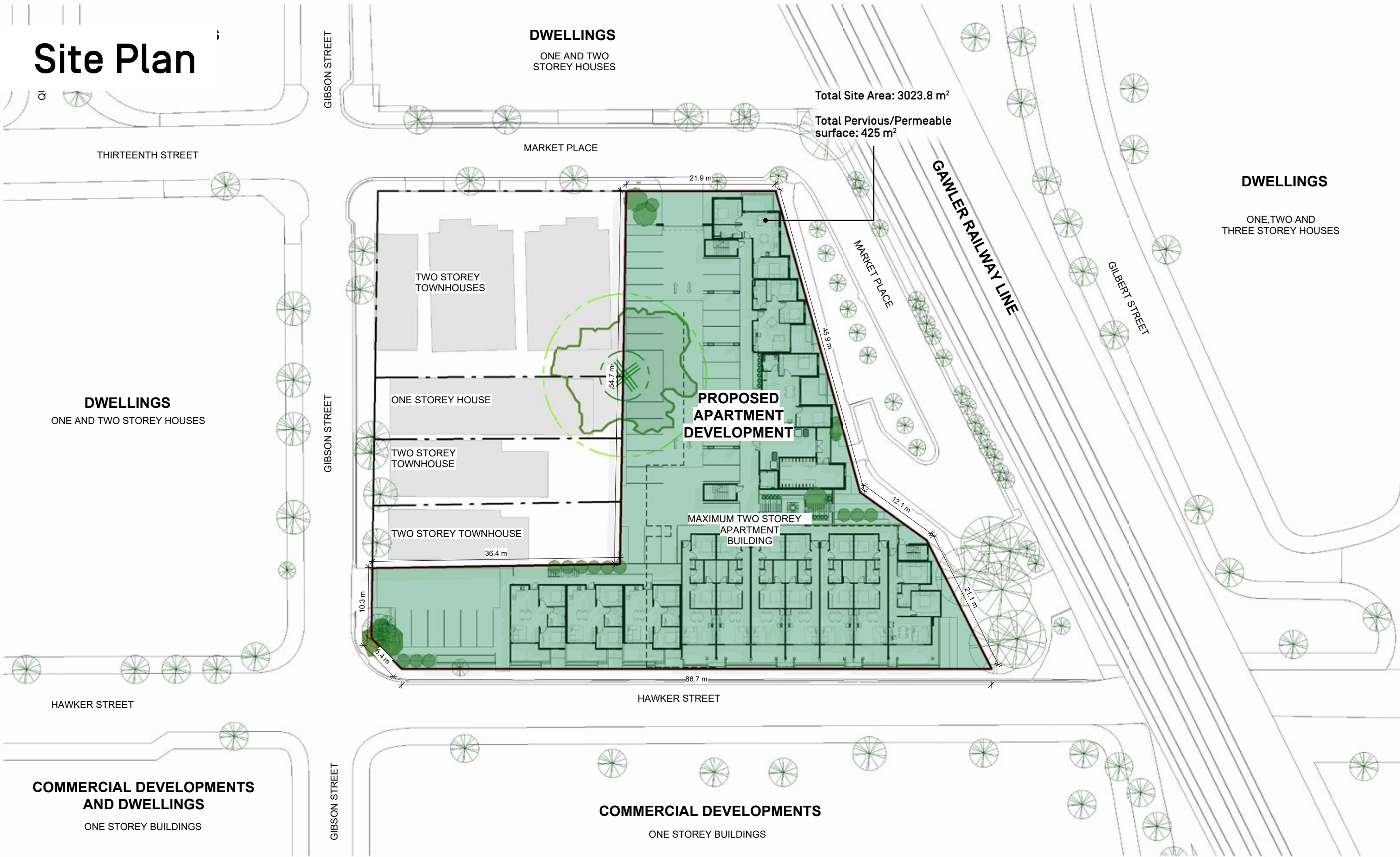
7. Stepped footprint and vertical separation to create rhythm and break-up facade



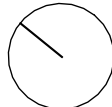
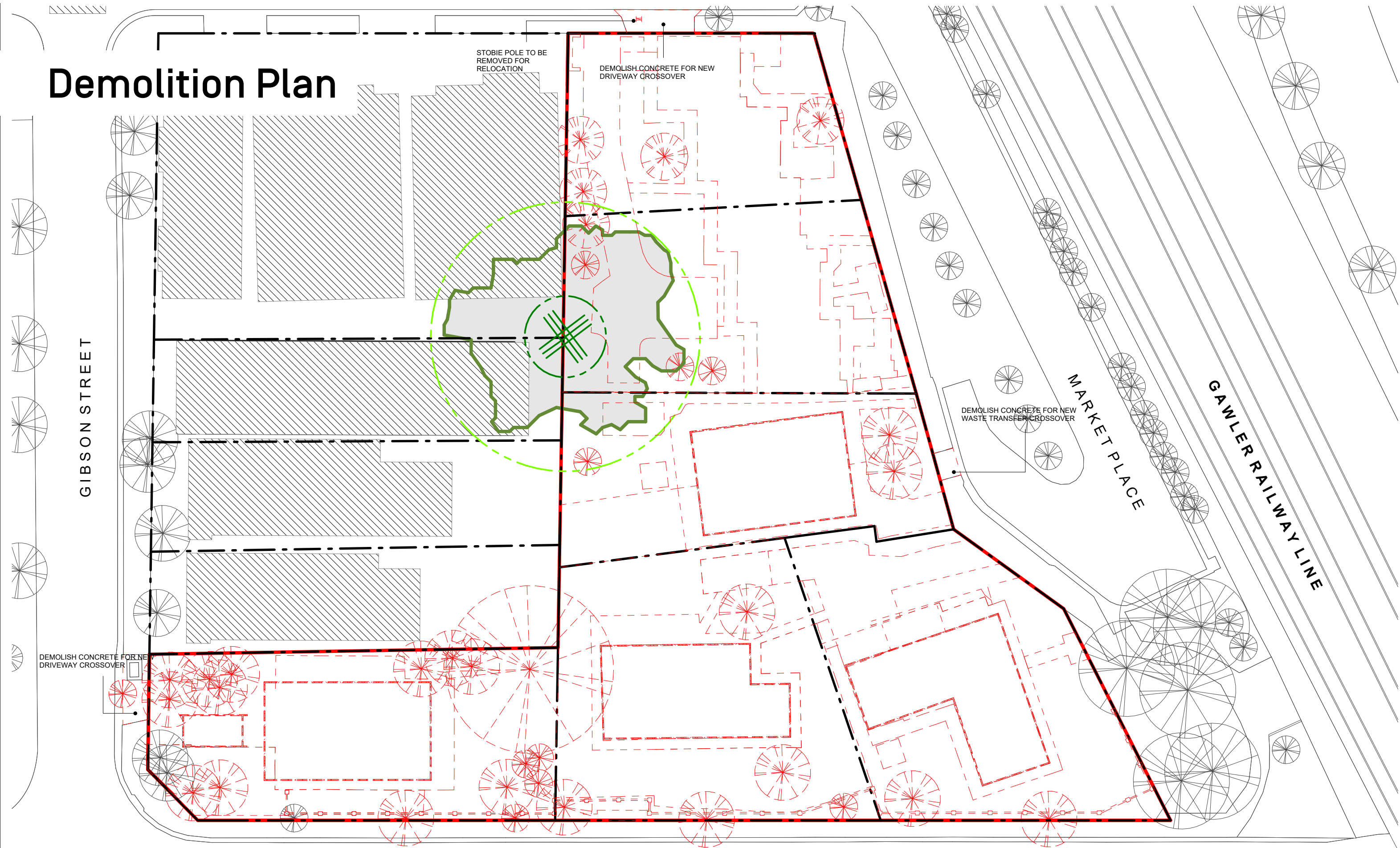
03 Architectural Drawings



