DEVELOPMENT APPLICATION

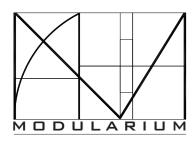
PREPARED FOR MICRO NEST PTY LTD

M21701 - ISSUE A

DESIGN REPORT

25 SEPTEMBER 2018

MODULE 195 195-197 SYDNEY RD FAIRLIGHT



SYDNEY DESIGN COLLECTIVE



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Note: All area calculations	are advisory only and all figures should be checked and			

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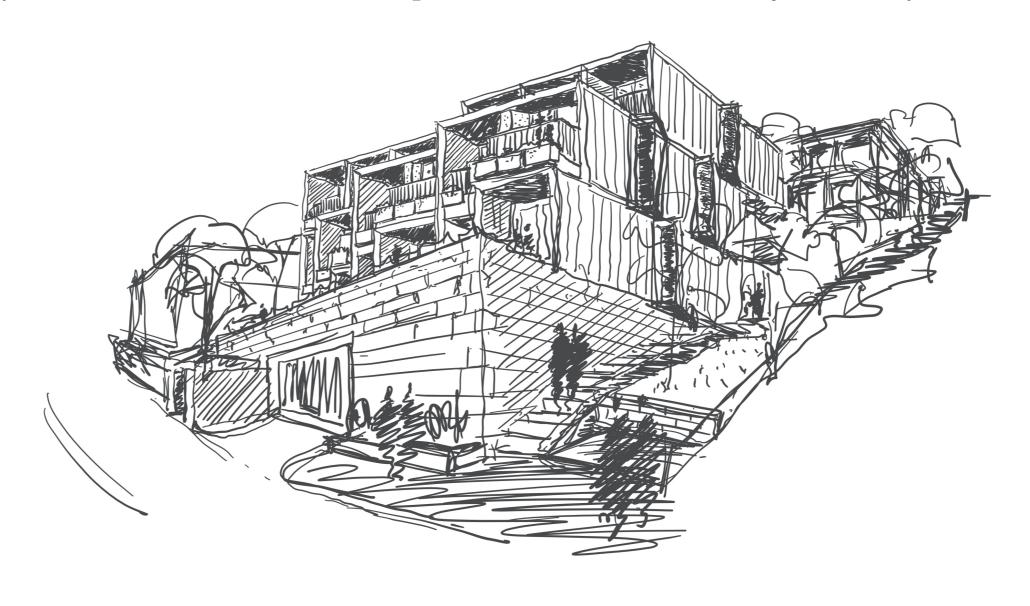


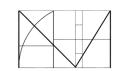
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1.0 VISION

The affordable and high quality housing are not conflicting terms, and while the sloping site seem to complicate a difficult proposition, these unique challenges facilitate a solution that results in an architectural expression that is sympathetic to it's natural context, responsive to topography and is expressive of its residential typology from which high quality architecture is derived.

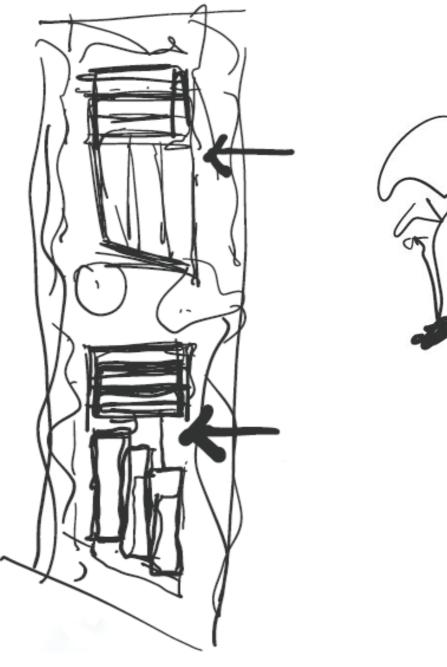
The spaces in between the two built forms will create a network of landscaped places and pathways that will complement the site and create a series of experiences, pocket spaces and journeys that which will enrich the user experience and enhance a sense of community.

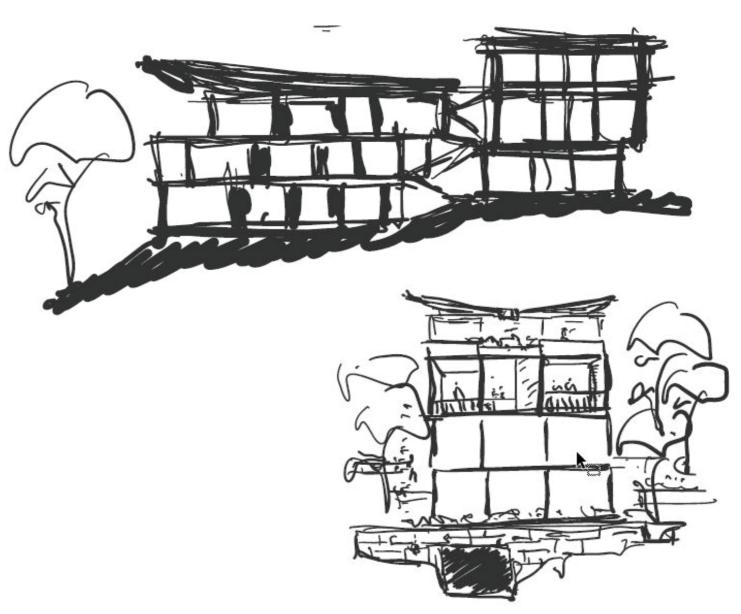


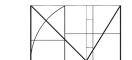


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The composition of the stacking volumes will enhance the interpolation of the built form into the landscape and urban context and through usage of a select materials create a juxtaposition between natural and built environment.







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2.0 MICRONEST COMMUNITIES

Creating a vibrant residential community

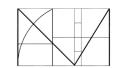
The model for MicroNest Living and this particular project incorporates principles envisaged by the Affordable Housing SEPP, but also it goes much further than that. The focus of each development is not only to provide a quality and affordable lodging, but also focuses on what makes a place a home as well as what makes a group of people a community.

Each dwelling module has been carefully designed as a crafted piece of joinery that maximises the use of compact space without any loss of amenity. In fact the relatively small size of each dwelling allows for an upgrade of finishes and design that is truly industry leading. The careful thought that considered how these spaces will be occupied is exemplified in a dwelling that is warm and liveable and that omptimises sustainable environmental passive design techniques. This assures not only savings and lesser environmental impacts in the operation of these facilities, but also assures healthy living and natural climate control (cross ventilation, shading, reuse, etc.) that enhances wellbeing of residents.

The composition of modules is carefully considered in its placement on the site to maximise horizontal and vertical connectivity through utilisation of voids and pedestrian pathways to enhance interaction between residents and foster a sense of community. The site landscaping has been designed to enhance the interaction with natural environment and create a series of spaces, pocket parks, where people can relax and interact. These spaces have been considered as opportunities to create outdoor rooms that are further enhanced by series of internal communal facilities. These include meeting spaces, common laundry, bicycle parking and storage facilities all in excess of what is envisaged by the SEPP.







The community facilities encourage a sense of sharing, a sense of bond between the residents that extends beyond their common interests. A simple task such as borrowing a vacuum cleaner or additional chairs for outdoor BBQ event, from the provided storage facility is an opportunity for resident interaction and strengthening of common bonds.

The design of each MicroNest Living facility considers a cost of production while assuring that quality is not diminished in any way or form. Through repetition of unit modules and careful utilisation of spaces, which may be small in size but large in flexibility and utility, a high quality and consistency is achieved that assures that people who can access affordable housing dwellings are in no way disadvantaged in the quality of their accommodation. This assures that our child care workers, teachers, police and fire officers and many of other low and moderate income earners enjoy the best living facilities that are delivered without any compromise in terms of quality.

The opportunity that this managed facility offers also goes beyond the benefits of quick maintenance and supervised site. It also facilitates organization of group programs (yoga classes, movie nights, crafts, etc.) that can take place on site both in internal and external common facilities.

The location of Module 195 residential facility has also been carefully considered to further enhance the philosophy of MicroNest Living. The site location is on a major bus transport link assuring quick and economic access to CBD or Manly. In addition to the landscaped environment provided within the facility in further enhanced by the site's close proximity to public parks and beaches that assures easy access to many wonderful locations offered by the precinct. In addition, less than 200m from the site is the Fairlight shopping village featuring many shops and cafes.



...Pocket parks



...Transport links



...Terraces



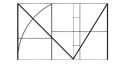
...Public parks



...Cafes



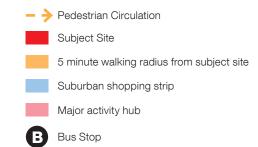
...Beaches

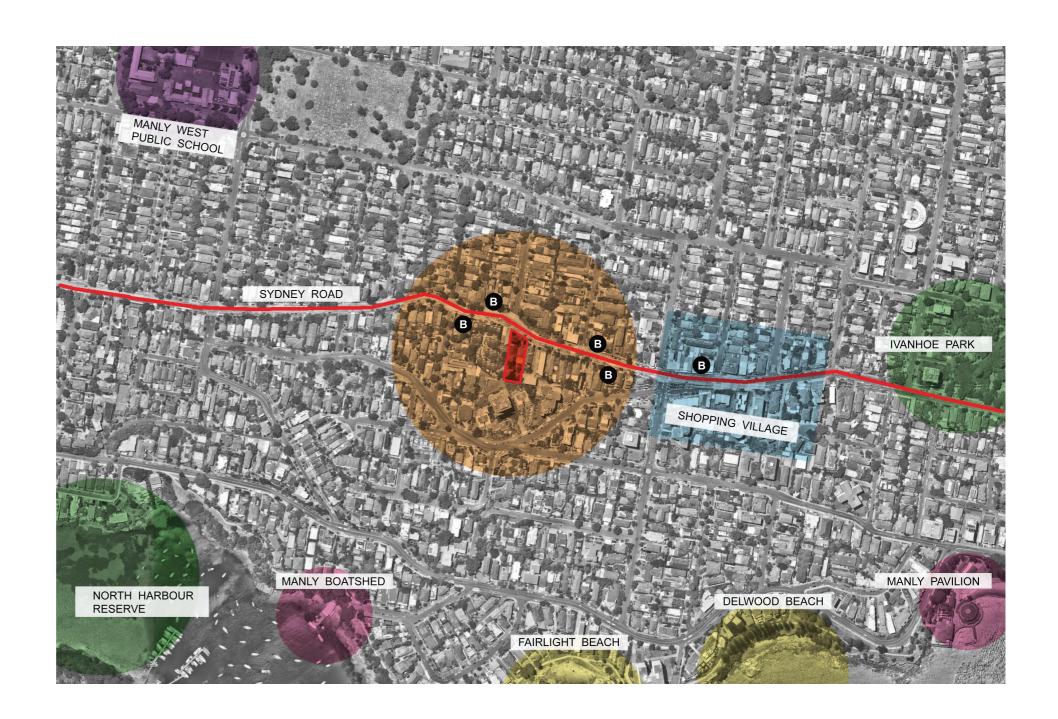


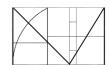
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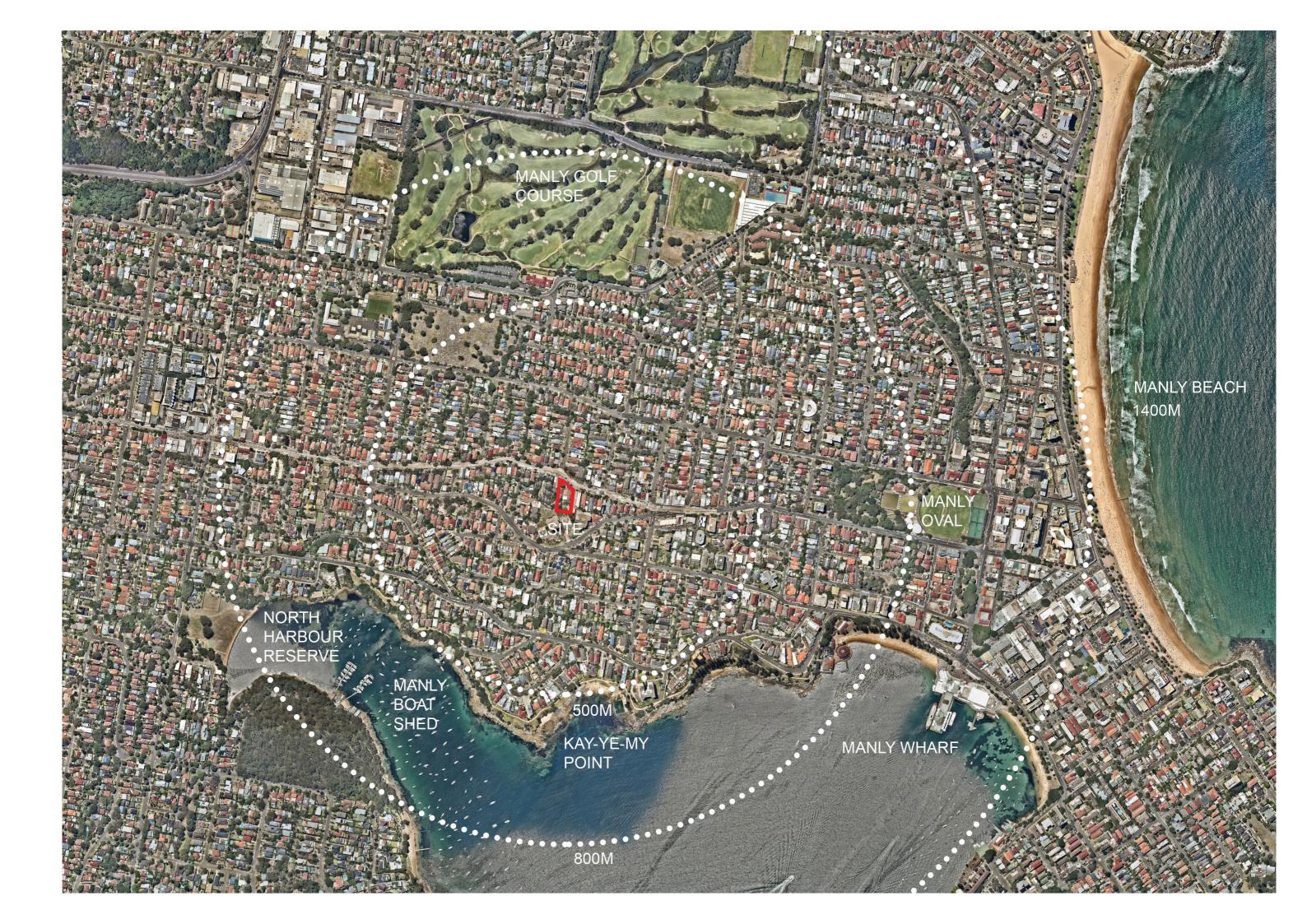
3.0 SITE CONTEXT

The MicroNest Living homes are strategically positioned to make best use of neighbouring amenities and infrastructure. The subject site is located on a key transport link with bus stops available (with transport both city bound and towards Manly beach) less than 100m away. The Fairlight shopping village is also in a close proximity, some 5 minute walk, while North Harbour reserve, Manly Boatshed, Fairlight Beach and Manly Pavilion all are less than 1km in distance.









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3.1 SITE PHOTOS





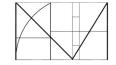


4. View from Sydney Rd.





2. View from Sydney Rd. - Brisbane St. corner





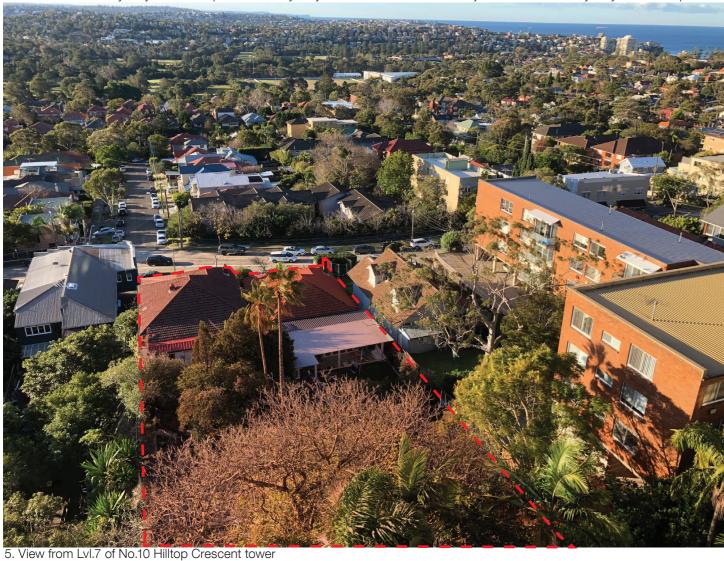






12. View of No.189 Sydney Rd. development from Sydney Rd.

9. View in front of No.197 Sydney Rd.









6. View of No.10 Hilltop Crest.tower from subject site

7. View of a small block at No.10 Hilltop Crst. from subject site



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4.0 SITE ANALYSIS





SUBJECT SITES

/ Two sites comprise development site 195 and 197 Sydney Road Fairlight

/ Total site area 1786sqm (859 - No.195 and 927sqm - No.197)

TOPOGRAPHY

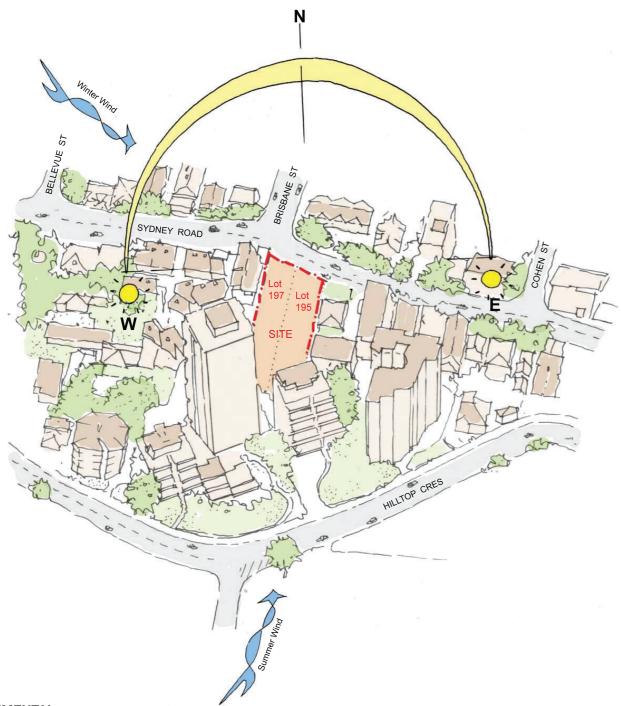
/ The site features a steep slope (12m) towards Sydney Road;

/ The Sydney Road frontage is partly comprised of a series of exposed sandstone rock elements and retaining walls;

/ The rear of the site also has a 2m high sandstone retaining wall towards the high-rise residential towers South of the site and a 6m high masonry rendered wall housing the parking of the No.10 Hilltop Crescent tower.