Site Plan

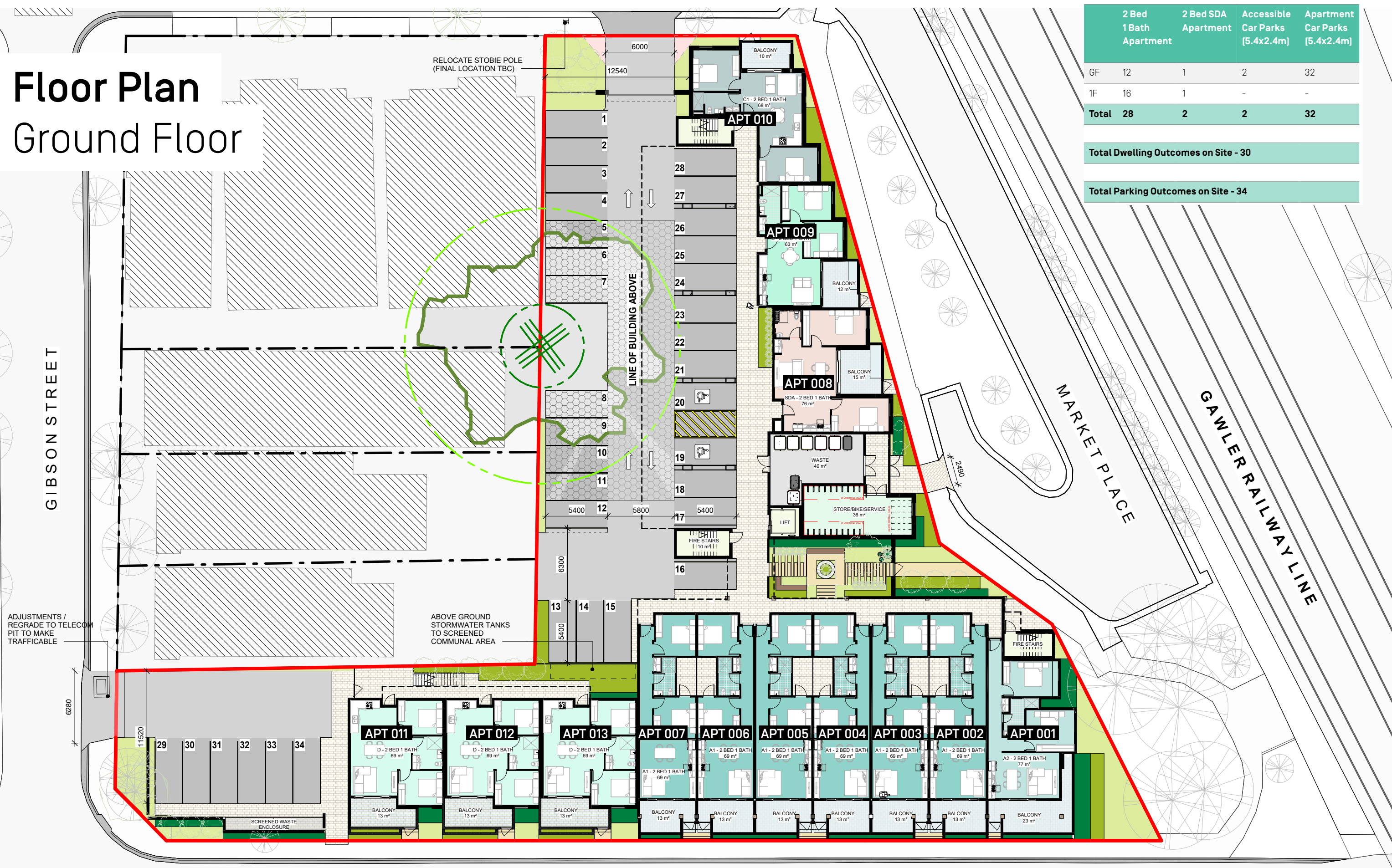


Demolition Plan



Floor Plan

Ground Floor



	2 Bed 1 Bath Apartment	2 Bed SDA Apartment	Accessible Car Parks [5.4x2.4m]	Apartment Car Parks [5.4x2.4m]
GF	12	1	2	32
1F	16	1	-	-
Total	28	2	2	32

Total Dwelling Outcomes on Site - 30**Total Parking Outcomes on Site - 34**

Floor Plan

First Floor

	2 Bed 1 Bath Apartment	2 Bed SDA Apartment	Accessible Car Parks [5.4x2.4m]	Apartment Car Parks [5.4x2.4m]
GF	12	1	2	32
1F	16	1	-	-
Total	28	2	2	32

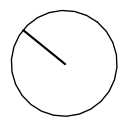
Total Dwelling Outcomes on Site - 30

Total Parking Outcomes on Site - 34

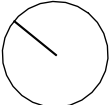
GIBSON STREET

MARKET PLACE

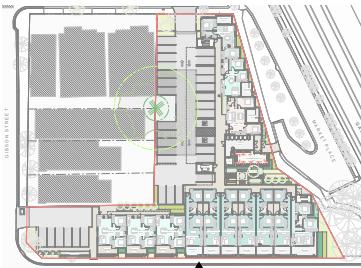
GAWLER RAILWAY LINE



Roof Plan



Building Elevations



Key Plan
Scale: NTS



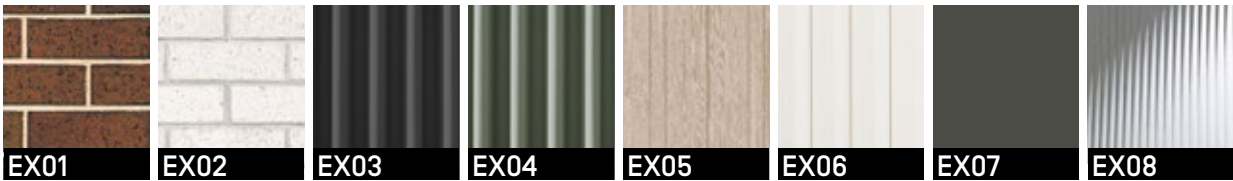
1. SW Elevation (Hawker Street)

Scale: 1:200 @ A3



1. SW Elevation (Hawker Street) [Cont.]

Scale: 1:200 @ A3

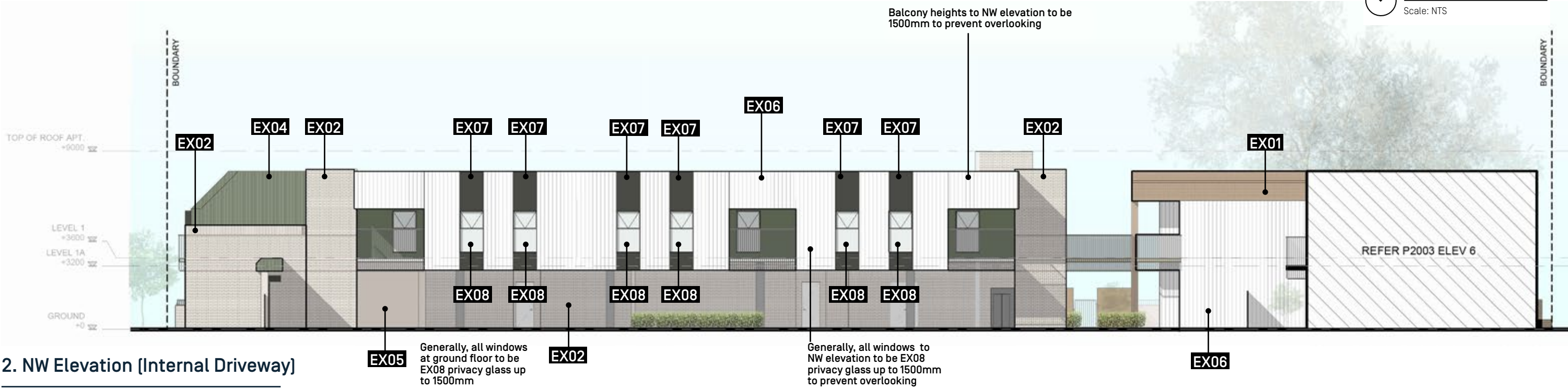


Key Materials
EX01 - Brown Brick
EX02 - White Brick
EX03 - Corrugated Steel - Woodland Grey
EX04 - Corrugated Steel - Pale Eucalypt
EX05 - Timber Cladding
EX06 - CFC sheet - Vertical profile - White
EX07 - CFC Sheet - Woodland Grey
EX08 - Fluted Glass

Building Elevations



Key Plan
Scale: NTS



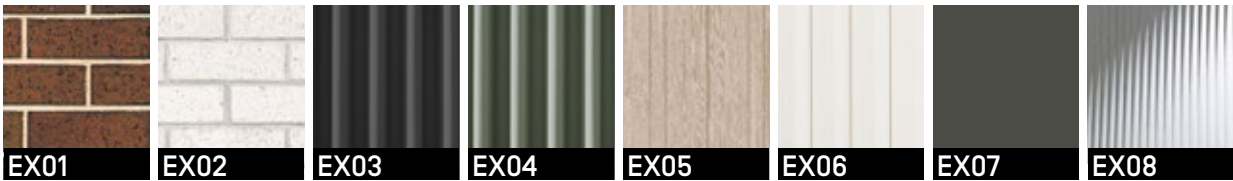
2. NW Elevation (Internal Driveway)

Scale: 1:200 @ A3



3. East Elevation (Railway Interface)

Scale: 1:200 @ A3

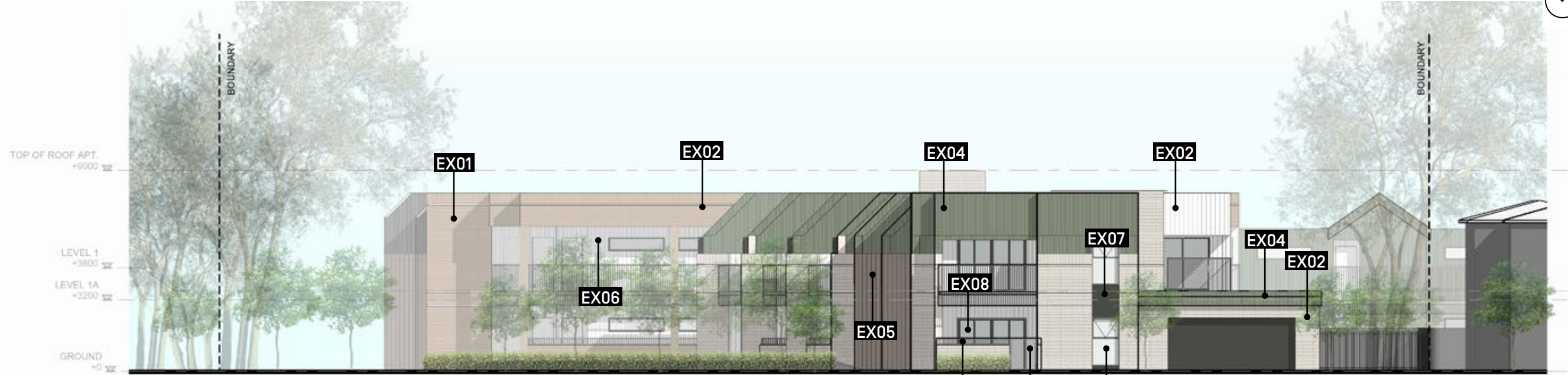


Key Materials
EX01 - Brown Brick
EX02 - White Brick
EX03 - Corrugated Steel - Woodland Grey
EX04 - Corrugated Steel - Pale Eucalypt
EX05 - Timber Cladding
EX06 - CFC sheet - Vertical profile - White
EX07 - CFC Sheet - Woodland Grey
EX08 - Fluted Glass