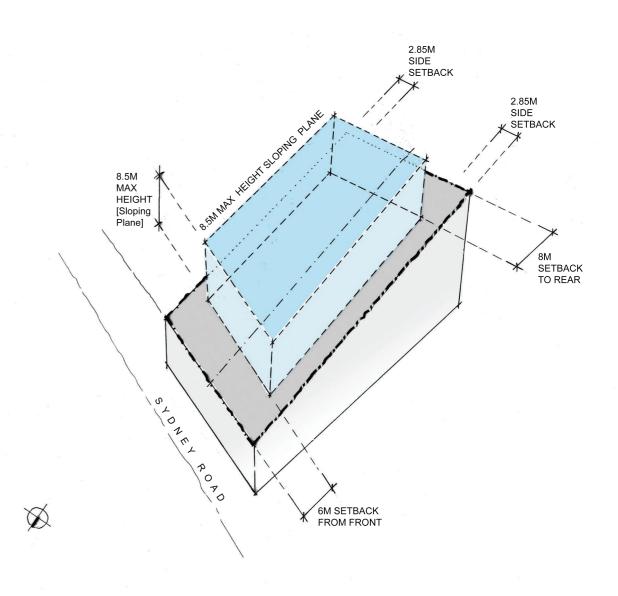


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ENVIRONMENTAL

- / Slope of terrain maximises northern orientation and access to excellent solar amenity;
- / Slope also protects the site from southerly winds which is further sheltered by the developments to South;
- / Consideration should be given to traffic noise along Sydney Road



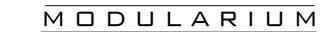
PLANNING CONTROLS

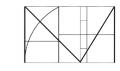
/ Zoning: R1 General Residential (Manly LEP 2013);

/ FSR 0.6:1 (LEP) with additional bonus of 0.5:1 (provided by AHSEPP);

/ Maximum height of 8.5m (LEP);

/ 6m Front Setback, 1/3 height setback to side (8.5m = 2.83m) and 8m setback to rear (Manly DCP 2013)

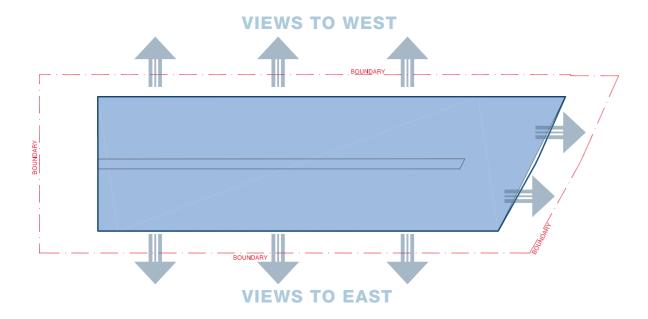


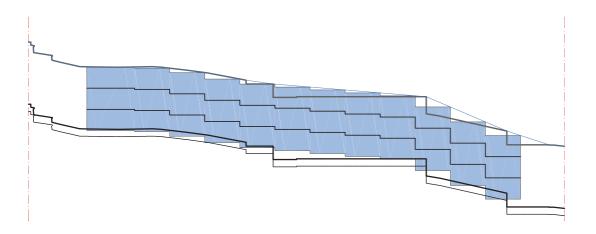


MICRONEST DA - ARCHITECTORAL DESIGN REPORT

5.0 DESIGN CONCEPT

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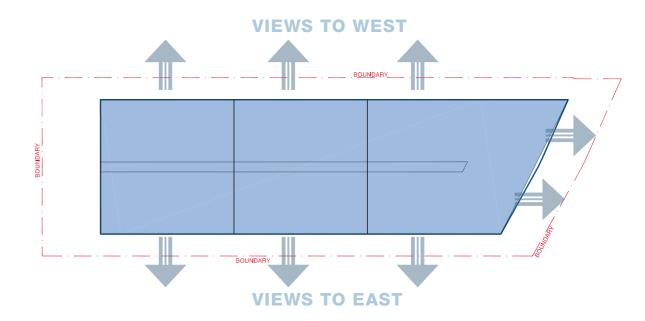


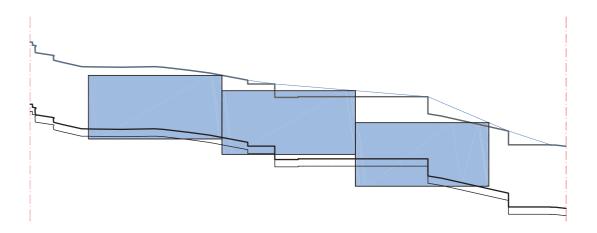


PLANNING ENVELOPE

/ The planning envelope limited by 8.5m building height equates to approx. 1090sqm per floor or at 85% FSR 1:55 / The design based on such a built form results in predominant dwelling orientation to side boundaries and built form that is long and difficult to articulate - a wall of building

The resultant communal outdoor area is also constrained to areas alongside boundaries with limited amenity

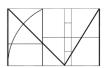




RATIONALISE STEPPED VOLUMES

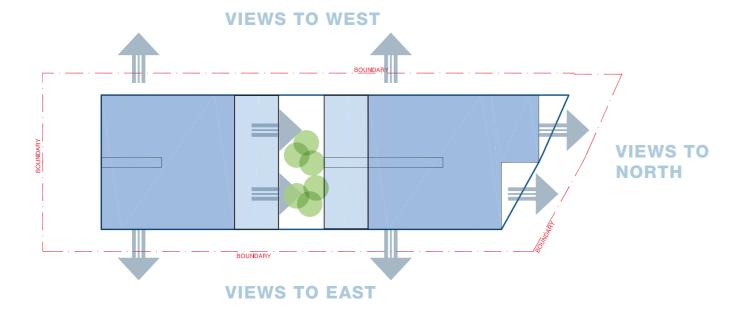
/ The steep nature of the site requires a rationalisation of the volumes to create efficiency and ability of dwellings to have appropriate stair and lift access as well as being able to be served by efficient number of building cores.

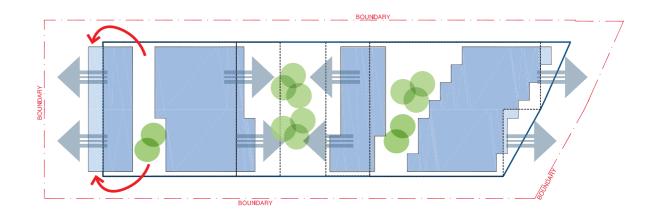
/ The efficient splitting of the planning volume results in 3 steps that equates to effective 6 levels of incline in relation to the entry street level.

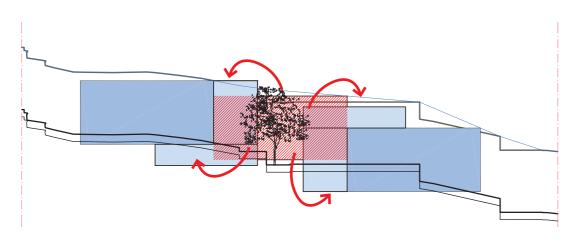




FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW



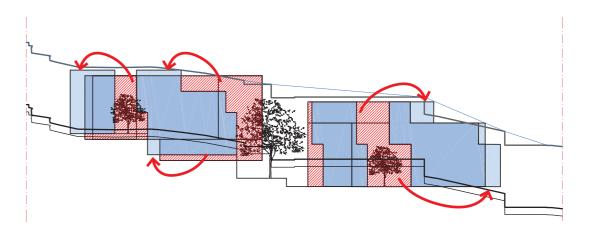




CREATE CENTRAL COURTYARD

/ The area of a central volume has been distributed to create a central communal landscaped space and simplify the building composition into two distinct elements

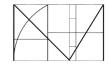
/ The issue of view overlooking and privacy towards neighbouring sites is somewhat mitigated as the north facing units of the rear volume can now face into a central courtyard



RATIONALISED STEPPING AND MAXIMISE SEPARATION AND AMENITY

/ The two volumes are further separated by rationalising stepping and shifting the rear module 2m towards the boundary / By pulling apart the volumes an interstitial space is created that allows for additional communal space within the blocks themselves and creation of 'internal' circulation atriums maximising opportunities for community engagement

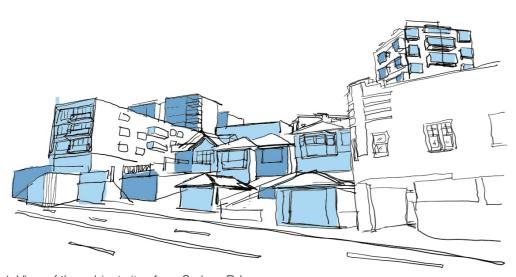
/ By 'sinking' the central courtyard privacy is enhanced and the impact of this space on the neighbouring properties minimised





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5.1 MASSING CONCEPT



 View of the subject sites from Sydney Rd
 The massing accentuates volumes stepping down the subject site and creating a series of flat volumes drawing a link to a the site history.
 Similar to a quarry, the building volumes have been carved into and from the



2. Pre-DA Massing showing volume stacking emphasising the context of the carved faces within the sloping topography. The building is integrated in the context breaking the appearance of mass and drawing a link to quarry typology, and the history of site.



3. Revised DA Massing shows further refinement to the building volume following the council comments.

The slot in the front volume makes buildings better relate to the context in particular unit blocks and residential dwellings to the east of the subject site. In addition the volume stacking has been brought to the front of the site with landscape elements creating a softer street interface and breaking up the scale.



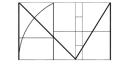
site..













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6.0 PRE-DA ADVICE

The design team met with Northern Beaches Council officers on 10th June 2018 in a formal pre-DA meeting where the overall design concepts were discussed and preliminary design was presented.

While the Council officers generally supported the design and the strategy a number of items were identified where amendments should be made prior to the lodgment of the development application.

These amendments were itemised in the Council Prelodgement advice in relation to the abovementioned meeting and in their letter dated 12th July 2018 and are as follows:

- 1. The basement level must have a minimum 2 metre setback to the side and rear boundaries.
- 2. The communal room/entry office must be setback a minimum 2 metres from the western side boundary.
- 3. A minimum 2 metres landscape buffer must be provided around the perimeter of the site. The seating and tables provided along the side boundaries must be deleted and replaced with soft landscaping.
- 4. The building mass is to be further reduced by way of additional physical separation North/south through the site. This would create 8 'pavilions' through the site effectively reducing The visual bulk and scale of the development when viewed from adjoining properties and the street.
- 5. Communal open space areas and private open space areas are to be sited and designed to ensure there are no unreasonable visual or acoustic impacts on adjoining properties.
- 6. The proposal does not comply with the minimum rear boundary setback of 8 metres. As discussed at the meeting the reduced setback may be supported subject to a visual/privacy analysis that demonstrates there will be no unreasonable visual impact from the adjoining property (i.E. The roof level of the proposed building is lower than the floor/ground level of the adjoining property).

Following the pre-DA meeting and in response to Council letter, the design team has considered the feedback and amended the scheme in response to the issues raised.

The following report will outline the amendments in detail, however in response to the points raised in the Council letter, the design has been amended as follows:

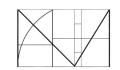
- Basement Level layout has been amended to assure a minimum 2m setback to all boundaries and in particular western side boundary:
- The communal/entry office has been setback 2m from the western side boundary, allowing for landscaping elements to step down towards the street as per UD comments.
- A continuous landscape buffer (mainly 2m, with some areas where circulation requirements (DDA) necessitated wider paths somewhat reduced) has been created around the perimeter of the site with seating and tables replaced with landscaping elements.
- 4. When viewed from street the building massing has been broken into two distinct elements reducing the visual bulk and scale. A detailed analysis of the views has shown that further separation would not create any substantial impact to how the development is perceived from the street.
- 5. All communal open spaces have been sited to assure no adverse impacts to adjoining properties. To that effect the central communal area has been 'sunk' almost a full storey below the adjacent property with a series of landscape elements screening the public zones. This also serves a purpose of providing an wheelchair accessible path to and from the lift core with minimal level change.
- 6. The 6m rear setback has been in principle endorsed, with the request for additional drawings, provided in this report that demonstrate that the entire block B has been sited below the courtyard level of the neighbouring developments to South and with substantial separation to both properties. In addition the louvred screens have been proposed to all south facing units to assure visual privacy when viewed from the public spaces below or from the neighbouring open spaces above. As the roof areas of the subject site are quite visible from the neighbouring taller buildings and to improve the visual amenity caused by the sloping site, most roof elements have been proposed to be landscaped.



PERSPECTIVE SHOWING PRE-DA MASSING



PERSPECTIVE SHOWING CURRENT AMENDED MASSING



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6.1 BASEMENT SETBACK

The basement level must have a minimum 2 metre setback to the side and rear boundaries.

Following the pre-DA meeting and in response to Council letter, the design team has substantially re-designed the carpark levels to minimise excavation and to provide a clear 2m (minimum) perimeter zone around the carpark.

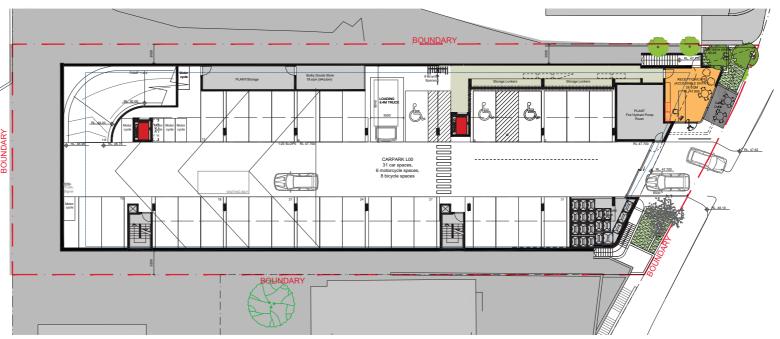
While the carpark structure has been shown to feature a retaining wall alongside the perimeter, following preliminary geotechnical investigation, it would seem that the majority of the site is comprised of a good quality sandstone rock. This would enable for the rock face to be effectively exposed in the carpark level(s) with rock anchors and perimeter drainage, therefore negating the need for any perimeter retaining walls.

This design would further increase the setback zone (by approx. 400mm), however this particular detail will be required to be validated, once further geotechnical investigations are conducted, post demolition of the existing buildings.

In order to assure compliance with the council requirement for a minimum setback zone, the design team has agreed to show a more conventional retaining system to assure compliance regardless of ground conditions.

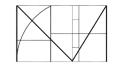


BASEMENT PLAN (LEVEL 00) SHOWING PRE-DA LAYOUT (note area of non compliance shown red)



BASEMENT PLAN (LEVEL 00) SHOWING CURRENT AMENDED LAYOUT (note min. 2m dimension shown to west boundary_





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6.2 CONCIERGE STREET LANDSCAPING

The communal room/entry office must be setback a minimum 2 metres from the western side boundary. rollowing the council required accumentation has been to the western boundary.

The communal room /office/concierge that is sited at the front of the site has a zero lot alignment on the north and western boundary corner.

It is recommended this element aligns with the required setbacks so as to provide some relief on this corner, noting the adjacent property has a zero lot alignment on this corner as well. adequate separation between the two properties is required to provide a form of relief between the properties.

documentation has been amended to reflect the required 2m setback to the western boundary.

Following the council request, the development application

In addition following some of the informal comments (during the abovementioned meeting with the council officers) and in particular regarding to the use of this space of as a communal room, the team has considered the layout and refined the design to better relate the space to it's immediate context.

As such, the entry pavilion has been re-purposed to act as a true front door, a concierge desk, for the entire development with an informal cafe space activating the street and creating an active ground floor use along Sydney road.

The re-designed entry pavilion will serve as a true front entry, a secure single point access into the entire development with wheelchair accessible connection to both lift core, therefore assuring virtually 100% accessibility to the site despite its steep nature and complex topography.

The nature of the sloping site presents opportunities and constraints. The general principles of the design concept stepping built form down the site is supported. Of note is the treatment of the front boundary retaining wall which would benefit from taking cues from the building concept of modulation and applying this principle to the front face and landscaped setback area by stepping up the site and recessing landscape elements to create a vertical multi layered and levelled landscape concept in keeping with the built form massing. This will assist to break down the blankness of the large wall facing the street and provide a less overwhelming presence to the development from the pedestrian and street level.

In terms of landscaping treatment of the newly created buffer zone in between the entry pavilion and the neighbouring site to west, (no.199), the design team entirely embraced the recommendations of the council officers and designed the landscape as a soft extension of the stepping forms and landscape modules keeping with the built form massing.

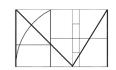
The resultant design creates a layered soft landscape buffer that seamlessly integrates the development into the existing street context while substantially ameliorating the existing streetscape along the subject sites frontage.



PERSPECTIVE VIEW SHOWING THE ENTRY PAVILION AND MODULATION OF LANDSCAPE ELEMENTS



PART ELEVATION SHOWING THE 2M LANDSCAPE BUFFER TO WEST



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6.3 LANDSCAPE BUFFER

A minimum 2 metres landscape buffer must be provided around the perimeter of the site.

The seating and tables provided along the side boundaries must be deleted and replaced with soft landscaping.

Western Boundary landscaping and pedestrian pathway is to be reconfigured to provide a minimum 2 metre green buffer to provide privacy and acoustic buffer to the adjoining property. The articulation of seating zones and little pocket parks on this boundary is unsupported due to the privacy, overlooking and acoustic issues.

The strategy of providing more green landscaping on the north south axis of the site will provide opportunity to reinstate these seating and pocket park ideas.

The revised design has taken into consideration the council request and created a continuous landscape perimeter zone to assure privacy. In addition the group seating and gathering areas have been deleted from the perimeter and the corresponding landscape design has been amended so that all communal open areas are positioned away from neighbouring properties and in the central locations of the site.

However the council requested a minimum 2m landscape zone which with 3m side setback would effectively result in a single 1m linear path and unarticulated landscape zone. While the intent of the council request has been fully incorporated the practical nature of the design and subject site, results in areas of departure (from council 2m landscape - 1m path) from the numerical buffer zone due to following:

 The accessible wheelchair turning paths, by-passing zones and latch size clearance at doorways necessitates increase of circulation zone and reduction of landscape zone in certain areas (ex. 8, 9, 6 etc.);

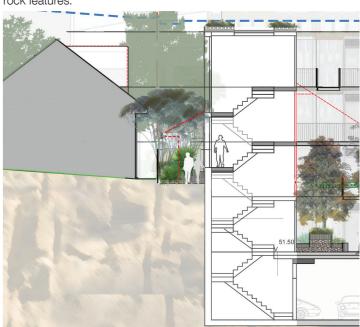
- 2. When two paths are required to intersect or join while responding to the existing natural levels (ex. 9, 11);
- The requirement for unobstructed zone outside of fire exits requiring for fire doors to open outwards not blocking the adjacent egress paths *(ex. 11 and zone between 5-9);
- Privacy concerns in relation to windows facing the paths necessitating for landscaping in close proximity to pop-out windows in order to screen for privacy (ex. 15, 5, 4, 6 etc);
- Retention of natural landscape features (rock face, exposed rock) in particular in area 10 which is adjacent to the neighbouring ground level car parking (therefore not requiring perimeter screening).

As it can be seen from the above and corresponding design the landscaping creates an excellent perimeter screening zone with regard to privacy to neighbouring properties. A particular regard has been taken in relation to two East and West neighbouring properties while noting the great level difference in particularly to no.199 Sydney Rd, dwelling which greatly helps to minimise any and provides an additional level of screening working in conjunction with landscape perimeter screens.



A section through Block A entry that requires reduced landscape perimeter width (due to required clearances at entry) while still assuring excellent privacy to neighbouring property due to still sufficient perimeter planter zone and significant level change provided by natural rock features.





A section through Block A fire exit that requires reduced landscape perimeter width (due to required clearances at entry) while still assuring excellent privacy to neighbouring property due to still sufficient perimeter planter zone greatly improving upon the existing setbacks)



FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW

6.4 BUILDING BUILK AND SCALE

The building mass is to be further reduced by way of additional physical separation North/south through the site.