Building Elevations



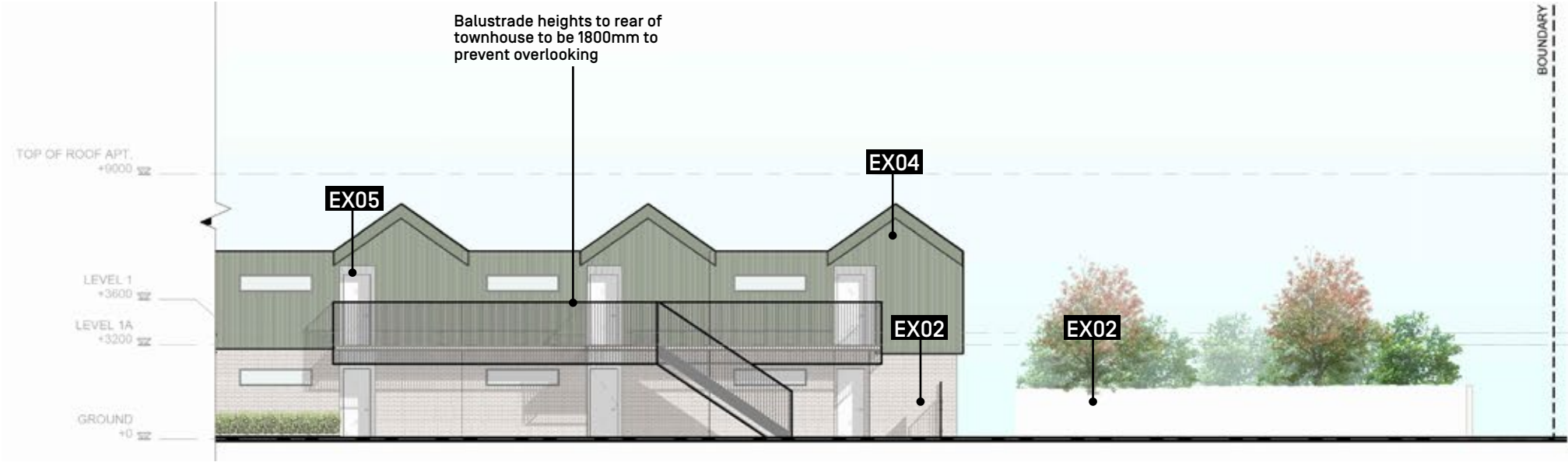
Key Plan
Scale: NTS



4. NE Elevation [Market Place]

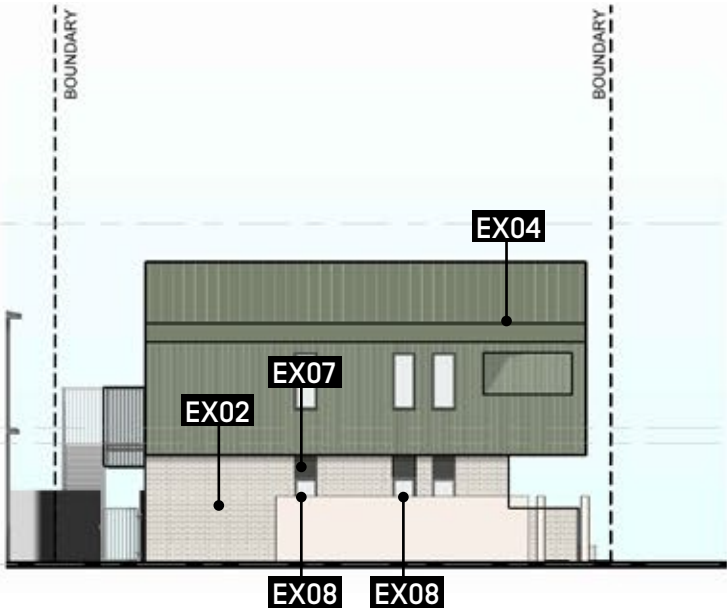
Scale: 1:200 @ A3

Generally, all windows at ground floor to be EX08 privacy glass up to 1500mm

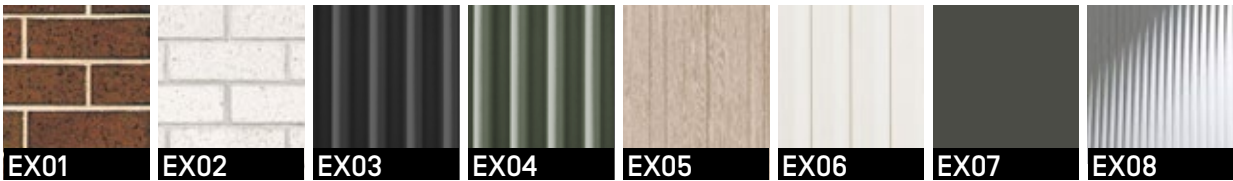


5. NE Elevation [Rear of Townhouses]

Scale: 1:200 @ A3



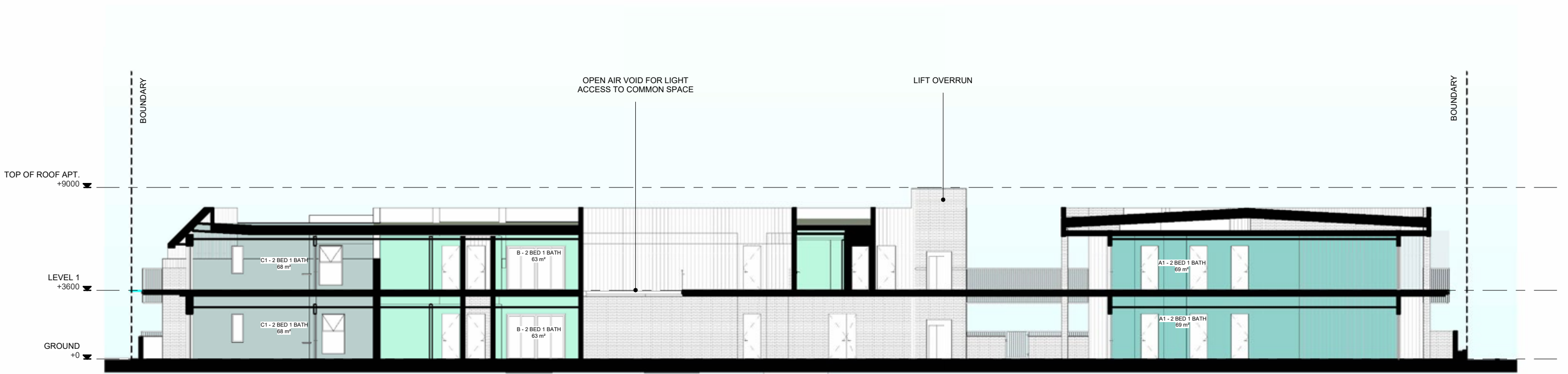
6. NW Elevation [Gibson St]



- Key Materials**

 - EX01 - Brown Brick
 - EX02 - White Brick
 - EX03 - Corrugated Steel - Woodland Grey
 - EX04 - Corrugated Steel - Pale Eucalypt
- EX05 - Timber Cladding
 - EX06 - CFC sheet - Vertical profile - White
 - EX07 - CFC Sheet - Woodland Grey
 - EX08 - Fluted Glass