This would create 8 'pavilions' through the site effectively reducing The visual bulk and scale of the development when viewed from adjoining properties and the street..

The design team has agreed with the intent to reduce the appearance of building bulk and scale to Sydney road which resulted in a revised design featuring a split design of the Block A element effectively separating the front pavilions.

However following the detailed analysis (the summary of which is provided here) it has been determined that continuing the physical separation (8 pavilions) through the entire site would not result in any benefit in terms of the perception of the development in context due to extremely limited ability (virtually imperceptible) to appreciate such a gesture from Sydney Road.



1. View of proposed development from Sydney road showing that the rear Block is largely obscured by the neighbouring properties and the front building making any gesture to split it along its North-South axis not possible to perceive from this vantage point.



2. View of a tested scheme showing a continuous cut (8 pavilions) which results in only a 1.5m wide zone across Sydney Road from where some extremely limited glimpses of the split upper level of the front Block are visible with the rear Building block being virtually imperceptible.



3. View showing volume stacking and existing massing of volumes at Sydney Road frontage. Note the wide volumes of neighbouring sites to East and steep slope of the site making any North-South axial link perceived as a series of stepped planes.



4. View showing the building massing as presented in Pre-DA which has raised a number of recommendation from council officers including in relation to the perception of bulk and scale.when viewed from Sydney Road.



3. View showing the amended scheme that clearly breaks the front volumes into two distinct elements. Note due to angled views there is only a limited vantage point where this is seen as a distinct break as the oblique views overlap volumes.



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RECOMMENDATION:

Further green landscaped courtyards/fingers that run north/south through the site are recommended in order to break down the massing on site.

Currently the site planning and unit distribution runs east west with no relief or separation between the banks of four and banks of seven units. It is recommended the maximum number of units sharing party walls is a bank of three units maximum (from the seven unit banks).

For the bank of four larger units that sit centrally in the site it is recommended these also provide some landscaping elements; pathways or seating /pocket parks between them with the max number of semi-detached dwellings being two larger units to a bank.

This would assist to reduce the bulk of the building mass viewed from the street or adjacent properties.

The significant height and slope of the site serves only to amplify the height of development on the site, so planning strategies to break down the visual bulk of the development are generally supported.



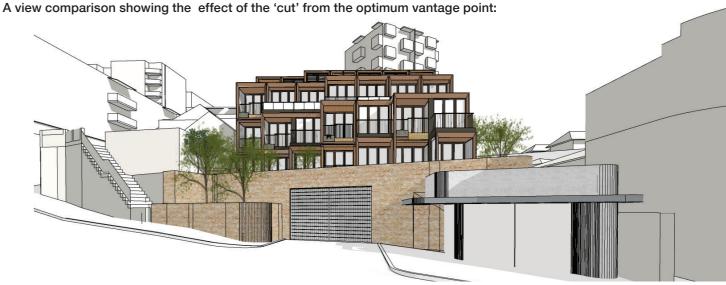
As it can be seen from the study (images below and to right) the articulation of the entire development into 8 pavilions will not result in any perceivable benefit in further breaking the massing that what has been proposed.

In addition it is worth noting that 'enclosing' of the central communal area by the continuous volumes will have a considerable benefit in terms of limiting the impact of this space to the neighbouring development as well as to the more quiet and private circulation spaces within each block while also sheltering the sunken courtyard from wind (particularly south) and limiting any potential wind tunnel effect that could be created by a long narrow volume.

As it can be seen from the study the actual effect of the slope of the site, significantly improves the perception of bulk with the rear Block almost completely obscured by the front volume and neighbouring properties.



Views showing the tested (8-pavilion) scheme where the through Block A cut is only visible from a narrow 1.5m frontage from the footpath on south side of Sydney road. It can be seen how stepping volumes (caused by 4 storey slope of the site) and bulk of neighbouring buildings make any cuts to Block B as well as to the rear of Block A virtually imperceptible.



1. Previous scheme as presented in Pre-DA (without the 'cut')



2. A tested scheme (with 8-pavilion cut) showing that Block B is not possible to be seen and that only the very upper level of the rear of Block A is possible to be seen from this vantage point.



3. The proposed development that maximises the effect of the articulated form (the 'cut') by limiting it to the front volume and infilling areas that are cluttered by the sloped site with a new communal glass room featuring a green element, that will act as a visual marker and defining element separating the two volumes and emphasising the volume articulation.



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6.5 COMMUNAL OPEN SPACES

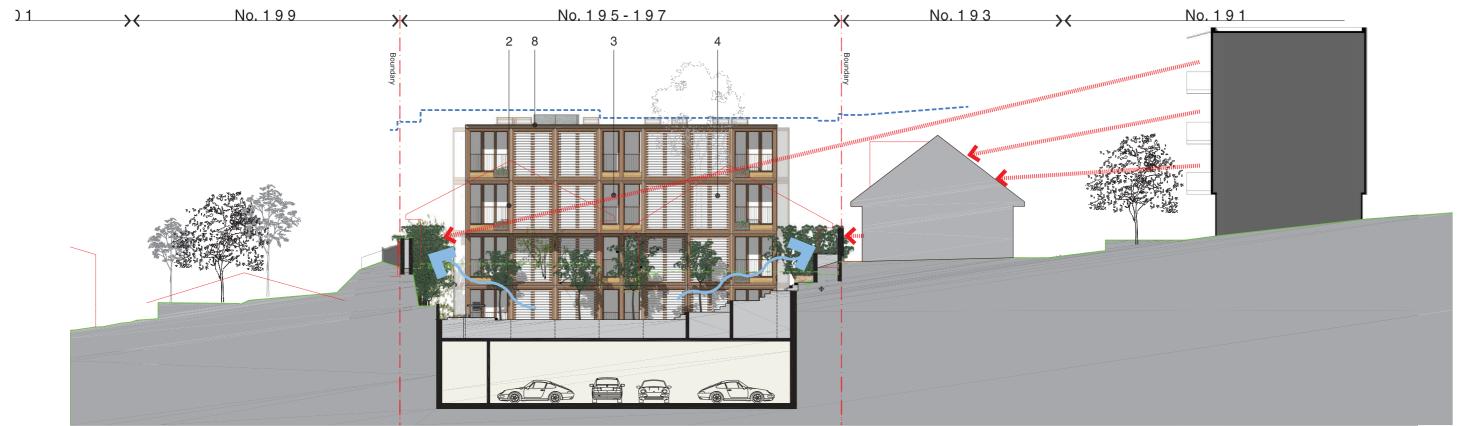
Communal open space areas and private open space areas are to be sited and designed to ensure there are no unreasonable visual or acoustic impacts on adjoining properties. All the communal spaces within the development have been strategically located to assure equitable access for residents, to maximise amenity and provide a variety of spaces with a strong regard to minimisation of any potential negative impacts to neighbouring properties.

The central communal open space is situated between the two building blocks sheltered by the southern building volume and protected from southerly breeze. On its southern perimeter it is bounded by a long communal room that enjoys northern orientation maximising the access to sunlight. This open space utilises

the natural contours and the slope of the site and further improves its relationship to neighbouring properties by lowering the open space almost a full storey below the existing level to assure minimal noise impact to neighbouring dwellings. In addition both east and west perimeter of this space has been heavily land-scaped creating soft visually pleasing privacy and noise buffers further improving the amenity.

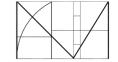
As neighbouring property to west of the subject site (No.199 Sydney Road) is heavily sunk into landscape, by virtue of a four storey cut into the sandstone rock, the main circulation zone on

the site has been placed along this boundary. To assure no visual overlooking and eliminate any adverse impacts to the neighbouring residential flat building, an expansive landscape buffer has been proposed alongside this boundary which together with careful modulation of the excavation into sandstone ground assure no adverse impacts to adjacent properties.



COURTYARD ELEVATION SOUTH

Showing privacy screens (landscape and perimeter fencing) blocking overlooking into this space (red arrows) with the blue arrows showing that noise emission from this space is mitigated through excavation and perimeter soft landscape screening.



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6.6 REAR SETBACK

The proposal does not comply with the minimum rear boundary setback of 8 metres. As discussed at the meeting the reduced setback may be supported subject to a visual/privacy analysis that demonstrates there will be no unreasonable visual impact from the adjoining property (i.E. The roof level of the proposed building is lower than the floor/ground level of the adjoining property).

As per previous discussion the council has endorsed in principle a reduction of the setback provided additional information is provided in relation to the existing levels and proposed development.

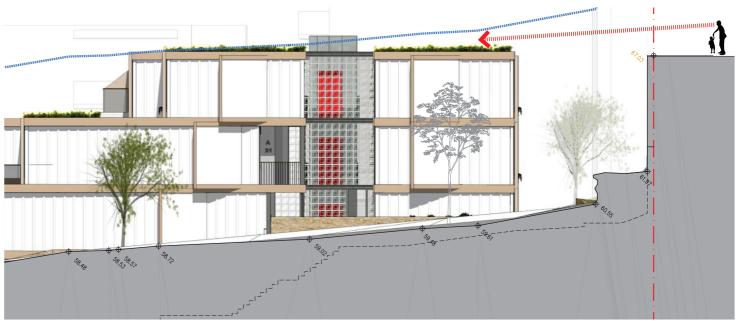
As it can be seen from the adjacent drawings and enclosed architectural documentation the proposed development is completely sunken below the neighbouring developments (so South) ground level with the roof of the proposed Block B being slightly below the communal open space of the neighbouring tower (No.10 Hilltop Crescent)

In addition all south facing windows have been heavily screened to assure visual privacy to the residents both from neighbouring properties and from the adjacent landscape zones within the subject property. The series of horizontal louvred screens assure that no views upwards or downwards are possible therefore screening the units without restricting light penetration.

Due to the neighbouring developments, in particular to South and East of the subject site are substantially taller than the proposed buildings, the roofs of both blocks are substantially visible acting almost as a fifth facade. In addition, due to stepping forms, the roofs are also visible within the development as the unit modules step in line with the site contours.

In order to address this issue the roof surfaces have also been heavily landscaped through a series of green roofs.

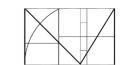
This has substantial visual and environmental benefits, making the development appear as a landscaped articulated park, when viewed from above, while also assuring efficient insulation and water efficiency significantly improving already excellent ESD credentials of the proposed scheme.



EAST ELEVATION SHOWING RELATIONSHIP OF THE PROPOSED DEVELOPMENT ROOF TO NEIGHBOURING PROPERTIES



SKETCH VIEW OF THE PROPOSED DEVELOPMENT FROM NO.10 HILLTOP CRESCENT COMMUNAL OPEN SPACE





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7.0 DESIGN PROPOSAL

The proposed development has been carefully considered to respond to the client brief for a high quality built to rent new generation boarding house development while responding to the site's natural and urban context. In addition, following the pre-DA meeting with the council officers, the project team has entirely embraced the recommendations and responded with a modified design that further improves its relationship to context while improving the amenity both to its future residents as well as to the neighbouring properties.

The design proposal utilises the modular architectural language to place the unit modules in a as a series of staggered forms responding directly to the natural topography of the site and character of urban context. These volumes, sitting on a sandstone base, created from the rock to be harvested from the site, draw a link to the history of the adjacent quarry while presenting a high quality architectural expression that is both modern and sympathetic to its context.

The materials chosen are all of high quality with a play of glass, metal, timber and sandstone all used strategically to enrich forms and create a scaled and humanised architectural form that is both pleasant and reflective of high quality development that MicroNest seeks to create.

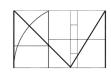
This is further enhanced by the highly detailed interior spaces, similar to a four star hotel, that are carefully crafted fully furnished units, which in spite of their size, through bespoke joinery and furniture pieces, maximise space utilisation to create pleasant and healthy spaces. In addition all units have been designed to have excellent light and amenity, are naturally cross ventilated and will all have access to private open space.

The spaces around the development have been heavily land-scaped, with landscaping being a major part of how the development is perceived within the context. This will significantly improve the streetscape along Sydney Road while also creating a pleasant outlook from the tall neighbouring buildings by virtue of a green roof and carefully designed architectural expression that is delicatelly integrated into the site contours.



PERSPECTIVE - VIEW FROM SYDNEY ROAD





FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW

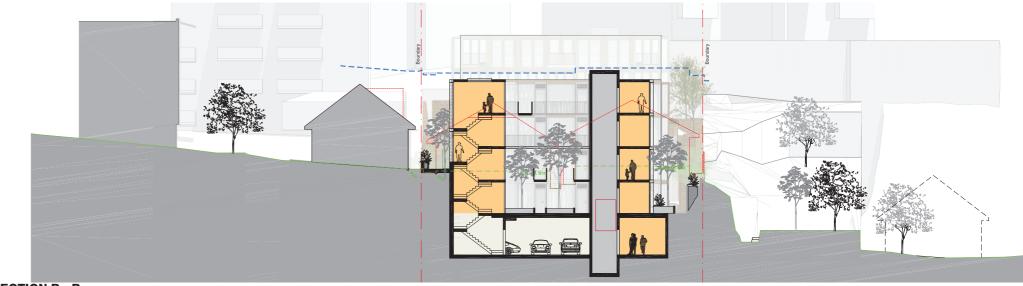
7.1 TYPICAL SECTIONS

The design concept described in chapter 5.0 clearly shows that the significant part of how the development is integrated in the site is dependant on creating the cuts in the landscape to create building separation and creation of internal spaces that internalises the outlook and addresses any issues of overlooking.

This conscious decision allows that no units have orientation towards the side boundaries, however the resultant design relies on an excavated basement to create a new datum from which building elements have been situated.

Another benefit is that by creating a car parking level accessible on grade from Sydney Road, a simple wheelchair route is created accessing both building cores that allow access to the entire site via the lifts. This creatively resolves a complex access problem created by the extremely steep site (sloping almost four storeys top to bottom) while also internalising the vehicular circulation and creating an appearance of a much smaller development within the context.

The tiered development is connected to corresponding levels alongside the East boundary which retains the existing contours and maintaining the existing slope alongside the primary fire egress path. On the other hand, to the west of the subject site is a significant cut into the landscape, part of the old Manly quarry, which created a significant level change as the subject site slopes upwards. As such this location has been chosen for the primary pedestrian access route which by being partly excavated into the landscape assure that there is a continuous landscape (soft and hard) screen providing privacy to adjacent residential unit block.

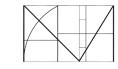


SECTION B - B









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7.2 GROUND LEVEL PLAN

The lowest level of the subject development features the main car parking level as well as the main building entry.

Utilising the natural slope of the site, the carparking is effectively level with the existing street rl's. In addition the main car parking entry is located in the same location where the existing garage entry to No.195 was situated this minimising the kerb intervention and optimising the vehicular entry in relation to the street conditions.

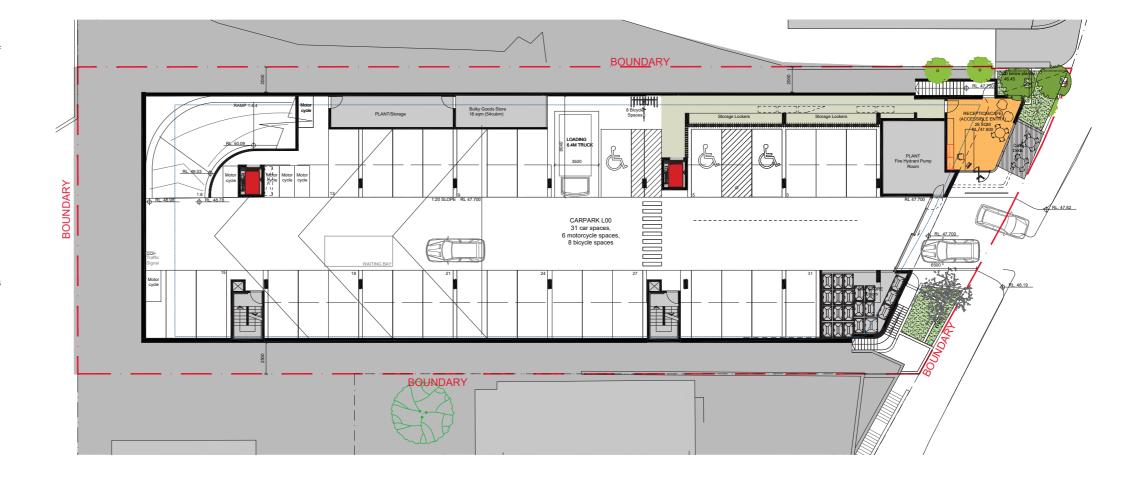
The carpark gently slopes (1:20) upwards towards the southern boundary of the site in order to minimise excavation. The preliminary geotechnical report has determined that the site is likely comprised of good quality sandstone rock and it is envisaged that it may be likely that the sandstone rock face could be possibly exposed and simply retained by rock anchors (although a retaining wall has been shown on drawings to assure minimum deep soil distances), which would create additional richness to the car parking spaces and further reflect the natural features of the site in the material language of the interior architecture.

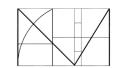
The main car parking level includes truck loading facilities, garbage storage areas and miscellaneous bulk storage, resident storage and plant room zones. Following council comments, the minimum head clearance has been increased to 3.5m allowing for access to loading dock for garbage and removalists trucks.

On the north western corner of the site (lowest point) a small gateway structure has been located featuring the main building reception with a concierge desk and a small cafe. This space has been envisaged as a main secure entry point to the entire development which assures a single point access control thus securing the entire site.

The building reception is also the main accessible entry point enabling a wheelchair access to the entire site via two lifts in each block. This strategy was an effective access solution that resolves equitable access on quite a steep site, facilitating circulation throughout the site for people with disabilities as well as for elderly residents

Following pre-DA meeting with the Council officers and in response to their comments, the design was refined to allow for landscape elements to gradually step down to the street level alongside both east and west boundary and 'wrapping' along the carpark structure softening the appearance of the development alongside the street boundary. In addition, a 2m setback for the reception pavilion was created from the neighbouring building on the western boundary, allowing for a landscape buffer which assures privacy and creates a soft edge to the adjacent development.





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7.3 LEVEL 01 PLAN

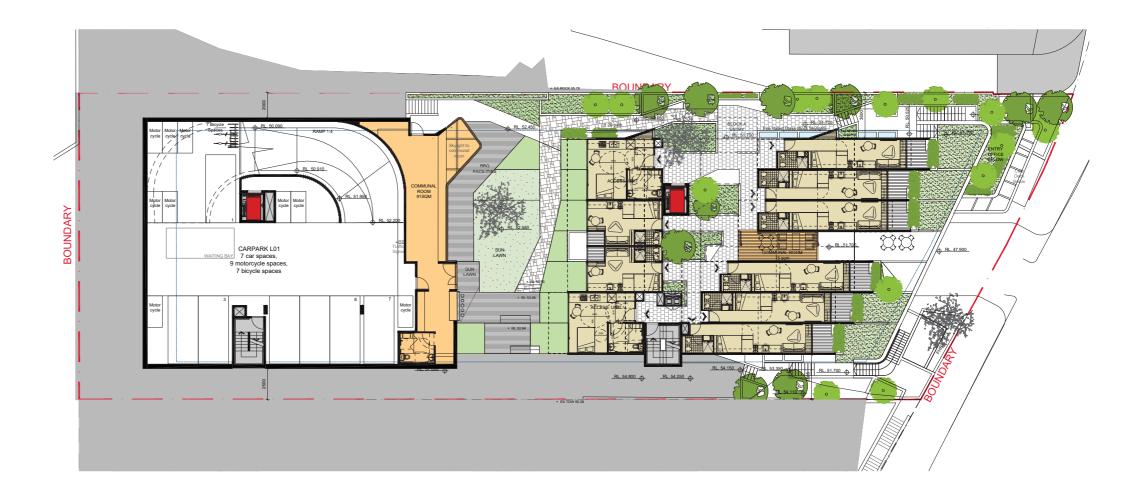
The lowest accommodation level of the development has been situated above the sandstone clad podium housing the main parking level. The podium structure creates an effective screen to the ground floor apartments from the traffic along Sydney Road, whilst also allowing for a north facing public open space that can be accessed both from the reception/cafe area as well as the communal circulation open space within the Block A.