Building Section

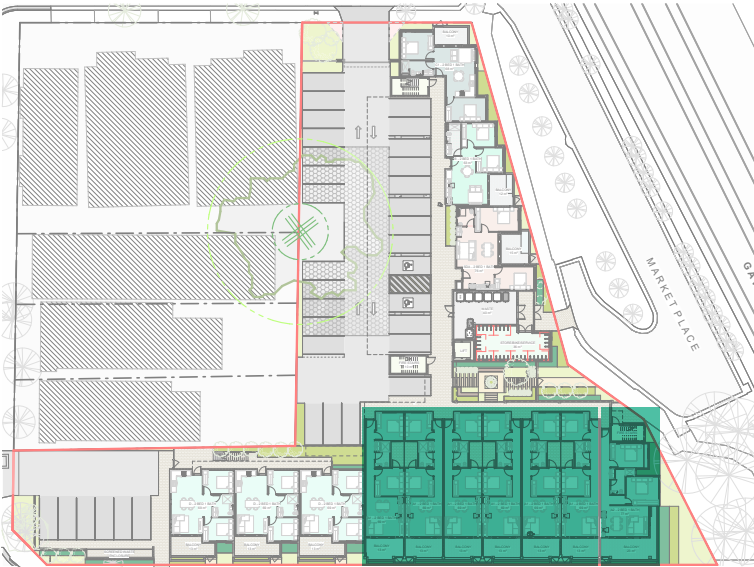


Building Section

Scale: 1:200 @ A3

Dwelling Typologies

Apartment Plans

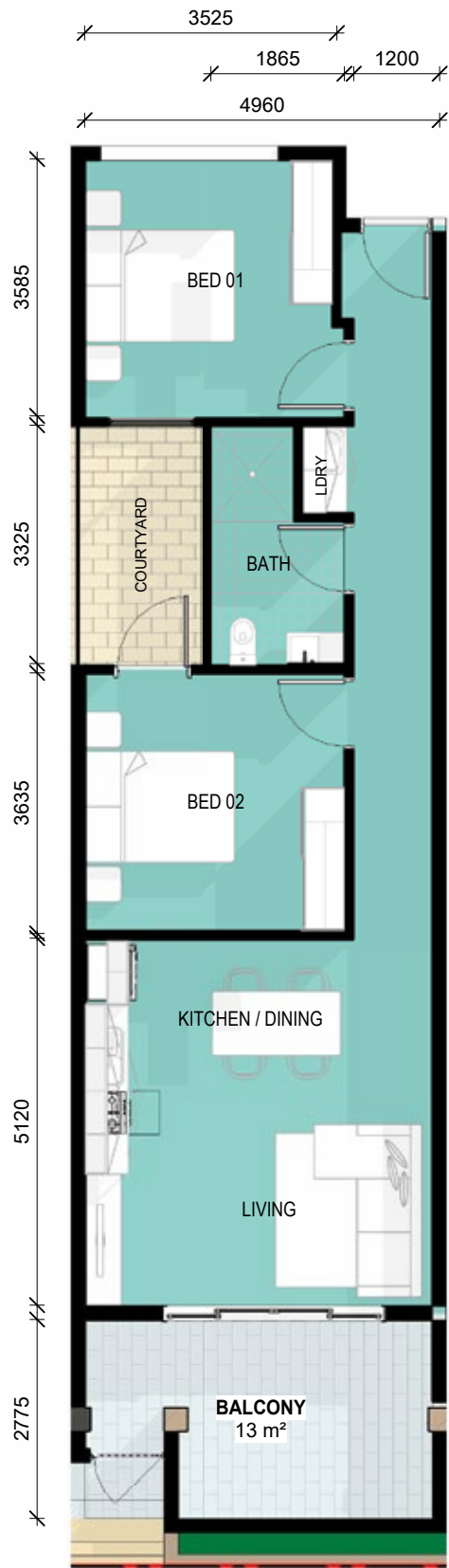


 **GF Key Plan**
Scale: NTS

	2 Bed 1 Bath Apartment	2 Bed SDA Apartment	Accessible Car Parks [5.4x2.4m]	Apartment Car Parks [5.4x2.4m]
GF	12	1	2	32
1F	16	1	-	-
Total	28	2	2	32

Total Dwelling Outcomes on Site - 30

Total Parking Outcomes on Site - 34



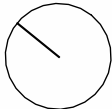
Apartment A1 Typical Plan

Scale: 1:100
Applies to APT 002-007, 102-107
Internal Area: 69m²
POS: 13m² at GF, 11m² at 1F



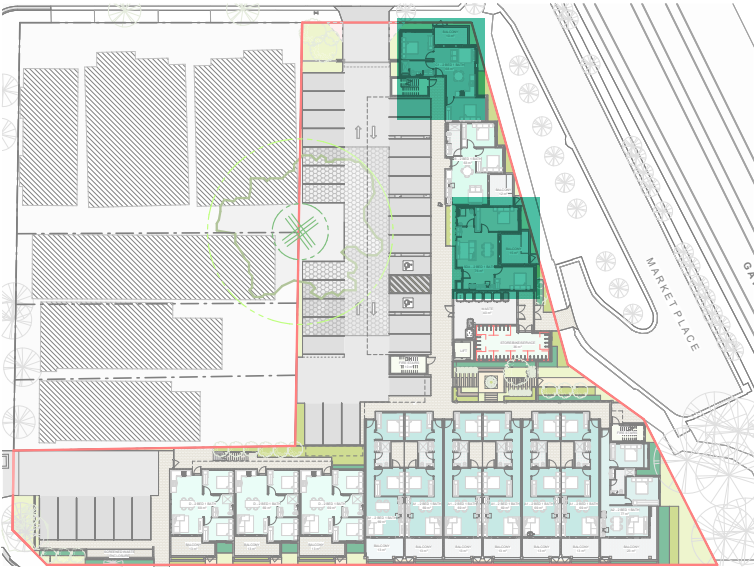
Apartment A2 Typical Plan

Scale: 1:100
Applies to APT 001, 101
Internal Area: 77m²
POS: 23m² at GF, 20m² at 1F



Dwelling Typologies

Apartment Plans

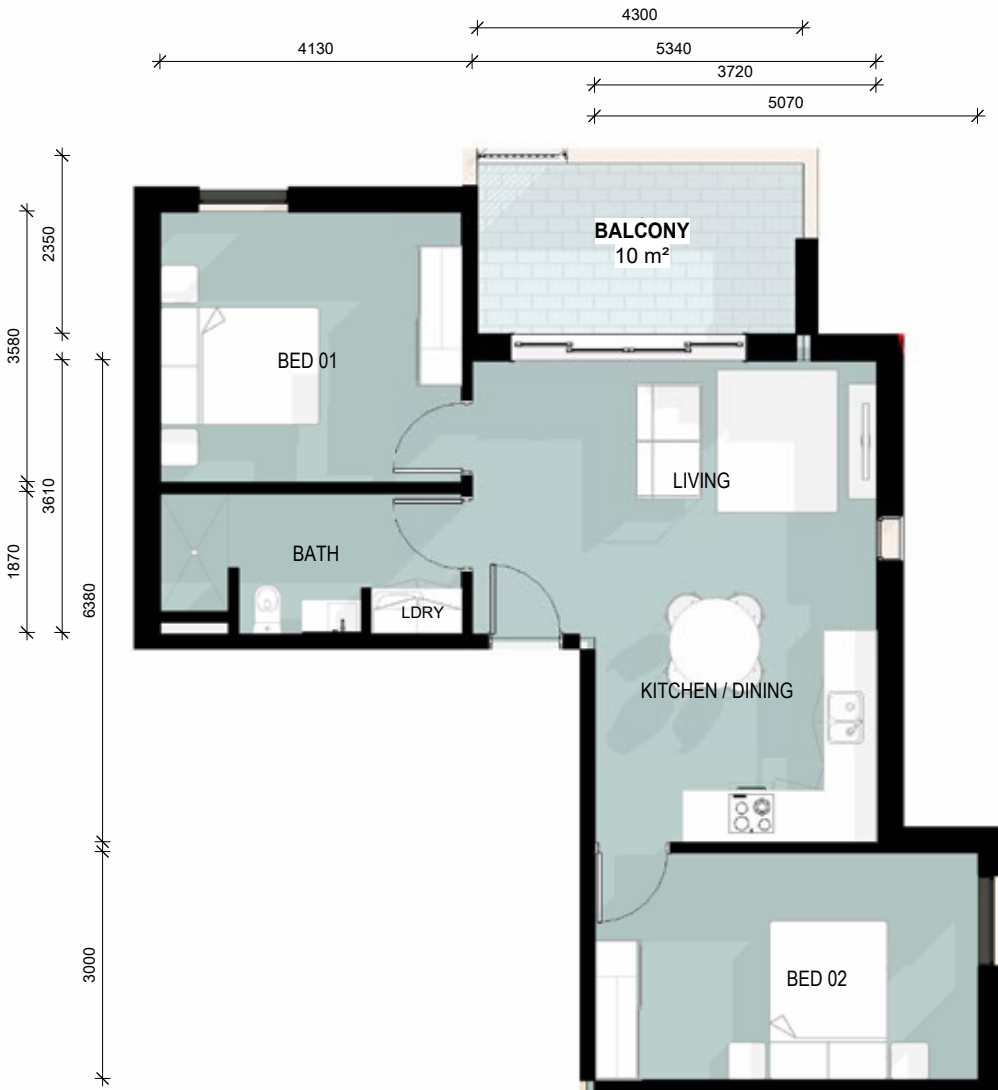


GF Key Plan
Scale: NTS

	2 Bed 1 Bath Apartment	2 Bed SDA Apartment	Accessible Car Parks [5.4x2.4m]	Apartment Car Parks [5.4x2.4m]
GF	12	1	2	32
1F	16	1	-	-
Total	28	2	2	32

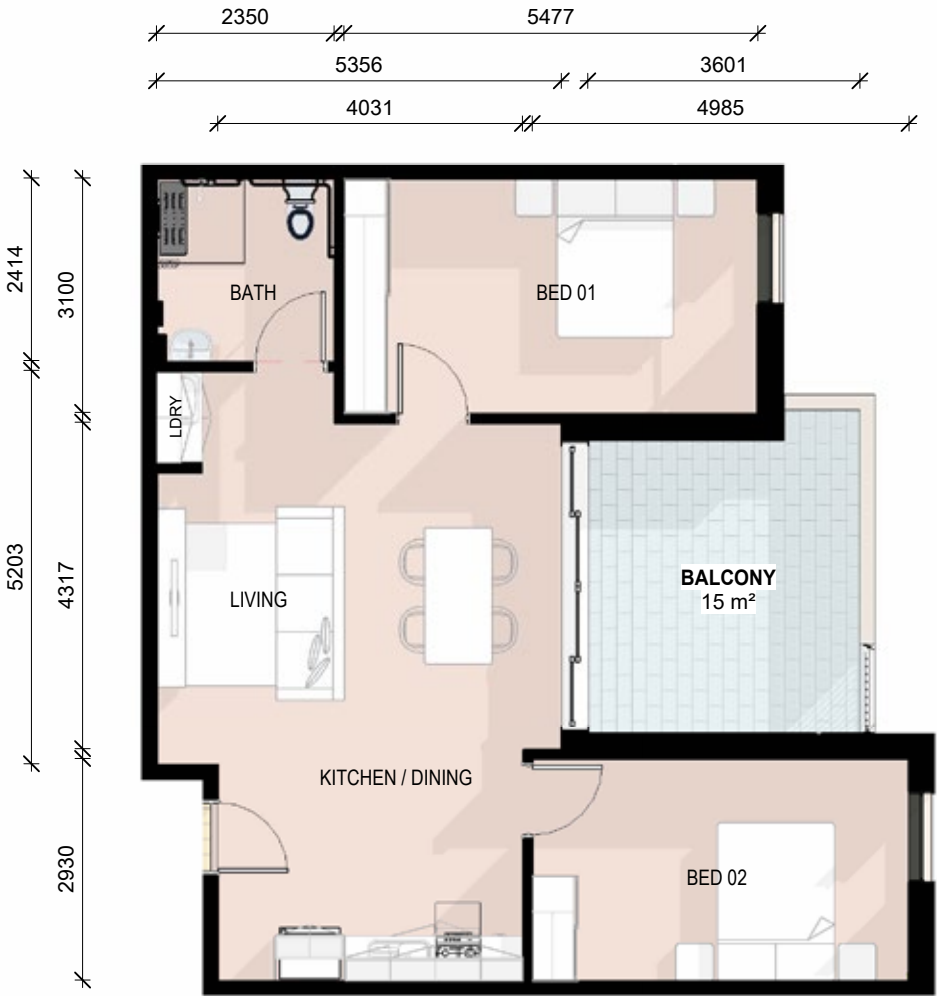
Total Dwelling Outcomes on Site - 30

Total Parking Outcomes on Site - 34



Apartment C1 Typical Plan

Scale: 1:100
Applies to APT 010, 111
Internal Area: 63m²
POS: 10m²

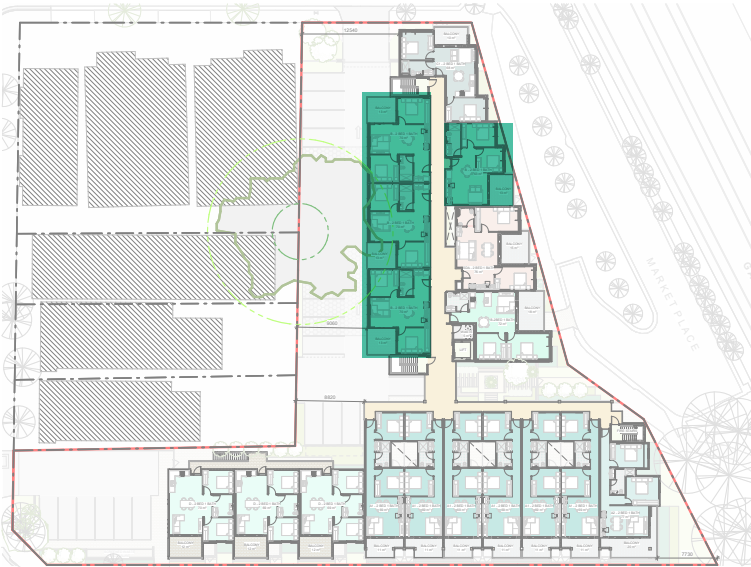


SDA Apartment Typical Plan

Scale: 1:100
Applies to APT 008, 109
Internal Area: 76m²
POS: 15m²

Dwelling Typologies

Apartment Plans



1F Key Plan
Scale: NTS

	2 Bed 1 Bath Apartment	2 Bed SDA Apartment	Accessible Car Parks [5.4x2.4m]	Apartment Car Parks [5.4x2.4m]
GF	12	1	2	32
1F	16	1	-	-
Total	28	2	2	32

Total Dwelling Outcomes on Site - 30

Total Parking Outcomes on Site - 34



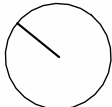
Apartment B1 Typical Plan

Scale: 1:100
Applies to APT 009, 110
Internal Area: 62m²
POS: 12m² at GF, 13m² at 1F



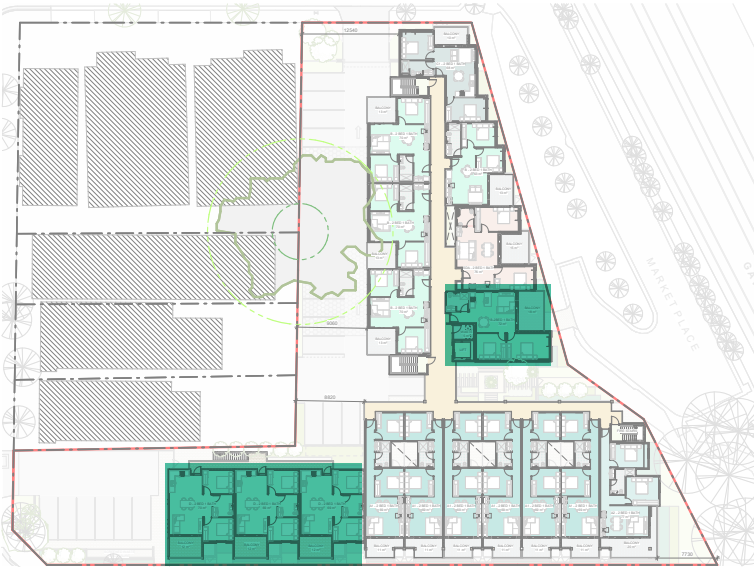
Apartment B2 Typical Plan

Scale: 1:100
Applies to APT 112-114
Internal Area: 70m²
POS: 13m²



Dwelling Typologies

Apartment Plans

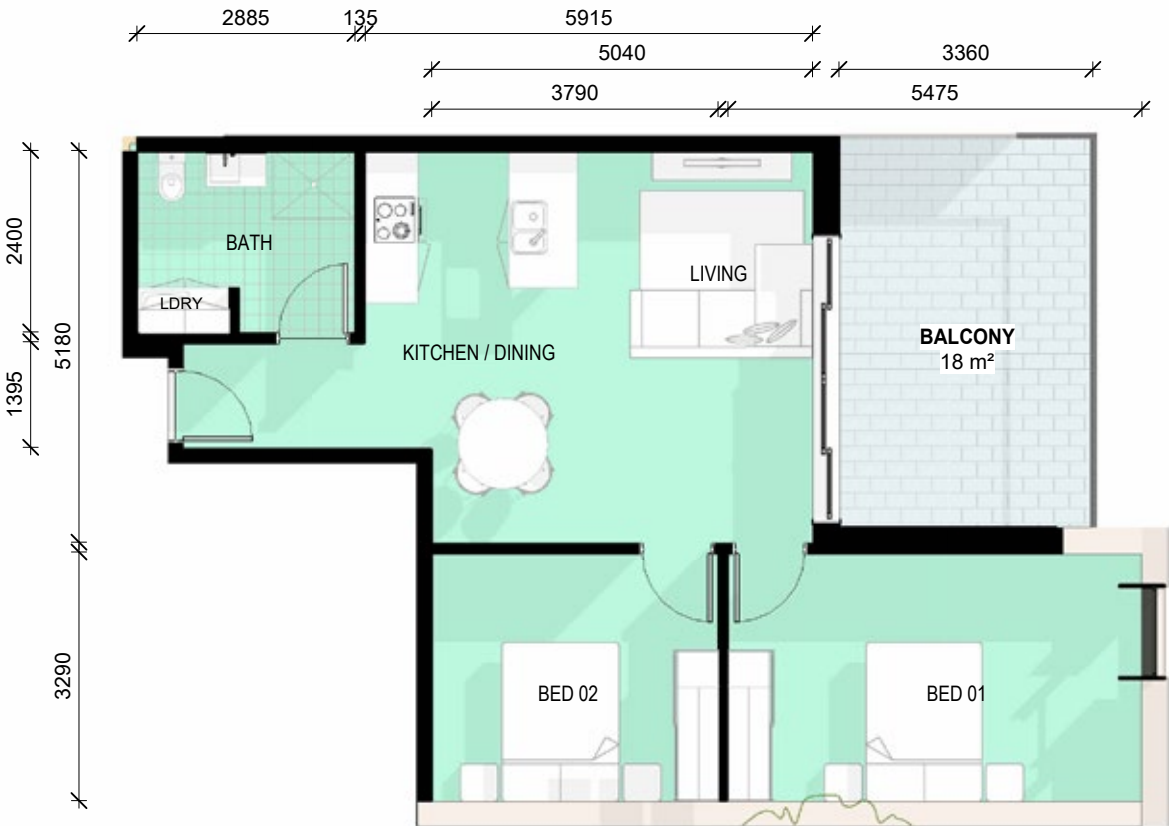


1F Key Plan
Scale: NTS

	2 Bed 1 Bath Apartment	2 Bed SDA Apartment	Accessible Car Parks [5.4x2.4m]	Apartment Car Parks [5.4x2.4m]
GF	12	1	2	32
1F	16	1	-	-
Total	28	2	2	32