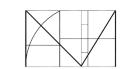
Alongside the western boundary the main access route has been situated making use of the existing site features, a north-west orientation and natural contours which rapidly rise in relation to neighbouring development at 199 Sydney Road that is sunken in a deep cutting extending from the Sydney Road levels, assuring privacy and addressing any overlooking issues between the two developments.

While the No.199 development is heavily cut into the landscape with the proposed development's western pathway raising quickly above, through use of a tall landscape buffer alongside the boundary and by carving into the natural sandstone, excellent privacy and no overlooking is maintained both to and from the property.

Level 01 creates a 'flat' access platform to the Block A central communal circulation space, to Block A northern communal sundeck, to the central communal open space located in the middle of the site, to the main communal room located below Block B and to the level 01 parking.

By creating this common datum, a wheelchair access is created to all the main communal spaces and facilities, while simultaneously resolving privacy and building separation both within the site and towards neighbouring properties.





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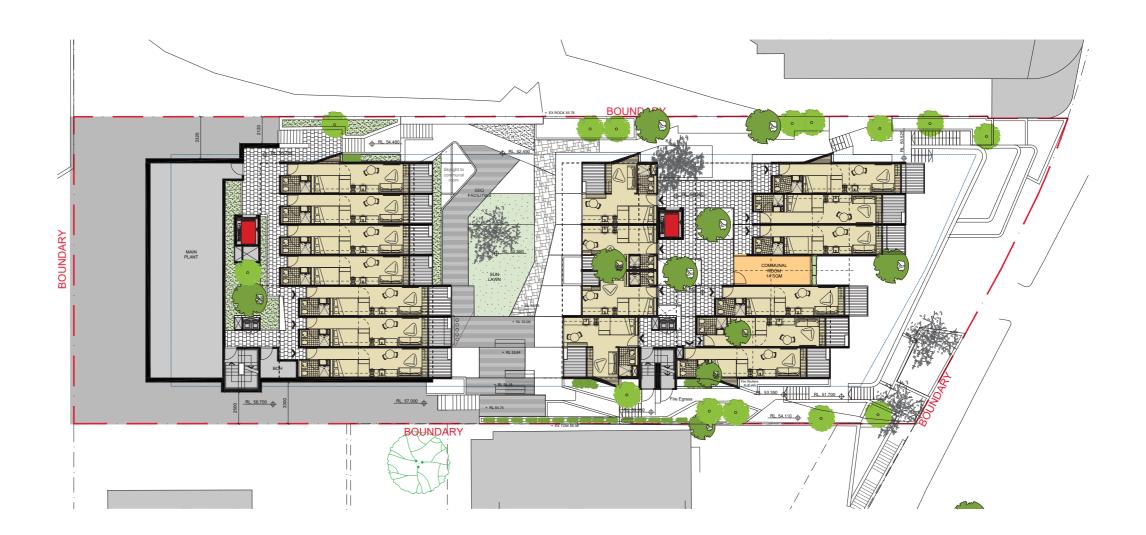
7.4 LEVEL D2 PLAN

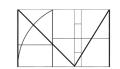
The Level 02 houses the second accommodation level of Block A accessible from a communal open circulation zone. This communal space has been designed as a series of bridges wrapped around the trees planted within the central zone with access to natural light and air. A north facing communal room is located in the slot between the northern building volume of Block A, which creates modulation sympathetic to the neighbouring context.

To the south, facing the central communal open space, the first level of accommodation of Block B has been located. To the rear of the landscaped circulation zone, dug into the sandstone rock, the main plantroom has been located that completely internalises the plant equipment and controls noise emission within the development and towards neighbouring properties.

To the east of the central open communal space a series of timber landscape platforms have been created modulating the level change from the natural levels along eastern boundary and towards the central landscape lawn. These tiered platforms will have excellent access to daylight and nice outlook created by the low developments to west.

At other times these platforms will act as a sort of an amphitheatre facing the lawn that can act as a stage or that can house a temporary screen allowing for film or presentation screening. Privacy towards neighbouring development (No.193 Sydney Road) is maintained as a result of level change, existing boundary fence and heavily landscaped perimeter walls, all making sure that no noise nor light pollution will impact the adjacent properties.





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7.5 LEVEL D3 PLAN

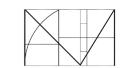
The Level 03 houses the third accommodation level of Block A accessible from a communal open circulation zone. To north above the communal room on Level 02, an open communal space (outdoor room) is located making use of excellent outlook and amenity that this space offers.

The Level 03 of Block B features a first full accomodation level with the main circulation zone accessible on grade from both east and west pathways. This is also the level where the main fire stair of the Block B will discharge into the egress path along the eastern boundary.

To the south, located in between the existing sandstone wall along the south boundary, the 6m tall carpark wall of the neighbouring residential tower at No.10 Hilltop Crescent and the south facing units of Block B, is another shaded landscaped space. This space has been designed to predominantly create an outlook to these apartments and to create a degree of amenity to this recessed space.

By utilising the natural contours and rock features, the landscape seamlessly integrates into the site creating a tranquill space that will create a wonderfull quiet space that will act as a buffer to the developments to south.





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7.6 LEVEL 04 PLAN

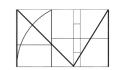
The Level 04 features the first major modulation step to the Block A northern volume with a large expanse of the green roof. This landscape element provides a pleasant outlook to the adjoining units while also forming an important part of the overall facade strategy in particular considering the appearance of the proposed development when viewed from the taller neighbouring properties to South and Fast

The last level of the Block A circulation zone is completely open to sky emphasising the major design intent with view to externalise all communal spaces and integrate them in the landscape. The treetops that dominate the interstitial zone next to the gantries further emphasise that link to the natural environment and landscape.

The third accommodation level of Block B is also arranged around the central external circulation zone. To north there are 7 elongated units with excellent outlook and north facing private open spaces.

To south there are 4 two storey units that in spite of their southern orientation will have access to northern daylight through large skylights located on the roof.





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7.7 LEVEL 05 PLAN

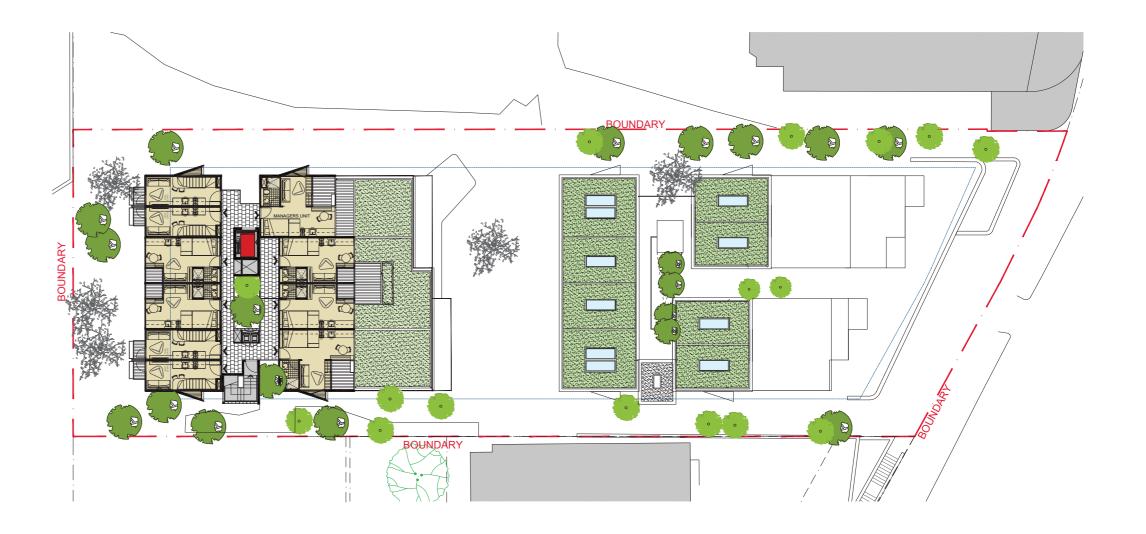
The Level 05 features the roof of the Block A. This space has been carefully considered, unlike many conventional roof zones, as it is heavily overlooked both from the Block B units, but more importantly by the tall neighbouring developments to South and East. As such the entire roof has been designed as a green roof, providing soft low landscaping while also having major benefits in terms of insulation to units below and with regard to stormwater management and rainwater filtration.

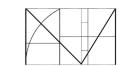
The Block A roofs also feature large skylight windows, allowing for excellent daylight access even to South facing units.

Block B features the top most level of accommodation arranged around the central open circulation gantryway. The circulation is arranged around the two treetops growing from the central landscaped zone and around the main lift core providing wheelchair access to and from the entire development.

Overlooking the stepped form to north, featuring the large green roof element, are four larger type units including the managers residence that also has access to the oversized private open space.

The units facing south feature four upper levels of the two storey units, featuring kitchen, dining and living areas as well as two smaller 1.5 module wide units. All the south facing apartments have access to excellent direct sunlight through large skylights integrated into the green roofs above.





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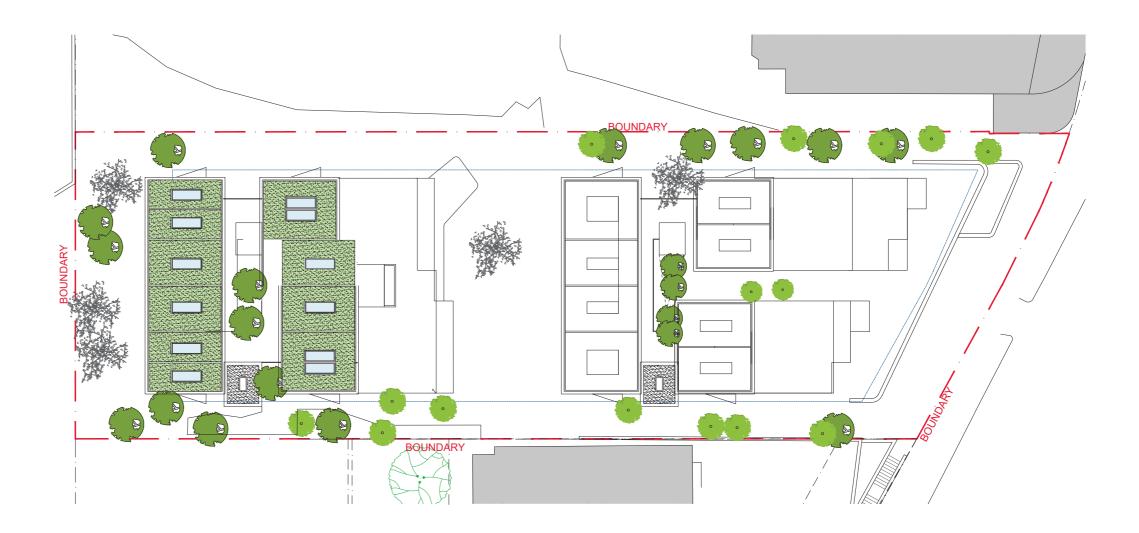
7.8 ROOF PLAN

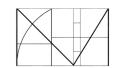
The roof of the proposed development has been considered as another facade. This is mainly caused by the fact the subject site is heavily overlooked by the neighbouring residential properties and due to the sloping nature of site. Stepping four stories top to bottom, large areas of the roofs are visible from the adjacent residential units, as such, the entire roof has been designed to create a pleasant outlook, featuring green roofs and extensive landscape zones.

While the landscaping part of this report addresses these zones in more detail, it is worth noting that other than providing a beautiful outlook, akin to viewing a sculpted park from above, there are substantial ecological benefits that green roofs bring both in terms of thermal properties and heat retention and insulation, as well as being beneficial in stormwater management and filtration.

The plant selection took into consideration water efficiency and minimal maintenance requirements, selecting native plants that are robust and that will have a positive impact on the environmental footprint of the proposed development.

The roof areas also feature large skylights that will allow for excellent access to natural daylight, reducing the need for lighting, and that will allow for direct sun access even in winter months including the south facing top level apartments.





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7.9 FACADE CONCEPT

The facade concept is derived from the overall building form and modulation, drawing a strong link from its natural and built context. While the overall materiality has a strong reference to Australian architecture with use of corrugated metal and timber, the application of these materials has been carefully considered to maximise the effect and be both economical and reflective of the sense of place and scale.

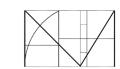
As such the corrugated metal sheets have been predominantly used on east and west elevations, maximising the effect with oblique sunlight angles hitting the surface of the material and creating a strong shadow effect that will further enhance the tree dimensionality of the site. The metal trim elements, of contrasting colour, serve to create a sense of scale and proportion, emphasising the rhythm of the stacked modules.

The pop up side windows also face north, making sure that no adverse overlooking is possible towards neighbouring developments. These elements also enhance the shadow play along these elevations contributing to the three dimensional expression of otherwise flat facades.

The north and south elevation feature large full height glass sliding doors to well proportioned balcony zones. By recessing these glass elements and stepping the volumes the buildings are emphasising the natural contours of the site effectively breaking the bulk. Additionally a large vertical cut, separates the two north facing volumes drawing the link to the proportional arrangement of the neighbouring residential flat buildings and contextualising the proposal with its surrounding.

The vertical metal balustrades with timber handrails, together with the timber trim to the module frames and plywood soffits, make the entire development appear as a soft and humanised place that comfortably sits in its heavily landscaped context. The sandstone cladding to the car park volume and stepped planters, further emphasise the base that draws a clear link to the existing site materiality and history of the place.





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7.10 ELEVATIONS EAST-WEST



The East elevation is quite simple both in its materiality and presentation. While, typically, windows are used to break the bulk of facade volumes, the proposal has consciously oriented all the glazing towards north and south, therefore away from the side boundaries of the site.

In order to emphasise the three-dimensionality and to add interest to the facades, a play of shadow and light is created through corrugated metal panels that are further emphasised by the pop out triangular windows. By utilising the oblique sun angles, this effect is maximised creating a strong dynamic architectural expression that creates interest and breaks the sense of scale.

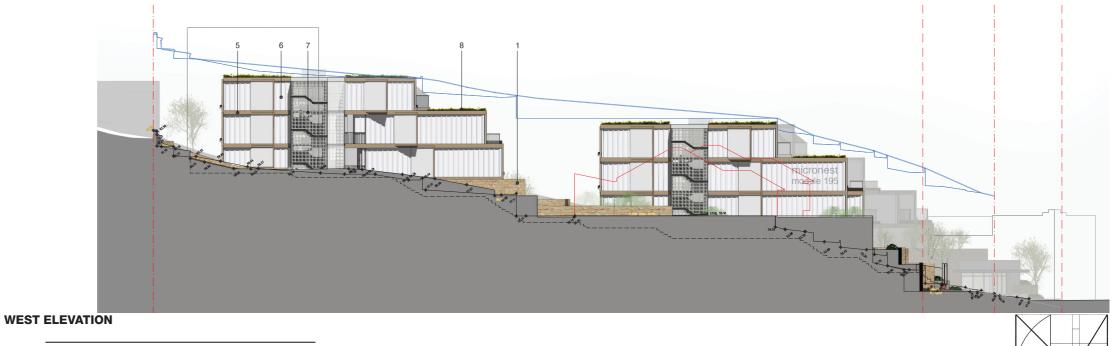
The contrasted horizontal metal strips, act as a trim to the modules further creating a sense of scale and emphasising the stepping of the modules responding to the natural ground contours.

The base of the development heavily utilises the natural sandstone that can be harvested from the site during the car park excavation. In addition to creating a strong sense of scale, the sandstone also firmly situates the proposal within the site, drawing a strong historical link to the Manly Quarry, that operated in the close proximity of the subject site. The in situ walls of the entry concierge pavilion, contrast the sandstone base, but also result in a soft expression that is carefully situated within the base elements.

The interstitial spaces between the unit modules house the main circulation voids as well as lifts and stairs. The screening of these zones is achieved through simple concrete block screens, that enhance the link to landscaping zones and create a simple curtain element filtering light and subtly exposing the circulation and trees planted in between the buildings. The strong colour accent to lift doors further emphasises the concrete screens, blurring the edge and creating a sense of interest beyond the concrete block curtain.

A rhythm of planters and perimeter landscaping are a considered architectural expression, creating another important layer to the facade expression of the side elevations.





MODULARIUM

FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW

7.11 ELEVATIONS NORTH-SOUTH

Quaried on-site sandstone Plywood Lining Clear glazing & dark, External venetian louves Bronze coloured metal hortzontal spandaries metal mortal metal hortzontal spandaries metal mortal metal mortal metal hortzontal spandaries metal metal hortzontal

The south and north elevations feature the main window openings located at the north and south face of the modules.

The south elevation of Block B, predominantly faces the existing sandstone rock face and neighbouring carpark podium, located at the rear of the site. The front of living rooms feature large full height operable windows and doors extending onto well proportioned private open spaces. The recessed nature of the windows assures privacy and limits any overlooking of the primary living spaces.

The secondary windows are located on the facade line and as such feature full height horizontal louvred screens that assure privacy from both neighbouring views from above as well as views from the communal open space at ground level.

The south modules also feature metal framed timber trims defining each individual module as well as plywood soffits to all terrace zones, softening the appearance of the building form and creating a pleasant immediate outlook to the residents.

The north elevation of the proposed development features a series of staggered volumes located above the sandstone clad podium housing the main car parking level.

The scale of the podium structure is broken through a series of landscape modules extending to the site frontage and softening the appearance of the development while extending the overall building modulation to the street front. The north west corner of the site features the main entry pavilion that is predominantly made of insitu concrete with glass metal framed shop front, creating an active frontage and a front address to the entire development. The natural look of off form concrete is contrasted by the metal pergola structure and the glass shop front extending onto the timber cafe deck.

The upper staggered volumes maintain the recessed nature of timber clad private open spaces with concrete planters and metal and glass handrails forming the overall building composition and breaking the overall impact of the building bulk.

In addition, the slot between the two main building volumes features an interstitial frameless glass facade to the communal room screened by a strong landscape green wall curtain, created by the wines growing from the landscape space above. This serves to further contrast the two built forms on each side and to reflect the natural landscaped environment onto the facade.

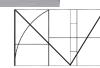


SOUTH ELEVATION



NORTH ELEVATION - SYDNEY ROAD





FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW

7.12 COURTYARD ELEVATIONS



The two courtyard elevations are comprised of the North Elevation of Block B and the South Elevation of Block A.

Similar to the design strategy of the other previously described North and South elevations, the two sides have been considered in terms of scale, orientation and privacy.

The north elevation of Block B, features an expansive operable glazing screen to the lowest level (accessing the ground) housing the central communal room. This facade has been designed to maximise solar access and to blur the edge between the inside and outside.

The upper levels of Block B, feature the same unit modules as Block A north component. All these modules feature private open spaces that are enclosed on three sides (eliminating any side views towards the neighbouring properties) and the open front that incorporates a metal fence and a small planter, elevating the landscaping onto the facade.

The soffit and the edge trim of each module features plywood sheeting, softening the material selection and further drawing a connection between the built and natural realm.

The south elevation of Block A is quite similar in expression as the south elevation of Block B. These modules also feature metal frame with the timber inset that softens the appearance and creates a high quality expression of a relatively simple facade.

All the windows on this facade feature extensive full height, floor to ceiling, horizontal louvres to minimise overlooking and provide privacy between Blocks. In addition when viewed from the communal space below, the areas that are not screened by the balconies (i.e. recessed glazing) are effectively screened by virtue of these horizontal louvred elements, assuring privacy to the interior of the dwelling when the central communal open space is utilised by the residents.

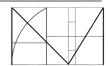


COURTYARD ELEVATION - BLOCK B NORTH

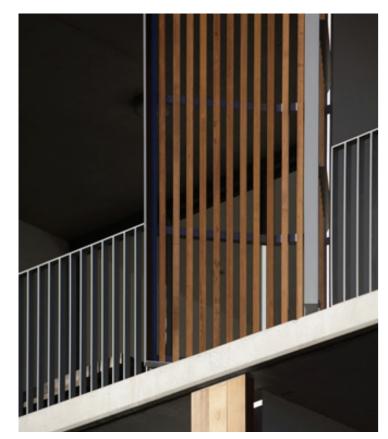


COURTYARD ELEVATION - BLOCK A SOUTH





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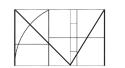








SELECT PRECIDENT IMAGES





FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW

8.0 COMMUNAL SPACES ENTRY PAVILLION & SUNROOMS

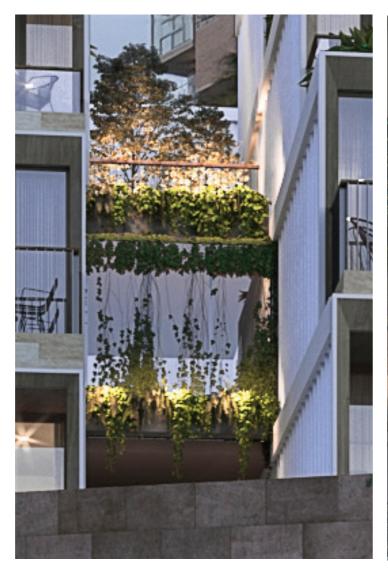
The MicroNest long term build to rent concept is heavily based on building a sense of community. The changing nature of work-living arrangements, the rapid nature of life particularly affecting young professionals, emergency services worker or students, is that less time is spent indoors and at home, meaning that when at home the spaces required are those that are efficient but also those that are supported by a range of communal and service facilities.

The result is a type of living that is shifting from getting home at 5PM to prepare dinner and watch TV, but rather a home being a transient space, that is more of a exclusive private zone, supported by a range of external services, such as catering, laundry facilities, communal zones for interaction, external communal space for socialisation, etc.

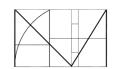
The proposed development has been designed to create a number of those communal spaces both internal and external, catering for a range of programmes.

The entry pavilion features the main security entry point, that is also the development concierge as well as a small cafe zone. This active frontage is actually a true front door to the development. It is a place to have a business meeting over a coffee, a place to pick up ones mail on a way home, a place to drop of dry-cleaning on a way to work or a place to meet and greet people as one enters or exits the precinct.

In the articulated cut of the Block A, accessible from Level 01 and Level 02 circulation zones, are two smaller communal spaces facing north (Sydney Road), with a similar external space located on Level 03. These more traditional communal living rooms cater for a small group gatherings, where people can meet their friends, gather and socialise. The location has been carefully chosen to facilitate access, maximise amenity both in terms of solar access and outlook, and also to minimise any adverse noise impacts to the neighbouring properties.







FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW

8.1 COMMUNAL SPACES CENTRAL COMMUNAL AREA

In the centre of the proposed development, sheltered by the Block A and Block B building volumes as well as by the side boundaries change of level caused by the sunken nature of this space, lies the main communal zone.

The central communal zone has been designed as both internal and external zone, blurring the edge of inside and outside. To the south of the central lawn area is a long communal internal room, facing North and featuring a long operable glass line that can be opened when weather permits.

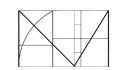
This space has been designed with a range of programmes in mind, the operable sliding screens will allow the communal room to be subdivided into a number of smaller spaces that can be each separatelly booked by the residents when required.

These spaces include smaller lounge zones, a bar area along the south eastern perimeter of the room, a larger sunroom facing north west, that will enjoy a direct sun access year round, as well as smaller storage areas that will house a number of leasable items (ironing boards, vacuum cleaners, BBQ's, etc.) for use by the residents.









FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW

8.2 COMMUNAL SPACES CIRCULATION ZONES

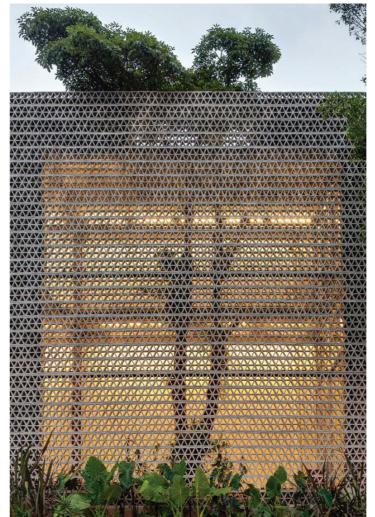
The circulation spaces of both blocks have been designed as landscaped communal zones that feature a series of elevated bridges leading to individual rooms. These spaces are open to sky, somewhat exposed to elements and only sheltered through porous screens, allowing them to be read as a part of landscape.

It is proposed that these spaces will feature a number of trees allowing them to create a sense of vertical connection that will enhance the sense that these spaces are connected into a single volume, continually offering glimpses of people inhabiting or transiting the circulation zone and further fostering a sense of community.

By creating a clear distinction, that the internal space is a private zone, and extending the landscaped, communal realm to these interstitial zones, the communal aspect of the development is carried throughout the site right to the front door of the private realm. This emphasises a sense of safety and communal living, removing a detachment often present in traditional multiunit developments and emphasising the flexible nature of modern living through a high quality environment.

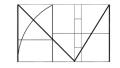








SKETCH PERSPECTIVES SHOWING BLOCK A CIRCULATION SELECT PRECIDENT IMAGES



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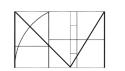








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FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW

9.0 PRIVATE SPACES CONCEPT

The MicroNest Communities boarding housing typology is based on providing a high quality affordable rental properties without compromising on quality nor amenity.

This is accomplish through provision of high quality crafted interior spaces that are more akin to a four star hotel than something typically associated with a typology.

By providing an integrated fitout that comes fully furnished with bespoke joinery and furniture, maximum spacial efficiency can be achieved that doesn't have to cater for various furniture types. In addition through careful design of every single element, excellent spatial utilisation and functionality can be achieved that achieves affordability through small spaces while maintaining extremely high quality.

Each module utilises a system of specially designed joinery elements, that are assembled with consideration of multipurpose use allowing for example the bed area to be utilised as a small work zone (using the kitchen bench and screen as a table), while also featuring extensive storage above and below the bed.

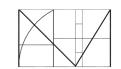
Similarly kitchen zone maximises storage with a continuous joinery element that extends into a living space, that also hides the bathroom exhaust duct therefore maximising the ceiling height.

Such a high level of spatial utilisation has also allowed for a creation of a clearly defined living zone as well as dedicated outdoor living area, therefore placing all the spaces typically found in a 50sqm apartment in a unit half that size.

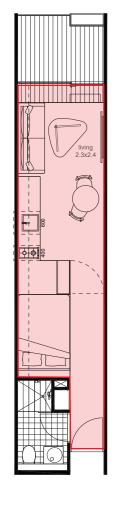
This is mainly achieved through multipurpose use of design elements, so for example, the raised timber terrace extends into the living room zone to create a bench seat as well as additional storage. The raised terrace allows for all the drainage and insulation to be housed within the floor depth (further maximising ceiling heights to units below) while also allowing for a planter box to be integrated with fully incorporated drainage system.



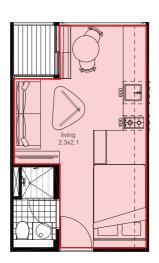




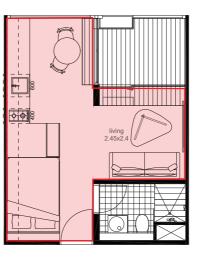
9.1 PRIVATE SPACES LAYOUTS AND AREAS



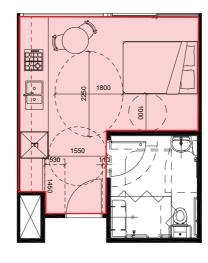
TYPE 1.0
23sqm total; 20sqm nett



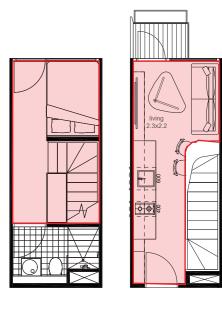
TYPE 1.5
19sqm total; 16sqm nett



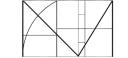
TYPE 2.0 23sqm total; 19sqm nett



TYPE 2.0 DDA
25sqm total; 19sqm nett

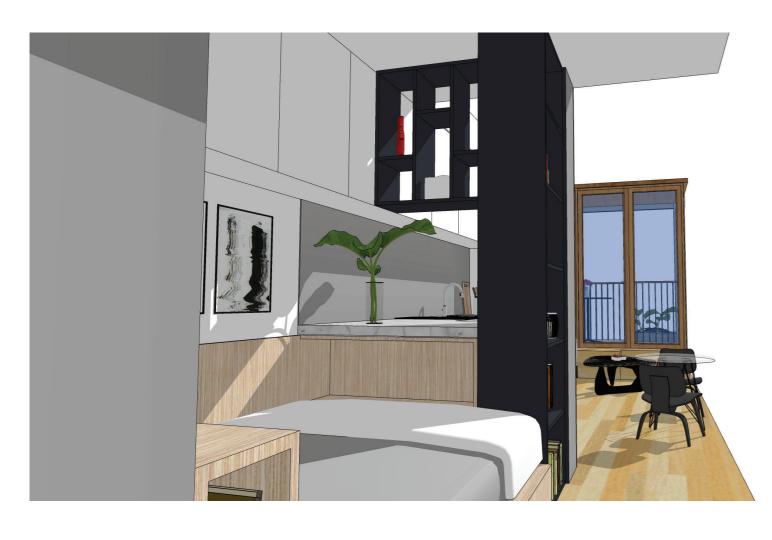


TYPE 2.5
24sqm total; 21sqm nett



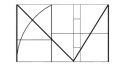
FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW

9.2 PRIVATE SPACES INTERIOR CONCEPT VIEWS





SKETCH RENDERS SHOWING THE INTERIOR CONCEPT



FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW











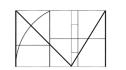








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Landscape Objective | Design Statement

Landscape and Living Architecture

This unique development proposal uses a grouping of apartment modules to create a site responsive and articulated building form. This is a very different concept to the site specific block forms of most residential apartments. The stacking and shifting of these modules up the sandstone slope create many different opportunities for landscape, with a similar innovative approach to how these spaces work.

Most residential unit design has a traditional open communal landscape either on podium or deep soil. There is often a landscape setback for all sides. The resultant spaces are either too large for a number of community uses or too small. There is not the ranges of spaces, in size, microclimate, outlook or programme. The less program a space has (a clear objective and function) the less successful it is likely to be, particularly in communal residential living.

Landscape Spaces

The angles forms, shifting surfaces and stepping create a variety of communal space types. These range from:

- 1. Central Communal Space- a communal 'heart, where larger groups of people can congregate from all areas within the development. This space is an extension of the indoor/outdoor community room. This space includes cooking and washing facilities. There is a central turf area that allows people to have informal congregations in organised or unorganised activities. Organised activities could include outdoor cinema nights. It is punctuated by a large indigenous Cheese Tree. Timber stepped terraces form a backdrop to this space, giving the open space somewhere comfortable that overlooks the turf zone.
- 2. Secondary Communal Spaces these smaller spaces relate specifically to the blocks, providing a central open space between Blocks A and B. Smaller than the central space, these relate specifically to the















Client: Micronest Pty Ltd

Architect: MODULARIUM

Landscape Objective | Design Statement

tenancies that face onto it. More of a 'local's communal space, the clear accessway between units is punctuated by large broad planters that incorporate furniture. These spaces will be a look into garden space with useable function. Each has a different character due to aspect, shade and exposure.

There is the possibility that these spaces could incorporate site stormwater management and treatment.

3. Landscape Buffers and Privacy- These landscape spaces are within the 2m setbacks on the eastern. Western and northern boundaries. These are not designed to be used by tenants, the spaces are for circulation and for landscape privacy planting. The path meanders creating large pockets and a more informal landscape quality. A straight path with a constant offset will not be a desired outcome for the quality of landscape.

Biodiversity and Habitat

The landscape planting on deep soil allow for small to medium sized indigenous trees and large shrubs (from the local sandstone vegetation type) The species of trees and shrubs that are selected attract and benefit wildlife. The informal native planting will attract native marsupials, birds and importantly, beneficial insects.

As we are aware resilient and hardy plant species selection is critical. Particularly with climate change adaption and a reduced availability (and cost) of potable water.

This planting design approach will provide a strong planting character to the site and address with the street.











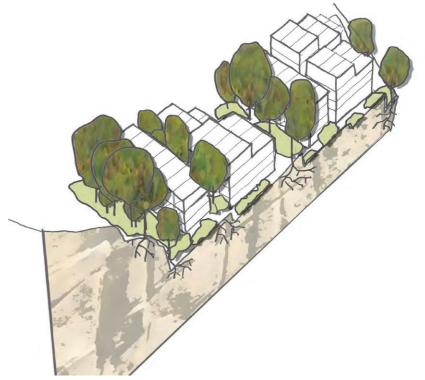
Landscape Plans | Landscape x 2- Two methods and ideas

1. Integrated and connected with site and context.

This landscape:

- · Responds and grows into the site, its geology, topography and
- · Needs to work within the site constraints and opportunities.
- Gives the site its unique identity and character.
- · Solves the problems of the site, such as privacy, providing significant greenery, shade shelter and amenity.
- · Connects landscape and architecture to the site and allows a biophillic connection between residents and nature.



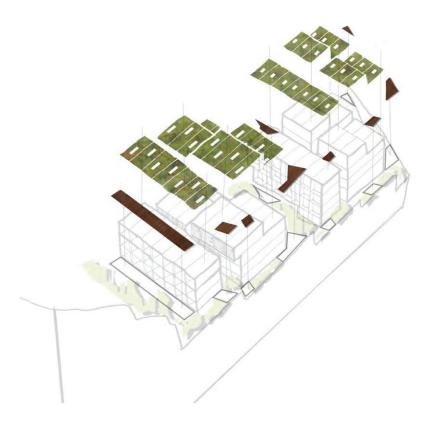


2. Applied and connected to the site.

This landscape:

- · Can be designed to work with the site, but it is connected through the building.
- · Relates more to the building and its function than the site.
- · Can be installed quickly or instantly, it developed and constructed off site.
- · Can plug into and solve site problems and contribute to sustainable goals and benefits.
- · Connects landscape and architecture to the site.
- · Can be adapted to different sites, briefs and objectives.







Drawn: DD/AG/KB

Scale: NTS

Design Concept | Applied Landscape - Living Roof and Living Architecture.

Green Roofs

The benefits for this project are many. These will include:

- · Additional area of landscape that can be prefabricated off site.
- · A pleasant green outlook and garden for stepped modules to look out over.
- A better visual impact of the project from surrounding properties. A net improvement.
- · Thermal efficiencies and improvement in passive cooling.
- · Is a point of difference from anything else on the market.
- · Uses low water use and low maintenance native plant species.
- Reduces any risks with waterproofing as the landscape is containerised and separate from the roof structure.
- Low profile and lightweight. 200mm soil depth in 250mm max height 'trays'.
- Plays an important ecological role providing habitat in the suburbs for pollinating birds and beneficial insects.









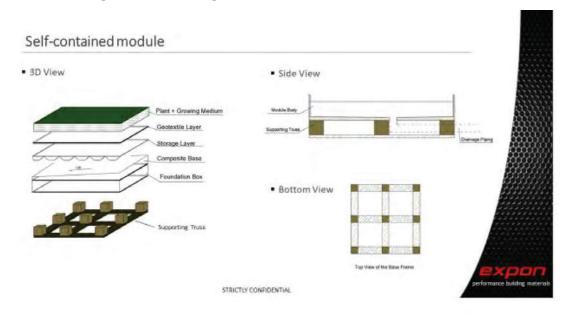


Design Concept | Applied Landscape - Living Roofs

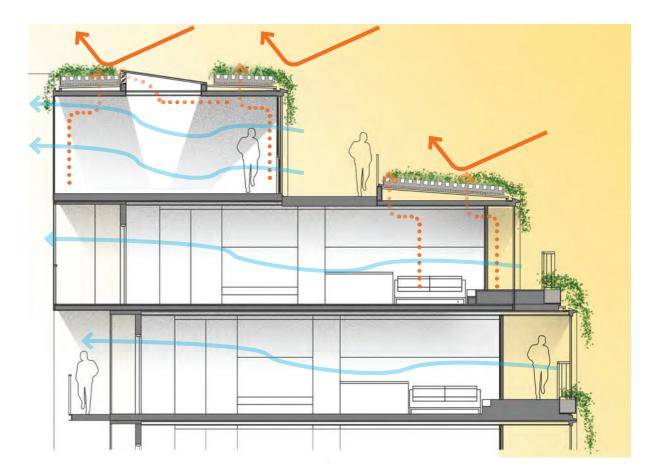
Green Roof Objectives and Outcomes

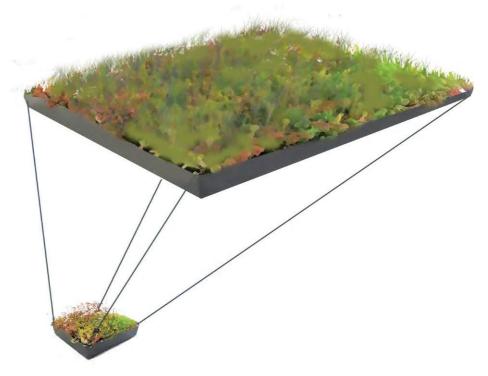
Green Roofs need clear objectives, measurable outcomes and be feasible to be successful.

- Affordable technology that provides return (or savings) for the development.
- Can have measurable benefits with cooling, Real efficiencies of targets that can be realistically achieved of 30% cooling and heating cost savings with AC on a metal deck roof in Sydney.
- · Improved passive cooling when there are no breezes for cross ventilation*
- · Easy to fabricate and modular for efficiencies.
- Minimise maintenance
- Will contribute to the unique marketing appeal. There is nothing else like this on the market in Australia (as yet).
- · Is lightweight at approximately 200kg /saturated weight.
- · Will assist with the planning approvals process.
- Green roofs to reduce stormwater tank size and assist stormwater management.
- Green roofs have been costed and determined feasible by a industry leading specialist living architecture contractor.