Total Dwelling Outcomes on Site - 30

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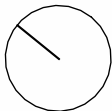
Apartment B3 Typical Plan

Scale: 1:100
Applies to APT 108
Internal Area: 72m²
POS: 18m²



Apartment D Typical Plan

Scale: 1:100
Applies to APT 011-123, 015-117
Internal Area: 69m²
POS: 13m² at GF, 12m² at 1F



Contrasting material
and sloped form give the
upper level a recessive
appearance

Stepped footprint provides
a distinct rhythm and
proportionality to elevation

View From Market Place
Looking North West

Expressed balconies with elements extending below one storey datum, evoking traditional verandah proportionality

Brick detail for further articulation, breaking up vertical forms with horizontal relief

Timber elements to provide textural relief and articulate key junction points along facade

View From Market Place
Looking South West



Defined Proportions and vertical rhythm along Hawker Elevation

Additional setback to parapet to increase visual relief from Hawker street interface

Corner articulation to address views from railway crossing, and better engage with landscaped area

Additional Setback for Ground Floor landscaping to soften street edge

View From Hawker Street
Looking North East

Recessed Ground Floor
to provide landscaping
opportunities and relief from
street edge

Strong vertical delineation
for rhythm along elevation

More traditional roof forms incorporated
to separate Northern Hawker Street
apartments visually from Southern
apartments. Roof pitch in line with angle
of other examples in locality



View From Hawker Street
Looking North

04 Landscape & Environmentally Sustainable Design



Landscape Concept

Soft Landscape

Design Approach

Plant Selection

- Address low light conditions with careful plant selection to ensure vibrant and healthy growth
- Enhance the courtyard experience with elegant free-standing pots and tasteful, accessible furniture for a range of ages and abilities
- Establish a peaceful and healing green space with lush foliage and small trees



Landscape Concept

Soft Landscape

Design Approach

Materiality

- Use high-quality, tactile surface materials commensurate with the scale of the spaces to define spaces for reflection and small social gathering
- Incorporate strategically placed decorative backdrops and screening for privacy and an intimate setting
- Choose inviting furniture to transform the courtyard into series of 'outdoor rooms,' extending the indoor living areas and encouraging relaxation and social interaction



Landscape Concept

Undercrofts & Walkways

Key Features

1. Linear spaces, using different surface treatments to denote access paths, or moments to pause
2. Shade friendly ground cover and planting to control movement through spaces, and provide a soft lush space
3. Larger Planting to more open areas and incidental spaces
4. Selective use of textural backdrop pieces to define communal areas



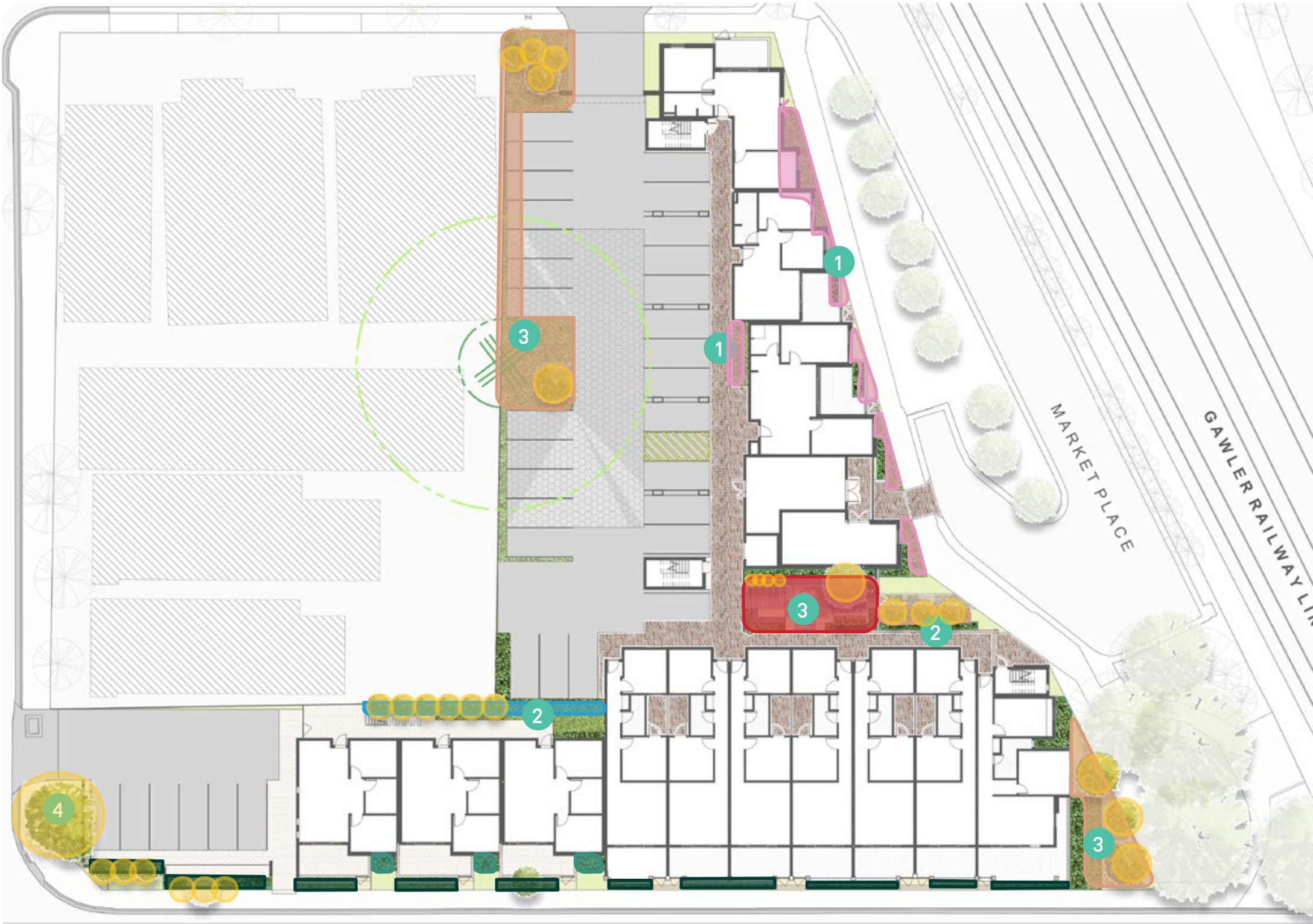
Landscape Concept Preliminary Plan

Key Features

- 1. Address low light conditions with careful plant selection to ensure vibrant and healthy growth
- 2. Shade friendly ground cover and planting to control movement through spaces, and provide a soft lush space
- 3. Larger Planting to more open areas and incidental spaces
- 4. Opportunity for planting to soften street interface edge

Mix No.	Mix Type	Size mm
MIX-01	Hawker Street Apartments	140
MIX-02	Apartment Market Place	140
MIX-03	Zen Garden	140
MIX-05	Light well & Internal Pots	140
MIX-06	Development Edge & Driveways	140
MIX-07	Green Screening	140

- Tree
- Mix 01 - Hawker Street Town houses
- Mix 02 -Apartments Market Place
- Mix 03 -Zen Garden
- Mix 04- Light well & Internal Pots
- Mix 05- Development Edge & Driveways
- Mix 06- Green Screening



Ground Floor Plan
Scale: 1:400 @ A3

Plant Schedule

TREE				
	Botanic Name	Common Name	Size L	Counting [m]
1	<i>Acer palmatum</i>	Japanese Maple	45	2
2	<i>Tilia cordata</i>	Linden Tree	45	3
3	<i>Gleditsia triacanthos</i> var. <i>inermis</i> 'Sunburst'	Honey Locust (Cultivar)	45	3
4	<i>Acer buergerianum</i>	Trident Maple	45	4
5	<i>Pyrus calleryana</i>	Chanticleer	45	6
6	<i>Fraxinus pennsylvanica</i> 'Broad Leaf'	Urbanite	45	4
7	<i>Ulmus parvifolia</i>	Chinese Elm	45	3

Mix 01 Hawker Street Apartments				
	Botanic Name	Common Name	Size mm	Spacing[m]
8	<i>Lomandra longifolia</i> 'Tanika'	Mat Rush	140	0.6
9	<i>Trachelospermum jasminoides</i>	Star Jasmine	140	0.75
10	<i>Dianella caerulea</i> 'Breeze'	Blue Flax Lily	140	0.7
11	<i>Hibbertia scandens</i>	Guinea Flower	140	0.55

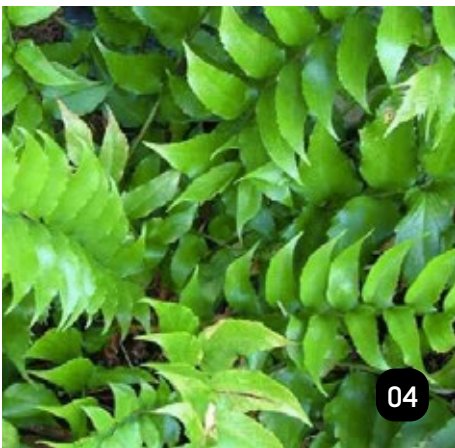
Mix 02 Apartments Market Place				
	Botanic Name	Common Name	Size mm	Spacing[m]
12	<i>Murraya paniculata</i>	Mock Orange	200	0.8
13	<i>Raphiolepis indica</i> 'Oriental Pearl'	Indian Hawthorn	140	0.5
14	<i>Rosmarinus officinalis</i> 'Prostratus'	Prostrate Rosemary	140	0.6