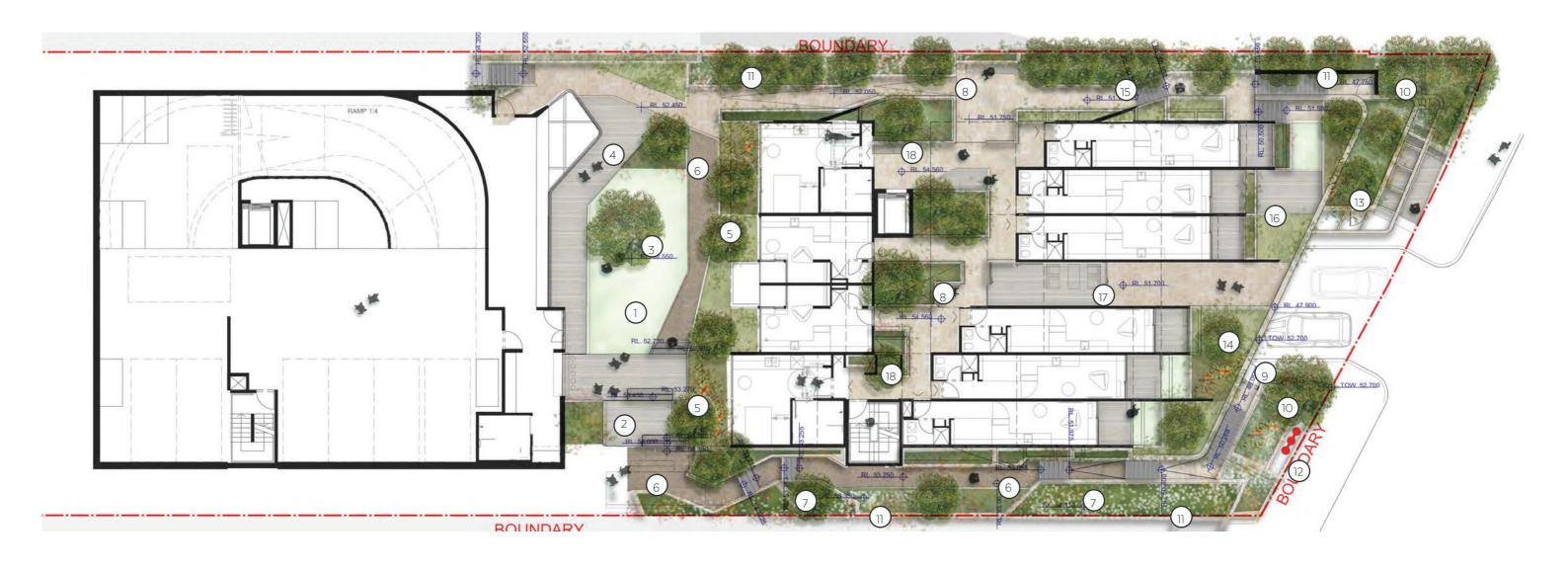


Proposed living roof module size, profile and composition.





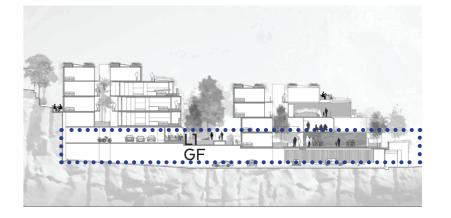
Landscape Plans | Ground Floor and Level 1



The characteristics of these spaces include:

- 1. A large communal space that with turf and terracing to allow a range of uses.
- 2. Broad timber terraces step up the slope and provide for informal seating or lounging.
- 3. Medium sized feature tree in over-excavated volume of soil, in the centre of the space and to create separation between blocks. Species selection will reference the plant schedule attached.
- 4. BBQ and communal room cooking facilities (by Architect). The external terrace extends the communal room space to outdoors.
- 5. Mass planted zone for seperation and privacy for outdoor terraces.
- 6. Stabilised gravel pathway.
- 7. Side access pathway with steps and alignment that enables deep pockets of planting for tall screening shrubs and small trees.
- 8. Furniture and fixtures that is simple and robust and easy to apply to the site design and conditions.
- 9. Secondary entry security gate.

- 10. Large tree in tree vault in deep soil zones.
- 11. Indigenous sandstone planting in cascading terraces.
- 12. Fire booster valves in well integrated cabinet.
- 13. Concierge entrance and cafe on street frontage. Living roof on top of entry building.
- 14. Large planters in communal zone in front of private terraces (non accessible by tenants).
- 15. Main entry passage way with large landscape planters on deep soil however due to shallow rock, planter walls greater than 1m will be required, where used as a perimeter balustrade barrier.
- 16. Communally accessible terraces with timber decks and turf. Large planters create seperation from terraces.
- 17. Clear passageway with green walls beneath winter-garden on L2 above.
- 18. Large planters with soil volume for planting columnar trees and to integrate seating amongst planting to create a private and relaxed space used by tenants adjacent.



Client: Micronest Pty Ltd Architect: MODULARIUM Drawn: DD/AG/KB Date 26/09/2018
Scale: NTS

Landscape
Development Application

Dwg no: LA-DA06 Rev: E

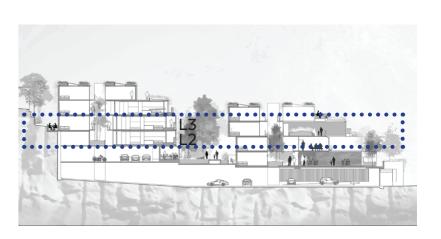
Landscape Plans | Level 2 + Level 3



The characteristics of these spaces include:

- 1. Extensive rooftop garden (shallow profile) on top of units to provide all of the benefits that this green roof will have to the development. Living roof is not accessible to the tenants adjacent.
- 2. Large planter and integral seat in north facing breakout space for tenant use on level 3.
- 3. Narrow full height balustrade planters for cascading plants.
- 4. Stabilised gravel pathway.
- 5. Side access pathway with steps and alignment that enables deep pockets of planting for tall screening shrubs and small trees.
- 6. Furniture and fixtures that is simple and robust and easy to apply to the site design and conditions.
- 7. Smaller secondary communal space that is likely to be used by the tenants in the adjacent block. This enables opportunities for interaction and engagement, however in a smaller scale and quiet environment.
- 8. Retaining walls to tie into existing sandstone rock face to create pockets for larger

- tree planting on the perimeter. Indigenous tree species will be selected for suitability to the site. Please refer to plant schedules.
- 9. Indigenous sandstone planting in cascading terraces.
- 10. Small communal 'hammock garden' in the south eastern corner that receives sun in the morning and is shaded in the afternoon. This is the only space at the rear of the development providing amenity to ensure privacy for rear terraces.
- 11. Large planters to seperate terraces from rear landscape.
- 12. Hardy and slender native palms used in the rear courtyard space that can grow upwards through the atrium openings.
- 13. Potential for walkways to be grating type to simplify stormwater management and allow additional light to communal spaces beneath, in addition to the atrium openings.



Drawn: DD/AG/KB

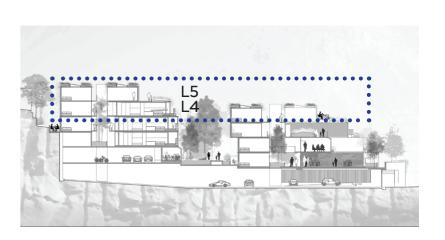
Landscape Plans | Level 4 + Level 5 (Rooftops)



The characteristics of these spaces include:

- 1. Extensive rooftop garden (shallow profile) on top of units to provide all of the benefits that this green roof will have to the development. Living roof is not accessible to the tenants adjacent.
- 2. Narrow full height balustrade planters at edge of terrace to provide greenery in varying heights and modulation. Planters maintained by body corporate and not accessible to tenants.
- 3. Skylights.
- 4. Plants adjacent to skylights, climbing species to prevent any overhanging vegetation and simplify maintenance.
- 5. Stainless steel fall arrest systems built into living roof design with cable tethering connection points to OHS and Australian safety standards.
- 6. Plant species are all indigenous or native to the Sydney region. Plants are selected to not block views but provide enough habitat and forage for beneficial insects and possibly birds such as honeyeaters. The roofs are intended to be biohabitat as well as the other benefits discussed previously.

- 7. Irrigation will be required despite low water use indigenous plants. Irrigation is all subsurface soaking type programmed by smart sensors and wifi connection to weather data.
- 8. Planting design will be a patina effect to create a native 'meadow' made up with benign native grasses, lilies, and flowering perennials. Self regenerating species will be used.



Landscape Plans | Site Long Section



- 1. Large communal space that with turf and terracing to allow a range of uses.
- 2. Medium sized feature tree in over-excavated volume of soil, in the centre of the space and to create separation between blocks. Species selection will reference the plant schedule attached.
- 3. BBQ and communal room cooking facilities (by Architect). The external terrace extends the communal room space to outdoors.
- 4. Mass planted zone for seperation and privacy for outdoor terraces.
- 5. Large planters in communal zone in front of private terraces (non accessible by tenants).
- 6. Clear passageway with green walls beneath winter-garden on L2 above.
- 7. Large planters with soil volume for planting columnar trees and to integrate seating amongst planting to create a private and relaxed space used by tenants adjacent.
- 8. Extensive rooftop garden (shallow profile) on top of units to provide all of the benefits that this green roof will have to the development. Living roof is not accessible to the tenants adjacent.

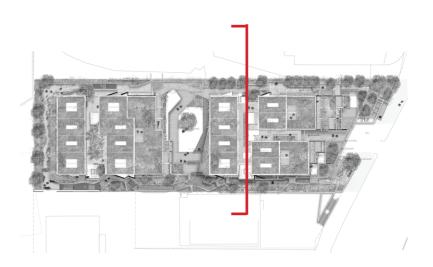
- 9. Large planter and integral seat in north facing breakout space for tenant use on level 3.
- 10. Smaller secondary communal space that is likely to be used by the tenants in the adjacent block. This enables opportunities for interaction and engagement, however in a smaller scale and quiet environment.
- 11. Hardy and slender native palms used in the rear courtyard space that can grow upwards through the atrium openings.
- 12. Retaining walls to tie into existing sandstone rock face to create pockets for larger tree planting on the perimeter. Indigenous tree species will be selected for suitability to the site.



Landscape Plans | Site Cross Section



- 1. Small tree and large shrub indigenous planting in deep soil setback zones on eastern and western boundaries.
- 2. Side access pathway with steps and alignment that enables deep pockets of planting for tall screening shrubs and small trees. Indigenous sandstone planting in cascading terraces.
- 3. Large planters with soil volume for planting columnar trees and to integrate seating amongst planting to create a private and relaxed space used by tenants adjacent.
- 4. Extensive rooftop garden (shallow profile) on top of units to provide all of the benefits that this green roof will have to the development. Living roof is not accessible to the tenants adjacent.
- 5. Living roofs on buildings beyond.
- 6. Smaller secondary communal space that is likely to be used by the tenants in the adjacent block. This enables opportunities for interaction and engagement, however in a smaller scale and quiet environment.



Design Concept | Landscape Axonometric



- 1. A large communal space that with turf and terracing to allow a range of uses.
- 2. Broad timber terraces step up the slope and provide for informal seating or lounging.
- 3. Medium sized feature tree in over-excavated volume of soil, in the centre of the space and to create separation between blocks. Species selection will reference the plant schedule attached.
- 4. BBQ and communal room cooking facilities (by Architect). The external terrace extends the communal room space to outdoors.
- 5. Stabilised gravel pathway.
- 6. Side access pathway with steps and alignment that enables deep pockets of planting for tall screening shrubs and small trees.
- 7. Secondary entry security gate.
- 8. Large tree in tree vault in deep soil zones.
- 9. Indigenous sandstone planting in cascading terraces.
- 10. Fire booster valves in well integrated cabinet.
- 11. Concierge entrance and cafe on street frontage. Living roof on top of entry building.
- 12. Large planters in communal zone in front of private terraces (non accessible by tenants).
- 13. Main entry passage way with large landscape planters on deep soil however due to shallow rock, planter walls greater than 1m will be required, where used as a perimeter balustrade barrier.
- 14. Communally accessible terraces with timber decks and turf. Large planters create seperation from terraces.
- 15. Large planters in communal zone in front of private terraces (non accessible by tenants).

Design Concept | Landscape Planting - COURTYARDS

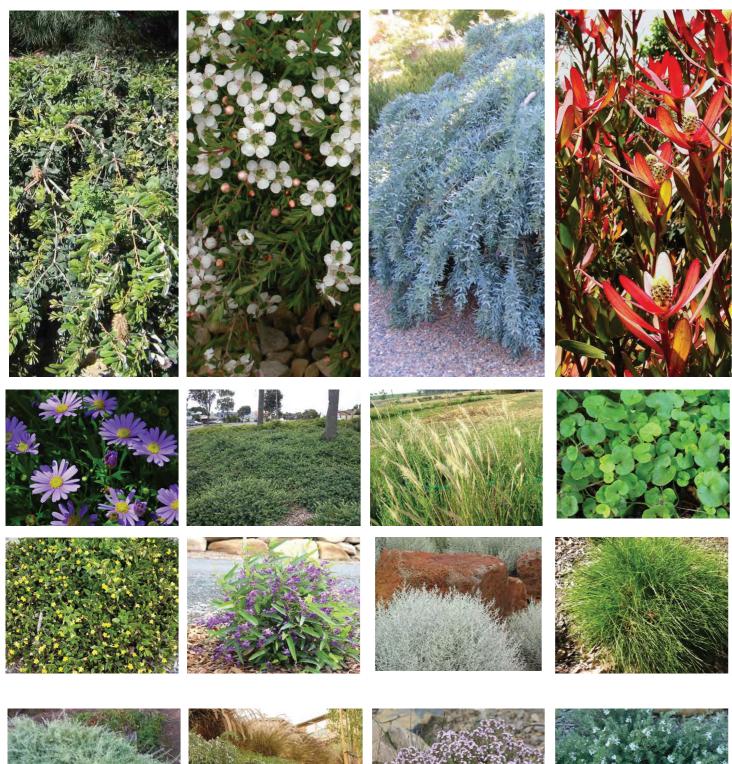


Modularium Courtyard- Courtyard Planting

Type of Plant	Species	Common Name	Pot Size	Origin	Bird attracting	Insect pollinators
Turf						
	Zoysia Nara	Nara	Rolls	Eastern Australia		
Accents and P	Perennials					
	Alocasia macrorrhiza	Brisbane Lily	25L	Australia and Asia		
	Alpinia caerulea	Native Ginger	25L	Eastern Australia		
	Asplenium australasicum	Birds Nest Fern	25L	Eastern Australia		
	Anigozanthos hybrids	Kangaroo Paw Hybrids	200mm	Eastern Australia		
	Aphenopetalum resinosum	Gum Vine	200mm	Eastern Australia		
	Arthropodium cirrhatum	Renga Renga Lily	200mm	NZ		
	Calochlaena dubia	Rainbow Fern	200mm	Eastern Australia		
	Ceropegia woodii	Chain of Hearts	200mm	Sth Africa		
	Cissus hyperglauca	Kangaroo Vine	200mm	Eastern Australia		
	Davalia fejeensis	Rabbits foot fern	200mm	Eastern Australia		
	Dianella caerulea cultivars	Paroo Lilly	200mm	Eastern Australia		
	Hoya australis	Waxflower Vine	200mm	Eastern Australia		
	Pandorea jasminoides Jazzy Bells	Bower Vine cultivar	200mm	Eastern Australia		
	Plectranthus nituius	Silver Plectranthus	200mm	Eastern Australia		
	Rhipsalis baccifera	Mistletoe Cactus	200mm	Africa		+
	Senecio radicans	String of Bananas	200mm	Africa		+
	00.700.0744.04.05	54	200	7.11100		
Shrubs and So	creen Plants					
1	Acacia howittii Honey Bun	Dwarf Wattle	300mm	Eastern Australia		
	Acmena smithii Forest Flame	Dwarf Lilly Pilly	300mm	Eastern Australia		
	Banksia robur	Swamp Banksia	200mm	Eastern Australia		
	Baurea rubioides	Native Dog Rose	200mm	Eastern Australia		
	Carissa macrocarpa Emerald Star	Emerald Star	200mm	NZ		
	Correa baurlenii	Chefs Cap Correa	200mm	Eastern Australia		
	Leionema elatius Green Screen	Green Screen Phebalium	300mm	Eastern Australia		
	Tristania laurina Burgundy Blush	Burgundy Blush Dwarf Water Gum	300mm	Eastern Australia		
	Westringia glabra	Glabra Cadabra Coastal Rosemary	300mm	Eastern Australia		
	Ziera cytisoides 'Grey Ghost'	Ziera	300mm	Eastern Australia		
Trace	, ,					
Trees						
	Acmena smithii	Lilly Pilly	400L	Eastern Australia		
	Brachychiton acerifolius	Flame Tree	400L	Eastern Australia		
	Backhousia citriodora	Lemon Myrtle	400L	Eastern Australia		
	Glochidion ferdinandii	Cheese Tree	400L	Eastern Australia		
	Stenocarpus sinuatus	Firewheel Tree	400L	Eastern Australia		
	Syzgium australe Pinnacle	Pinnacle Lilly Pilly	400L	Eastern Australia		
	Tristania laurina	Water Gum	400L	Eastern Australia		



Design Concept | Landscape Planting- ROOFTOPS



Modularium- Planting Schedule Modular Green Roofs

Type of Plant

Banksia integrifolia Rollercoaster
Brachyscome multifida
Carpobrotus Aussia Rambler
Dichelachne crinita
Chrysocephalum apiculatum
Goodenia ovata Gold Cover
Hardenbergia violacea 'Mini Ha Ha'
Leptospermum laevigatum (White wave)
Rosmarinus prostratus
Westringia fruticosa Mundi

Common Name Pot Size Origin Prostrate Coast Banksia 150mm Cut leaf Daisy Cultivar 200mm Pigface 150mm Hare tail Grass 150mm Yellow Buttons 150mm Gold Cover 150mm Happy wander 200mm Prostrate Coastal Tea Tree 200mm Prostrate Rosemary 200mm Prostrate Coast Rosemary 200mm

Origin attracting pollinators

Eastern Australia
Mediterranean
Eastern Australia







Design Concept | Landscape Planting- PERIMETER SCREENING



Modularium Fairlight- Planting Schedule Screening Plants						
Type of Plant	Species	Common Name	Pot Size	Origin	Bird attracting	Insect pollinators
Accents and Pe	erennials					
	Babingtonia vigata 'Howies Sweet Midget' Callistemon Great Balls of Fire Lomandra longifolia Philotheca myoporoides Profusion Pimelia linifolia Ozothamnus diosmifolius Radiance	Dwarf Thread barked Honey Bottlebrush cultivar Mat Rush Wax Flower Rice Flower Sago Bush	200mm 200mm 200mm 200mm 200mm	Eastern Australia Eastern Australia Eastern Australia Eastern Australia Eastern Australia		
Screening Shru	Westringia fruticosa Blue Heaven	Coastal Rosemary	200mm	Eastern Australia		
1-1	Allocasurina distyla Banksia asplenifolia Banksia ericafolia Kunzea ambigua	She-oak Fern leaf Banksia Heath Banksia Tick Bush	45L 25L 25L 25L	Eastern Australia Eastern Australia Eastern Australia Eastern Australia		
Trees						
	Angophora costata Angophora hispida	Smooth Barked Apple Dwarf Apple	400L 100L	Eastern Australia Eastern Australia		

Yellow Top Ash

Cheese Tree

100L

Eastern Australia

Eastern Australia













Eucalyptus leuhmanniana

Glochidion ferdinandii





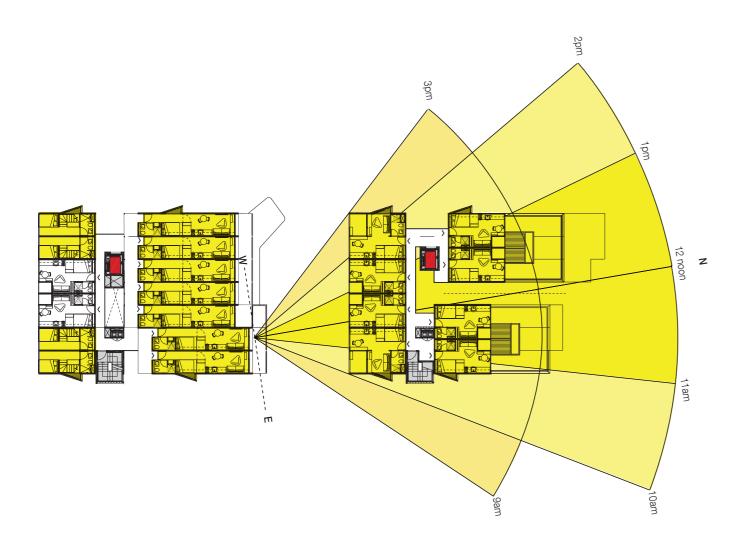
Architect: MODULARIUM



DESIGN ASSESSMENT

FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW

11.0 UD COMMENTS SEPP 65 ANALYSIS





SOLAR ACCESS

/ The site features a steep slope towards North optimising solar access

/ 80% of all dwellings enjoy more than 3hrs of direct solar access mid winter and 85% enjoy more than 2hrs

/ The number of south facing dwellings have been minimised (less than 15%) and through usage of skylights and/or two storey units even some of the south facing apartments will enjoy sufficient solar access.

CROSS VENTILATION

/ The site has been planned as a landscaped park with all circulation externalised

/ This enables every unit (100%) to be cross-ventilated by virtue of operable grills to rear of each unit allowing for excellent air movement

/ Together with north aspect and shaded open spaces the passive ESD has been utilised to maximise resident comfort and minimise environmental impacts



FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW

11.1 UD COMMENTS LANDSCAPE OPEN SPACE

4.1.5 Open Space and Landscaping

4.1/5/1 Residential Open Space Areas at DCP Map B – Area OS3

RESPONSE

Refer figure 34 for percentage of Open Area (55% of total site Area) and Above Ground Landscape Areas (34% of the 55% Total landscaped Area)

Private Open Space for Boarding Houses

Private open space for boarding houses is to be provided in accordance with the following minimum specifications; The areas are to receive a minimum of 3 ours direct sunlight between 9am and 3pm in midwinter.

RESPONSE

There are a number of units in the centre of the site which have private open spaces oriented to the south. The units would benefit from flipping the orientation of the private open space to the north to optimise solar gain in the winter months.

This would also assist to avoid any overlooking of private space issues internal to the site.

The landscaping is a significant part of the overall design strategy and as such the development is well in excess of the minimum requirements for all landscape zones.

However due to the specific nature of the site, steep slope, shallow sandstone and almost no current soil zone as well as the atypical development typology, it is quite difficult to quantify the exact spatial compliance

This is further compounded as all circulation zones are open to air and technically an 'open space' however for the purpose of these calculations they have been excluded. Nonetheless, due to building tiering, extensive ground plane landscaping, private open space associated with each unit and finally heavily landscaped green roofs, the total open space actually exceeds the entire site area (i.e. in excess of 100%)

Iln response to the council request to change the orientation of the south facing units the design team has reviewed this request, however due to BCA requirements this is simply not possible. The design requires that the open circulation areas be effectively fire separated from all units zones necessitating the fire rating to walls and doors fronting the circulation zone. This prohibits the orientation of these areas towards the central circulation spine.

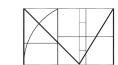
However, where possible, the south facing units have been designed to have north facing windows by having the side pop-out windows oriented north or for middle units to feature north facing skylights that will allow for direct sunlight to primary living areas. In addition some of the south facing units of Block B have been redesigned as two storey units with upper level living and outdoor areas which will receive the direct sunlight in spite of their orientation.



EXTENT OF LANDSCAPE ZONES ON GROUND LEVEL



EXTENT OF GREEN ROOF LANDSCAPE ZONES



FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW

11.2 UD COMMENTS OVERLOOKING

4.2 Privacy and Overlooking, Overshadowing

Units to the front western boundaries of the site pose overlooking and privacy issues to the western adjoining residential flat building. Careful planning and articulation of screening elements, windows and doors on these elevations that overlook this area will assist to provide solutions to mitigate these issues.

...Sectional Analysis diagrams showing view corridors from proposed development to adjoining western property windows in accordance with the requirements of SEPP ARH (and Apartment Design Guidelines where possible)

View Corridor diagrams from proposed development demonstrating internal overlooking and amenity is addressed in accordance with the requirements of SEPP ARH (and Apartment Design Guidelines where possible)

The building massing and landscape screening have taken careful consideration of overlooking and privacy concerns towards neighbouring residential properties. As it can be seen from adjacent view analysis there is going to be a significant improvement upon the existing condition when it comes to views towards neighbouring property at No.199 Sydney Road.

This is achieved through the increased setback (3m rather than 0.9m currently), as well as additional parameter screening (currently none) and also lower dwelling being further forward with side walls not allowing for direct overlooking.

The upper levels also rapidly raise in relation to the adjacent dwelling with only limited views downwards with only glimpses of some of the neighbouring kitchen windows possible through landscape screens.

As the landscape elements grow it is envisaged that no views will be possible whatsoever. Should all overlooking be required to be eliminated even in short term additional temporary screens could be erected alongside the site boundary.



1. Existing view condition with overlooking of No.199 windows from the house at No.197.



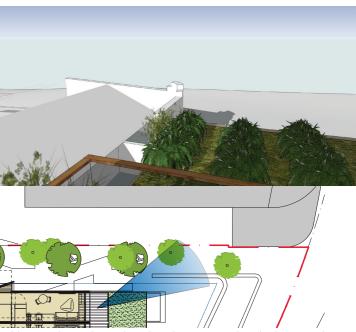
2. Existing view condition with overlooking of No.199 windows from the front yard of No.197, this condition will be remedied by the proposed development.



4. View analysis of view from Level 01 west most dwelling being further north and due to side walls not allowing views of Windows on No 199



5. View analysis of view from Level 02 west with similar view as the current condition, however the new proposal is substantially further east and elevated with screening only allowing glimpses of windows.



5. View analysis of view from Level 03 west with only downward views through perimeter landscaping allowing only glimpses of existing secondary windows.



FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW

11.3 UD COMMENTS SHADOW ANALYSIS

Internal Units shadow diagrams showing solar access is achieved in accordance with the requirements of SEPP ARH (Apartment Design Guidelines where possible)

Shadow diagrams showing any overshadowing on adjoining properties in accordance with the requirements of SEPP ARH (and Apartment Design Guidelines where possible)

Although boarding house developments are not required to comply with SEPP 65 (Apartment Design Guidelines), a detailed shadow analysis has been prepared (please refer to attached documentation) that shows that the proposal conforms both with requirements of SEPP ARH as well as SEPP 65.

This is predominantly achieved by considered modulation of building volumes facilitated by the northern exposure and slope of the site. In addition greater setbacks to East and West boundary assure compliance to neighbouring developments in spite of greater density of the proposed development compared to the existing condition.



Plan View - June 21st @ 01:00PM



Plan View - June 21st @ 02:00PM



Plan View - June 21st @ 03:00PM



View from the sun: June 21st @ 09:00AM



View from the sun: June 21st @ 10:00AM



View from the sun: June 21st @ 11:00AM



View from the sun: June 21st @ 12:00PM



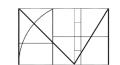
View from the sun: June 21st @ 01:00PM



View from the sun: June 21st @ 02:00PM

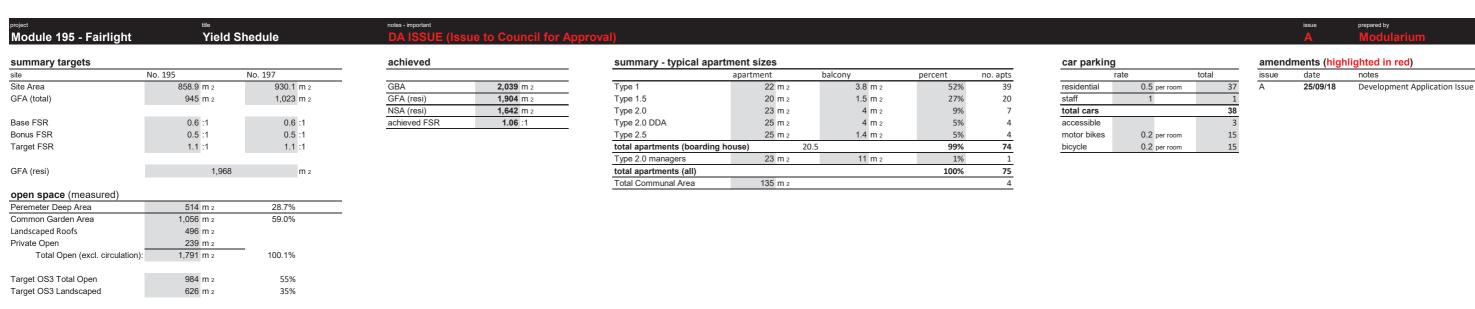


View from the sun: June 21st @ 03:00PM



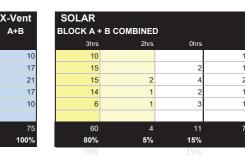
FAIRLIGHT MODULE 195 - SYDNEY ROAD, FAIRLIGHT NSW

11.4 AREA SCHEDULE



AREA ANALYSIS		BLOCK A									
		RESIDENT	ΓIAL								
level	m	GBA	GFA	NSA	BALC.	TYPE 1	TYPE 1.5	TYPE 2	TYPE 2 DDA	TYPE 3	TOTAL
level 05	2.96	0	0	0	0						0
level 04	2.96	180	166	166	17		6	2			8
level 03	2.96	252	232	218	34	6	2	2			10
level 02	2.96	270	248	218	34	6	2	2			10
level 01	2.96	274	252	222	34	6	2		2		10
level 00 - Ground	3.25		28								
level LG	0										
TOTAL	18.1	976	926	824	118	18	12	6	2	0	38

BA	GFA	NSA	BALC.	TYPE 1	TYPE 1.5	TYPE 2	TYPE 2 dda	TYPE 3	TOTA
185	170	226	20		4	2		4	10
289	266	194	30	7	2				9
286	263	244	38	7	2		2	_	11
222	204	154	27	7					7
82	75	0	0						0



DEFINITIONS

GBA - Gross Building Area

Total building area measured from external face of the external walls includes: / basement & carpark areas (including perimeter plenums

- / lobbies
- / plant room / gym & Pool / storage Room
- / lift & Stair shafts / all structure elements (internal & attached perimeter elements)

- / unenclosed or enclosed balconies & terraces
- / void components (double height spaces) / non useable areas (eg crawl spaces) / detached external structural elements / external blade walls

(NSW Department of Planning Standard Instrument - Principal LEP 2006)

gross floor area means the sum of the floor area of each floor of a building measured from the internal face of external walls, or H31from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, including:

- / the area of a mezzanine
- / habitable rooms in a basement or an attic / any shop, auditorium, cinema, and the like, in a basement or attic

- Any area for common vertical circulation, such as lifts and stairs
 / any basement
 / storage
 / vehicular access, loading areas, garbage and services

- / vericular access, loading areas, garbage and services
 / plant rooms, lift towers and other areas used exclusively for mechanical services or ducting
 / car parking to meet any requirements of the consent authority (including access to that car parking)
 / any space used for the loading or unloading of goods (including access to it)
 / terraces and balconies with outer walls less than 1.4 metres high
 / voids above a floor at the level of a storey or storey above

NLA - Net Lettable Area

walls of dwelling. NLA includes some structural elements if

located within the internal walls of the dwelling.

- / service Risers
- / intertenancy party walls / internal voids, stair voids / balconies

apts w/ solar

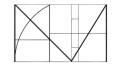
apartments receiving min. 2hrs direct sunlight between 9am-3pm at mid winter

09 apartments cross ventilated in the first 9 storeys. Apartments at 10 storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allow adequate natural ventilation and cannot be fully

apts w/ CV below level

apartments receiving no direct sunlight between 9am-3pm at

apts no solar









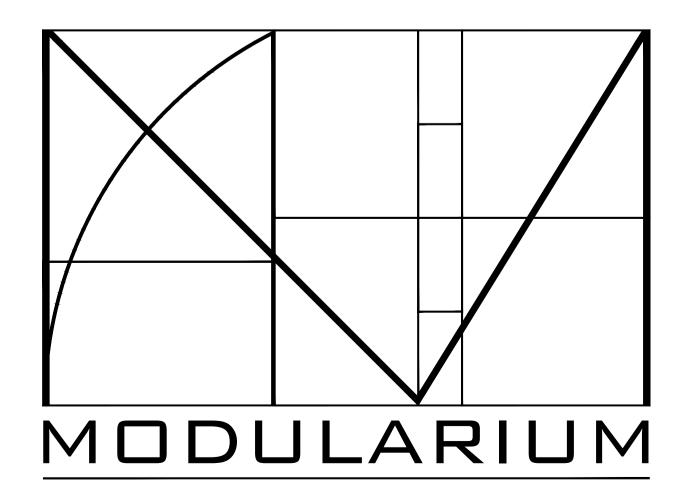
ARCHITECTURAL DRAWINGS

Development Application Drawing List

Site Plan

A 00.01

A 01.00 A 01.01 A 01.02 A 01.03 A 01.04 A 01.05 A 01.06	Level 00 Level 01 Level 02 Level 03 Level 04 Level 05 Roof Plan
A 02.01	Typical Unit Layout Plan
A 03.01 A 03.02	Elevation North + South Elevation East + West
A 04.01 A 04.02	Section A - A + Secton B-B Courtyard Sections
A 08.01 A 08.02 A 08.03	Demolition Plan Excavation Plan Gross Floor Area Plans
A 08.11	Shadow Dlagrams (Winter Solistice - June 21st) Views From the Sun - Proposed
A 08.12	Shadow Dlagrams (Winter Solistice - June 21st) Views From the Sun - Existing
A 08.13	Shadow Dlagrams (Winter Solistice - June 21st) Shadow Study - Proposed
A 08.14	Shadow Study - Proposed Shadow Dlagrams (Winter Solistice - June 21st) Shadow Study - Existing
A 08.15	Shadow Study - Existing Shadow Dlagrams (Spring Equinox -Sep 22nd) Shadow Study - Proposed
A 08.16	Shadow Study - Proposed Shadow Dlagrams (Summer Solistice - Dec 22nd) Shadow Study - Proposed



'MODULE 195'

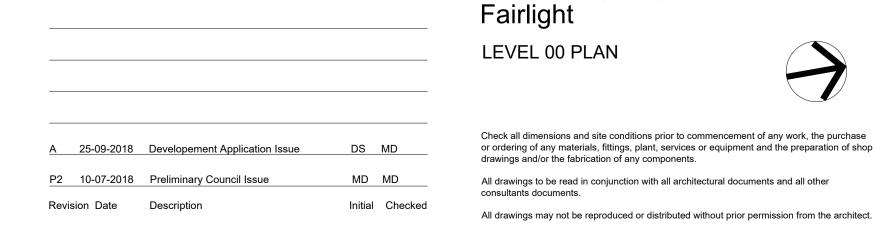
M21701 195-197 Sydney Rd, Fairlight





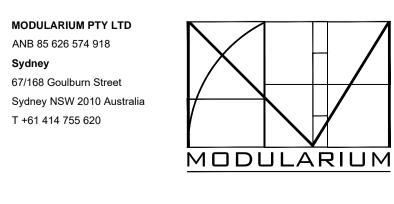


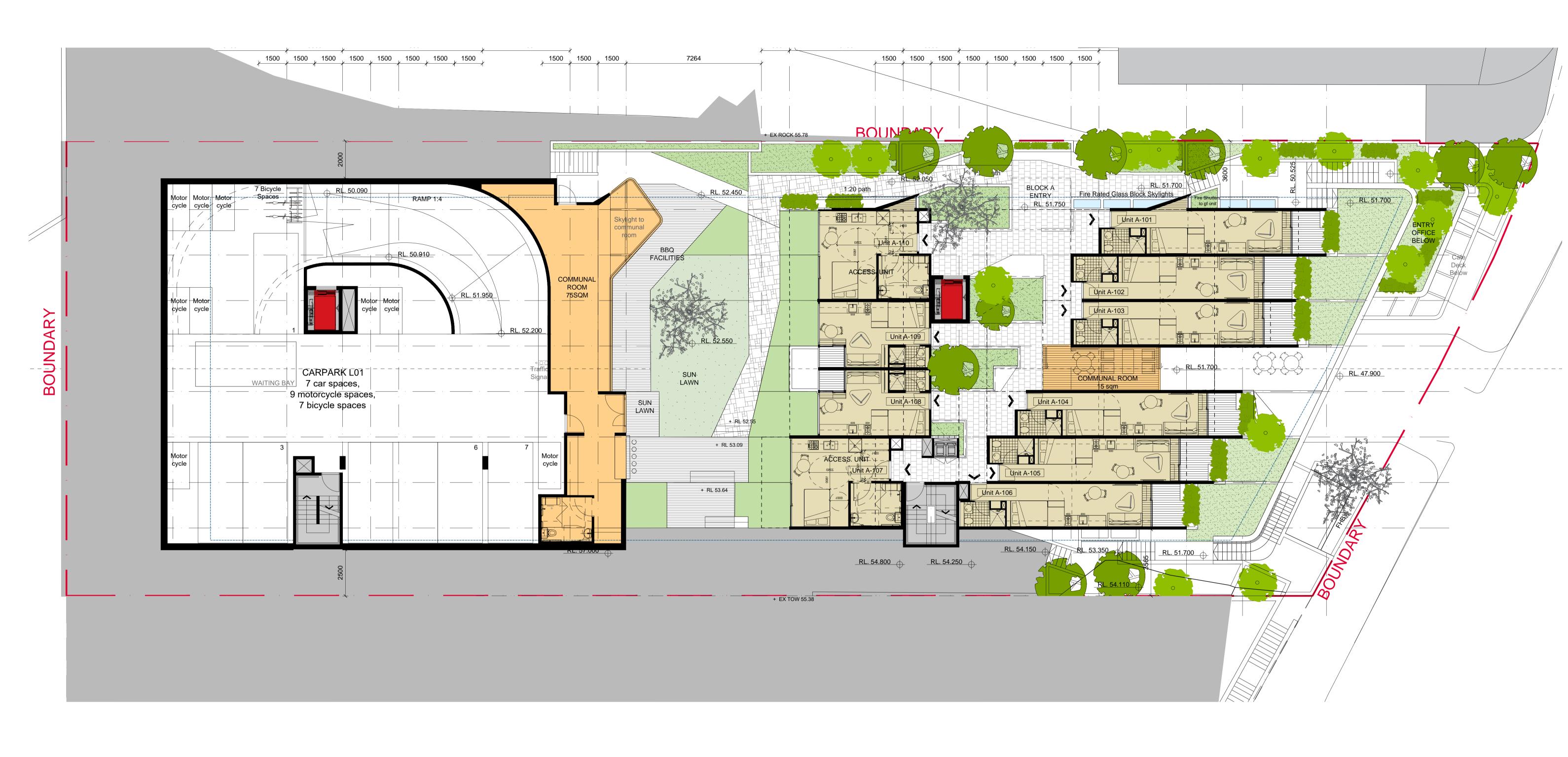
NOT FOR CONSTRUCTION 195-197 Sydney Road Fairlight MODULARIUM PTY LTD





Drawn	MD	Checked	
Project No.	M21701		
Status			
Plot Date	14/10/2018 5:15	PM	
Plot File			
Drawing No.		[Revision]	







A 25-09-2018 Developement Application Issue DS MD P2 10-07-2018 Preliminary Council Issue MD MD Revision Date Description Initial Checked

195-197 Sydney Road Fairlight LEVEL 01 PLAN

LEVEL 01 PLAN

Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and/or the fabrication of any components.