Plant Schedule

Mix 03 Zen Garden				
	Botanic Name	Common Name	Size mm	Spacing (m)
1	<i>Ajuga australis</i>	Australian Bugle	140	0.3
2	<i>Aspidistra elatior</i>	Cast Iron Plant	140	0.6
3	<i>Asplenium australasicum</i>	Bird's Nest Fern	140	0.4
4	<i>Cyrtomium falcatum</i>	Japanese Holly Fern	140	0.7
5	<i>Doodia aspera</i>	Rasp Fern	140	0.3
6	<i>Helichrysum petiolare</i>	Licorice plant	140	0.9
7	<i>Helichrysum splendium</i>	Cape Gold	140	0.7
8	<i>Liriope muscari</i> 'Just Right'	Just Right Liriope	140	0.7
9	<i>Plectranthus</i> 'Plepalila'	Mona Lavendar	140	0.6
10	<i>Stachcys byzantina</i>	Lamb's Ears	140	0.3
11	<i>Trachelospermum jasminoides</i>	Star Jasmine	140	0.75
12	<i>Viola hederacea</i>	Native Violet	140	0.7

Mix 04 Light Well & Internal Pots				
	Botanic Name	Common Name	Size mm	Spacing (m)
13	<i>Asplenium australasicum</i>	Bird's Nest Fern	140	0.6
14	<i>Clivea miniata</i>	Bush Lily	140	0.4
15	<i>Philodendron</i> 'Xanadu'	Philodendron 'Xanadu'	140	0.5
16	<i>Plectranthus</i> 'Plepalila'	Mona Lavendar	140	1.1



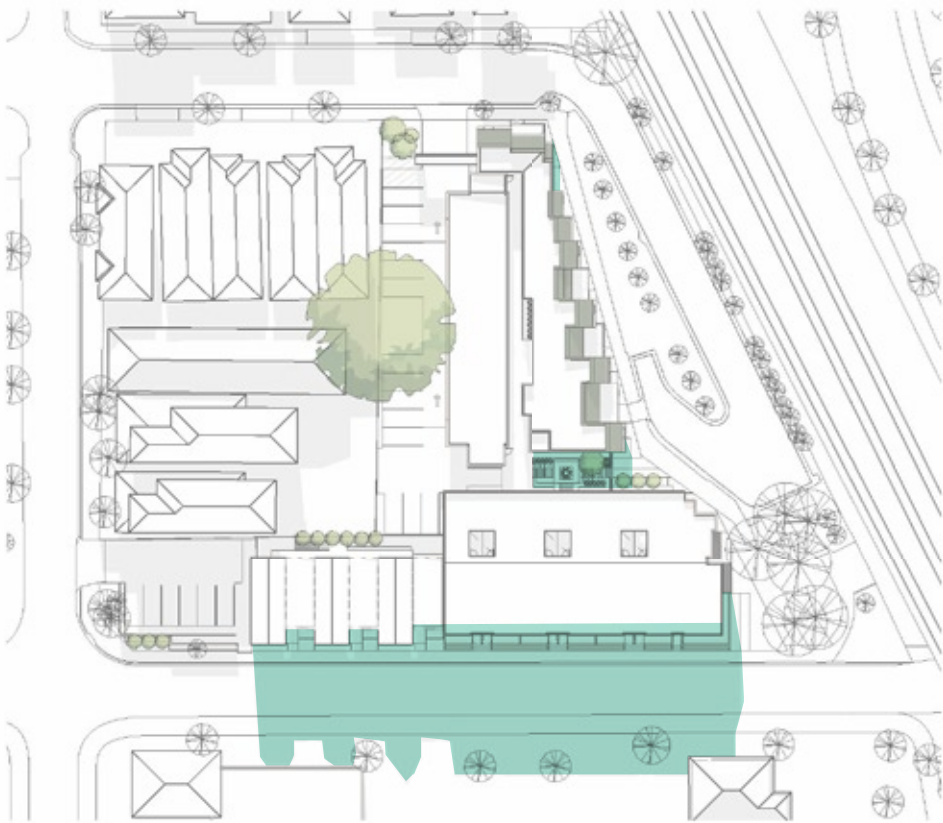
Plant Schedule


Mix 05 Development Edge & Driveway				
	Botanic Name	Common Name	Size mm	Spacing [m]
1	<i>Dianella revoluta</i> 'Revelation'	Bird's Nest Fern	140	0.5
2	<i>Ficinia nodosa</i>	Bush Lily	140	0.5
3	<i>Hardenbergia</i> 'Bushy Blue'	Philodendron 'Xanadu'	140	0.6
4	<i>Leucophyta brownii</i>	Mona Lavendar	140	0.4
5	<i>Lomandra longifolia</i> 'Tanika'	Mat Rush	140	0.5
6	<i>Myoporum parvifolium</i> 'Fine Leaf Form'	Creeping Boobialla	140	0.55
7	<i>Poa labillardieri</i> 'Eskdale'	Tussock Grass	140	0.6
8	<i>Westringia</i> 'Wynyabbie Gem'	Coastal Rosemary	140	0.4
9	<i>Westringia Fruticosa</i> 'Smokey'	Coastal Rosemary	140	0.55

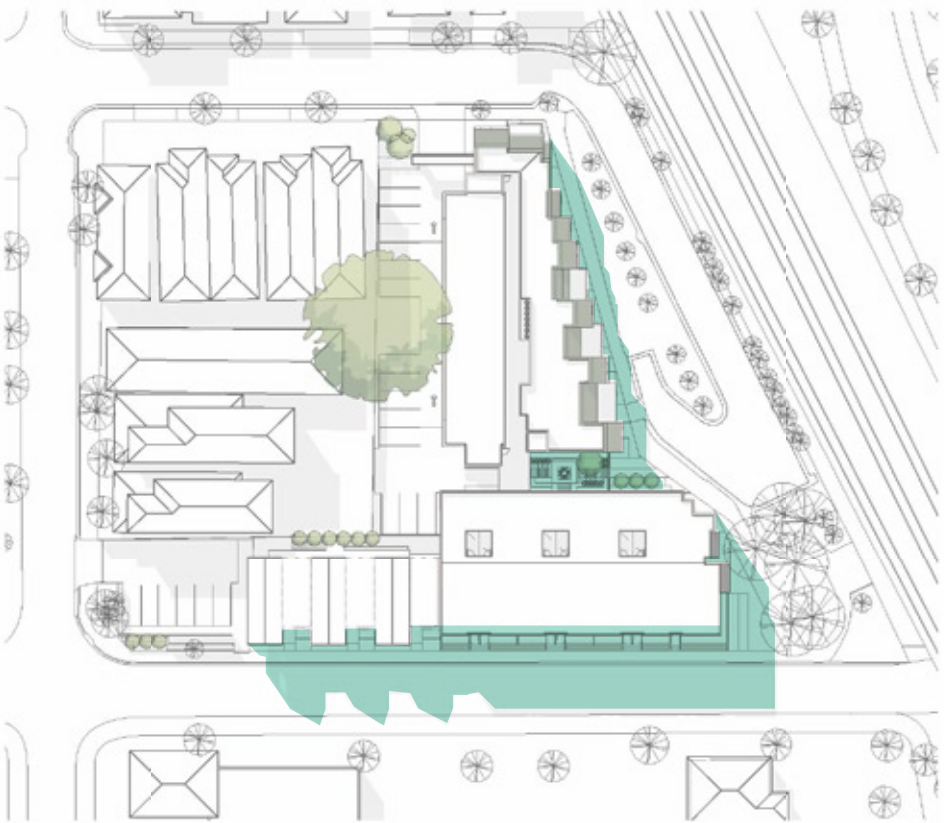
Mix 06 Green Screen				
	Botanic Name	Common Name	Size mm	Spacing [m]
10	<i>Murray paniculata</i>	Mock Orange	140	0.5




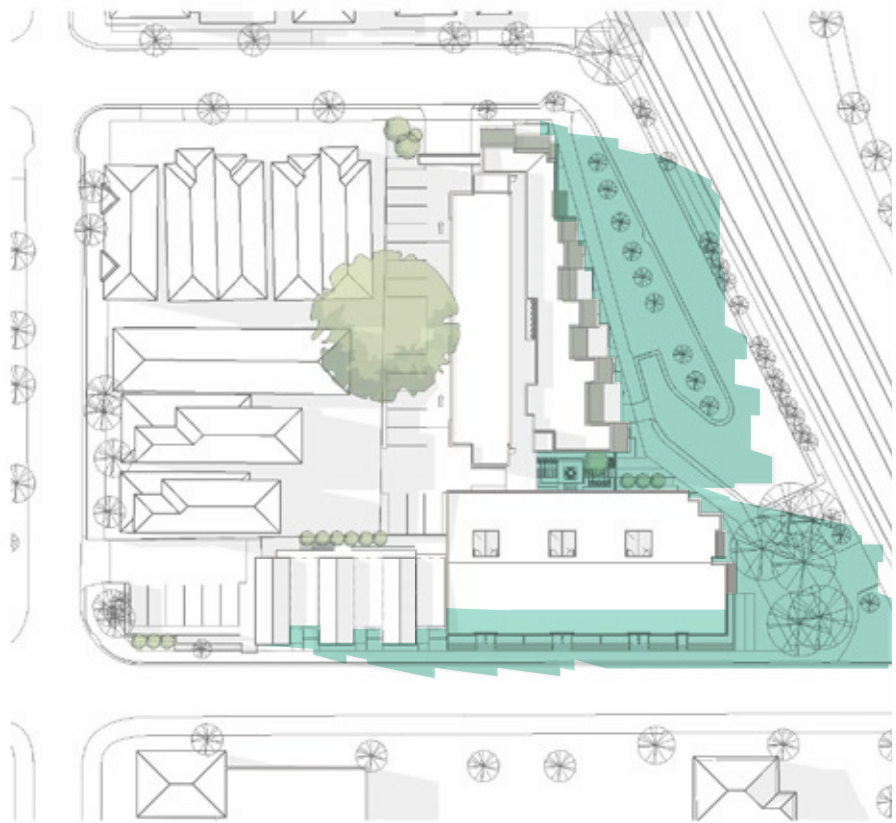
Shadow Diagrams




 **Winter Solstice 10am**
Scale: NTS



 **Winter Solstice 12pm**
Scale: NTS



 **Winter Solstice 3pm**
Scale: NTS

LEGEND

K&WT	CONCRETE KERB & WATERTABLE HEIGHT AS NOTED.
K	CONCRETE KERB HEIGHT AS NOTED.
TRK	CONCRETE TRANSITION KERB
FK	FLUSH KERB.
FK1	DEEPEEN FLUSH KERB TO PERMEABLE PAVEMENT AREA. REFER DETAIL.
---	NEW STORMWATER PIPE (UNSEALED SYSTEM).
---	NEW STORMWATER PIPE (SEALED SYSTEM).
- - - - -	RIISING MAIN
□	GRATED INLET PIT ALL PITS TO BE FIT WITH OCEAN PROTECT "OCEAN GUARDS"
□	JUNCTION BOX
□	SIDE ENTRY PIT
●	STORMWATER INSPECTION POINT.
□	MAINTENANCE VALVE. REFER DETAIL.
○	DOWN PIPES, ALL DOWN PIPES TO HAVE A uPVC TAIL MATCHING THE SIZE OF THE DOWNPIPE, CONNECTING TO MAIN STORM WATER RUN U.N.O.
---	CONCRETE CULVERT WITH 6mm GALVANISED CHECKER PL.
---	RETAINING WALL. SINGLE SLEEPER UNDER GOOD NEIGHBOUR FENCE. (TBC)
P ***	DESIGN LEVEL P-PAVEMENT LEVEL TK-TOP OF KERB WT-WATER TABLE TP-TOP OF PIT IL-INVERT LEVEL FL-FINISHED FLOOR LEVEL EX-EXISTING LEVEL TW-TOP OF WALL BW-BOTTOM OF WALL L-LANDSCAPE H-HEIGHT
5.5.25	EXISTING SPOT LEVELS FROM SURVEY.
FALL	DENOTES SURFACE FALL
1:100	1:100 YEAR STORM EVENT OVERLAND FLOW PATH
X	DEMOLISH EXISTING.
2 x 5KL	2 x 5KL RETENTION TANKS.
---	DEEPEEN FOOTING TO EDGE OF BUILDING.

DETENTION ASSESSMENT
PRE-DEVELOPMENT FLOWS
• 20% AEP EVENT = 29.86L/s.
POST DEVELOPMENT FLOWS
• 1% AEP UNDAINED AREA = 3L/s.
• 1% AEP BUILDING D = 3L/s.
• 1% AEP REMAINDER OF THE SITE = 23L/s.
• TOTAL SITE DISCHARGE = 29L/s.
POST-DEVELOPMENT DETENTION REQUIRED
• 1% AEP UNDAINED AREA = NIL
• 1% AEP BUILDING A = 8.15KL
• 1% AEP REMAINDER OF THE SITE = 52.14KL
POST-DEVELOPMENT DETENTION PROVIDED
• 2 x 5KL ABOVE GROUND DETENTION TANK FIT WITH A 30mm ORIFICE RESTRICTING FLOWS TO 3L/s.
• 1 x 35KL BELOW GROUND PUMP CHAMBER + 22KL BELOW GROUND DETENTION TANK (TOTAL 57.14KL) DISCHARGING TO THE EXISTING SIDE ENTRY PIT IN MARKET PLACE AT A MAXIMUM RATE OF 23L/s.

EXISTING TELSTRA PIT TO BE REPLACED WITH HEAVY DUTY BOX AND LID. LEVELS OF TOP OF PIT TO BE ADJUSTED WITH NEW DRIVEWAY LEVELS.

REMOVE EXISTING CROSSOVER AND IN ACCORDANCE WITH COUNCIL STANDARD DETAILS, PROVIDE "PAVED COMMERCIAL" CROSSOVER (DRAWING No. M1182) AND "COMMERCIAL" TYPE DRIVEWAY INVERT (DRAWING No. M1249).

REMOVE EXISTING CROSSOVER AND IN ACCORDANCE WITH COUNCIL STANDARD DETAILS, REINSTATE KERB AND GUTTER TO "150mm KERB & GUTTER" (DRAWING No. M1242) AND FOOTPATH TO "FOOTPATH CLAY BRICK PAVED" (DRAWING No. M1573).

REMOVE EXISTING STORMWATER OUTLETS AND REINSTATE KERB AND FOOTPATH IN ACCORDANCE WITH COUNCIL STANDARD DETAILS. REINSTATE KERB AND GUTTER TO "150mm KERB & GUTTER" (DRAWING No. M1242) AND FOOTPATH TO "FOOTPATH-CLAY BRICK PAVED" (DRAWING No. M1573). TYPICAL FOR ALL REDUNDANT OUTLETS.

STOBIE POLE TO BE RELOCATED TO SUIT DRIVEWAY CROSSOVER. TO BE DOCUMENTED IN FUTURE SERVICES SCOPE.

2250 uPVC ROUTES STORMWATER PIPE TO MITIGATE IMPACT ON TPZ. HAND DIG OR HYDROVAC THROUGH TPZ.

HAND DIG OR HYDROVAC ALL EXCAVATION WORKS WITHIN TPZ.

BUILDING A/B/C ROOF AS WELL AS PAVEMENT AND LANDSCAPE RUNOFF TO DISCHARGE THROUGH A OCEAN PROTECT "JELLYFISH" JF-900-2-1 PRIOR TO DISCHARGE TO THE DETENTION SYSTEM. STORMWATER COLLECTION PITS TO BE FIT WITH OCEANGUARD LITTER BASKETS.

BUILDING A/B/C ROOF AS WELL AS PAVEMENT AND LANDSCAPE RUNOFF TO DISCHARGE TO "ENVIROLIFT" PPE-3500 PRECAST PACKAGED PUMP STATION (35KL) PLUS 22.4KL UNDERGROUND TANK PROVIDING A MINIMUM OF 50.31KL DETENTION CAPACITY. ENVIROLIFT TO BE FITTED WITH SUBMERSIBLE PUMP DISCHARGING TO EXISTING SIDE ENTRY PITS IN MARKET PLACE AT 23L/s. BACK UP PUMP, ALARM SYSTEM AND EXTERNAL POWER PLUG TO BE PROVIDED TO THE SYSTEM. (FINAL LOCATION T.B.C. - INTENTION IS 3.5m DISTANCE FROM BOUNDARY AND STRUCTURE TO ACHIEVE BENCHING REQUIREMENTS).

900x600 SEP TP 17.40 P 17.30 IL 16.70

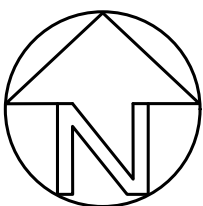
ALL STORMWATER FROM BUILDING D RUNOFF TO DISCHARGE TO 2x5KL ABOVE GROUND TANKS PROVIDING A MINIMUM OF 8.15KL DETENTION CAPACITY. DISCHARGE TANK TO HAVE A LOW LEVEL 30mm ORIFICE DISCHARGING AT A MAXIMUM OF 3L/s. TANK TO BE FIT WITH A HIGH LEVEL OVERFLOW MATCHING INLET PIPE SIZE. STORMWATER TO ENTER TANK VIA A SIPHONIC SYSTEM.

REMOVE EXISTING STORMWATER OUTLETS AND REINSTATE KERB AND FOOTPATH IN ACCORDANCE WITH COUNCIL STANDARD DETAILS. REINSTATE KERB AND GUTTER TO "150mm KERB & GUTTER" (DRAWING No. M1242) AND FOOTPATH TO "FOOTPATH-CLAY BRICK PAVED" (DRAWING No. M1573). TYPICAL FOR ALL REDUNDANT OUTLETS.

FLOOD MODELING INDICATES FLOODING TO 51mm ABOVE THIS POINT. FLOOD LEVEL 17.561

FFL SET 300mm ABOVE FLOOD LEVEL TO COMPLY WITH COUNCIL REQUIREMENTS.

C	20-03-25	RE-ISSUED FOR PLANNING APPROVAL	CM/TAC
B	19-12-24	RE-ISSUED FOR PLANNING APPROVAL	CM/TAC
A	26-07-24	ISSUED FOR PLANNING APPROVAL	CM/TAC
Issue	Date	Details	Eng/DIT



Designed C.M.I.	Drawn T.A.C.	Checked -	Scale 1:200	Date Mar-25
Drawing No. 240141-C001	Rev. C			
PRINTED ON : 20/03/2025 2:10:27 PM ORIGINAL SHEET SIZE A1				