All drawings to be read in conjunction with all architectural documents and all other consultants documents.

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Status			
Plot Date	14/10/2018 5:15	PM	
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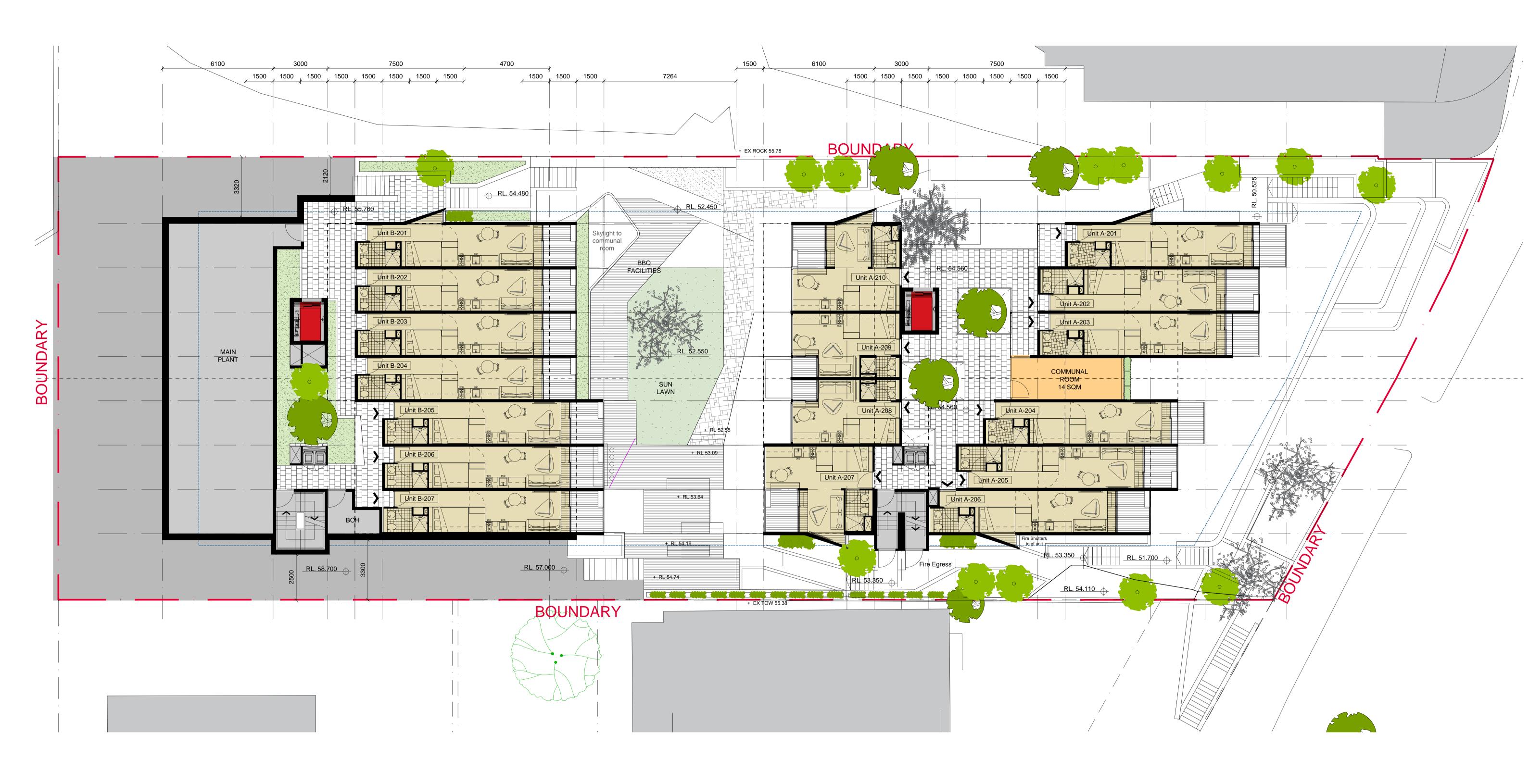
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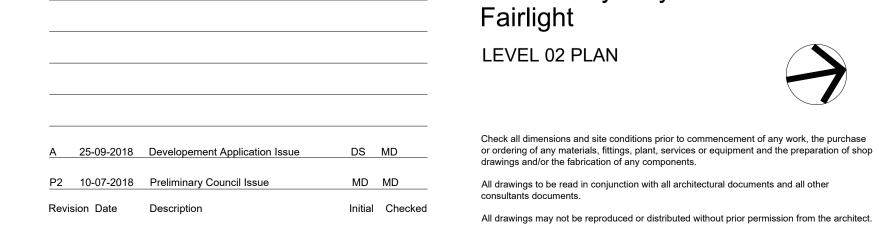
T +61 414 755 620

MODULARIUM



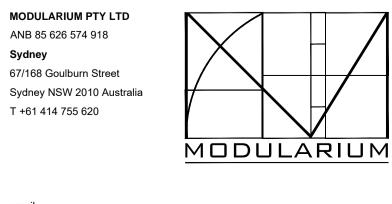


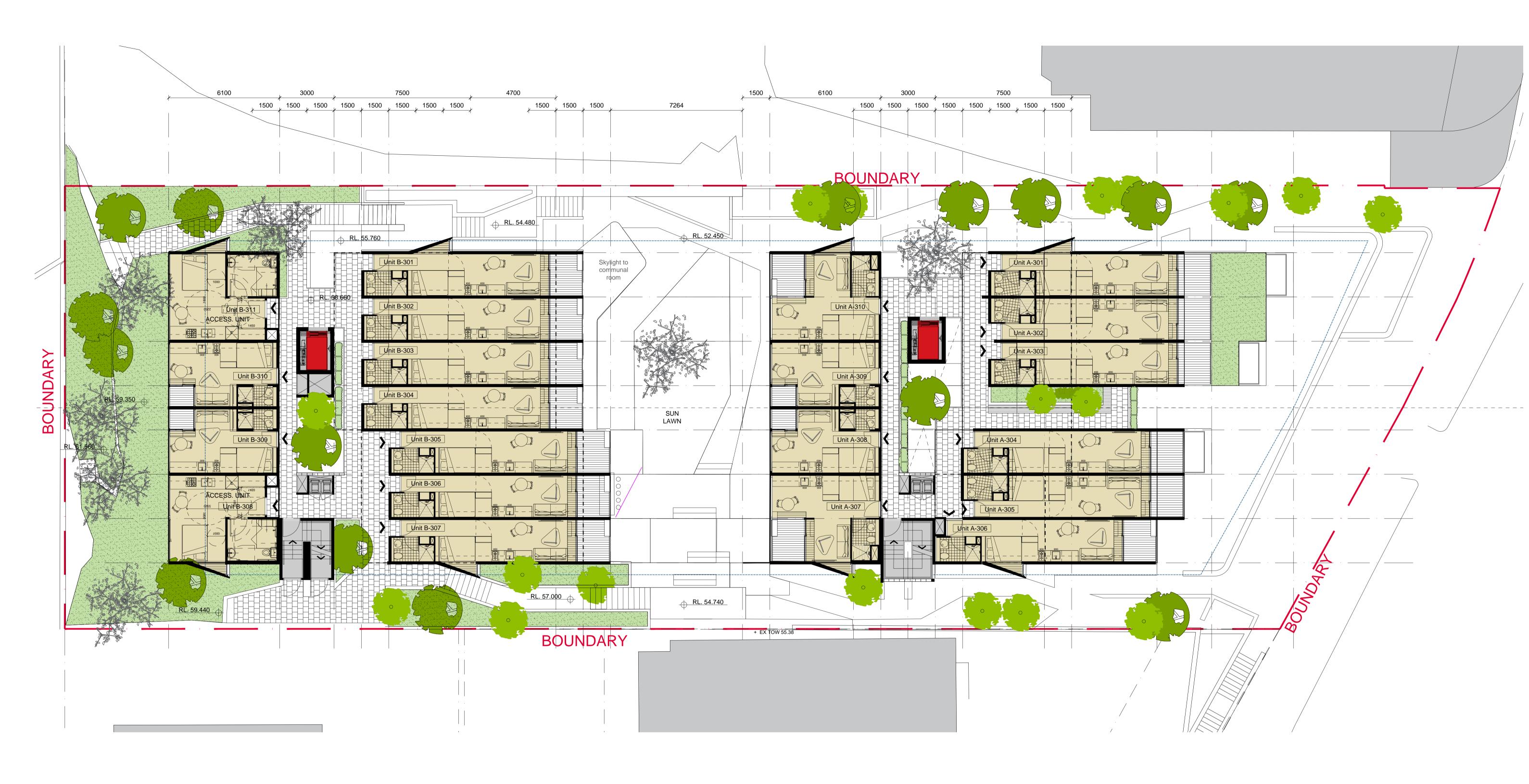
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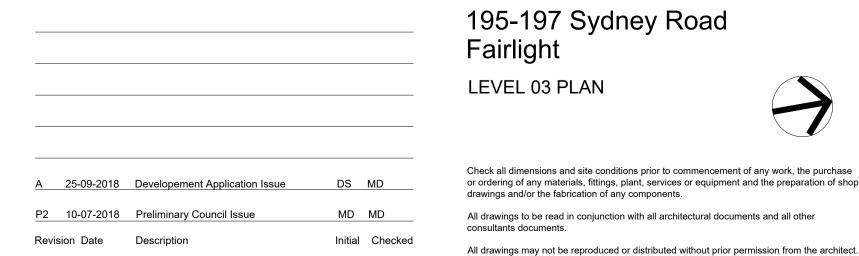
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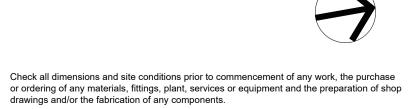




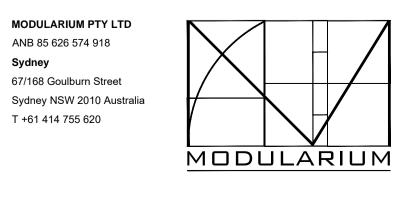


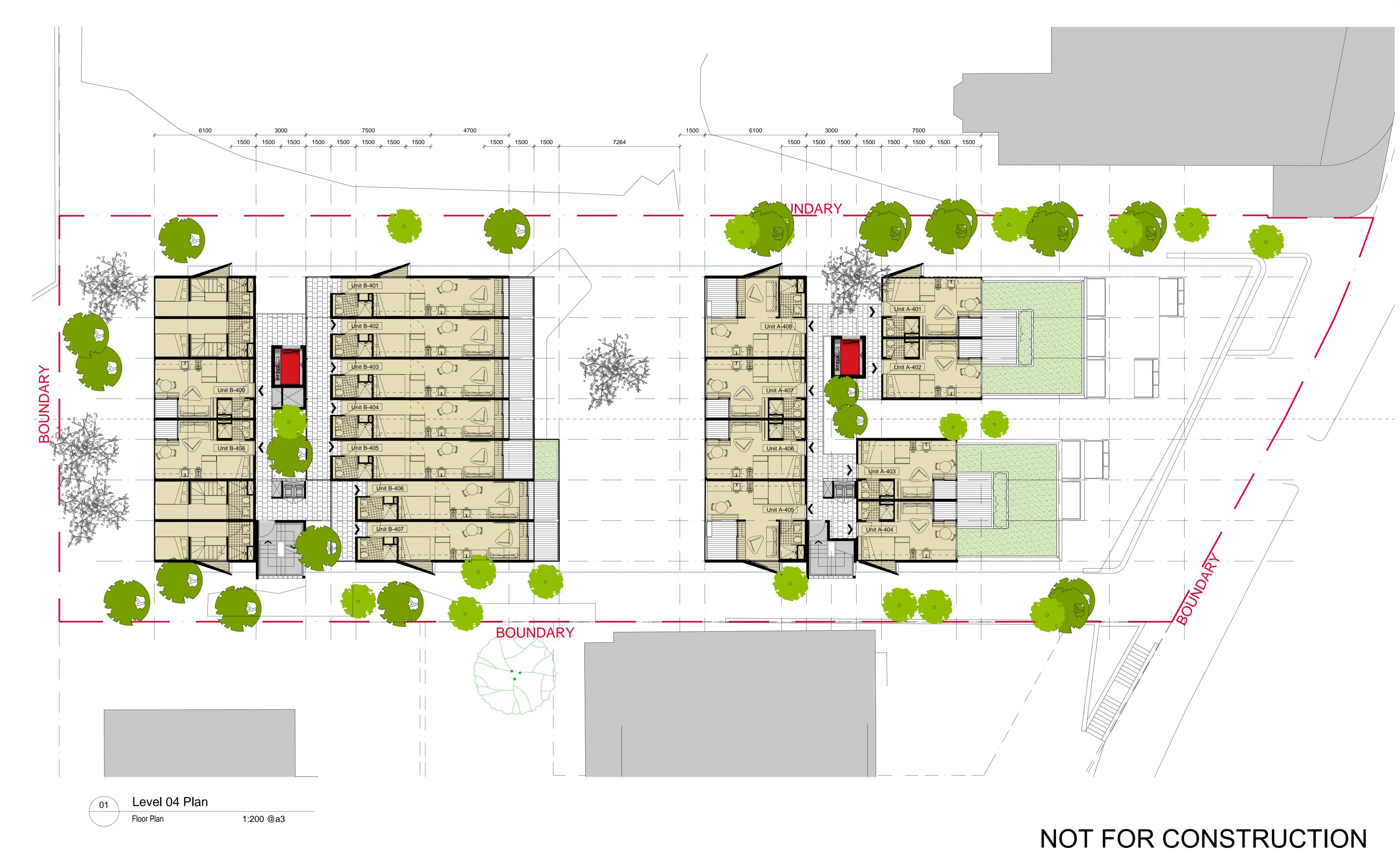
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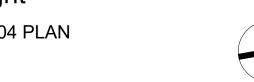




A 25-09-2018 Developement Application Issue

Initial Checked

195-197 Sydney Road Fairlight LEVEL 04 PLAN

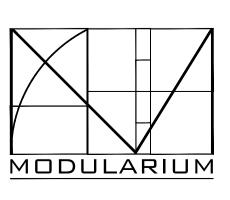


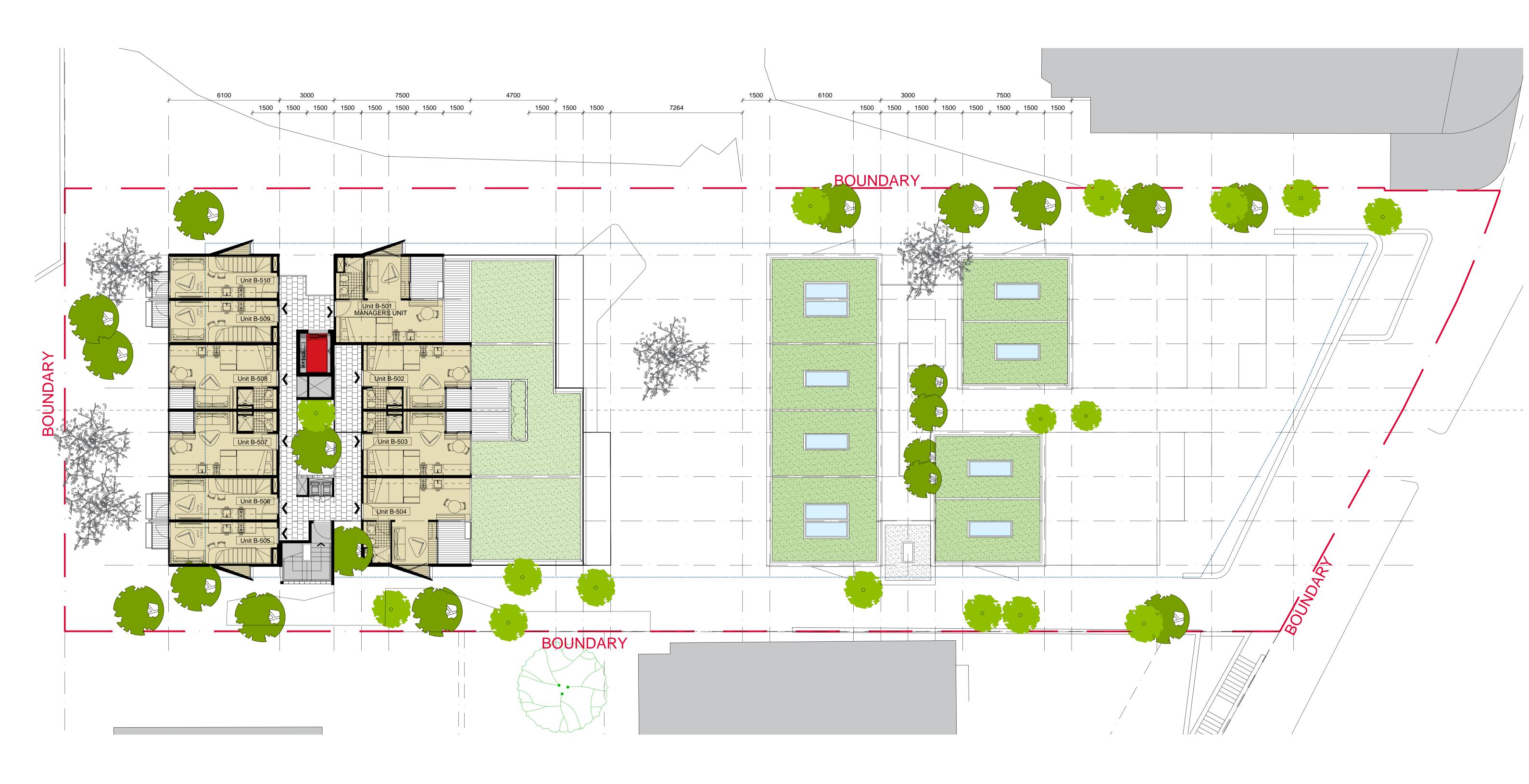
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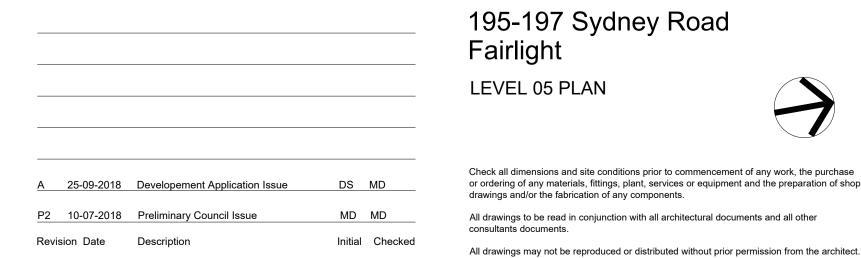
ANB 85 626 574 918 67/168 Goulburn Street Sydney NSW 2010 Australia T +61 414 755 620





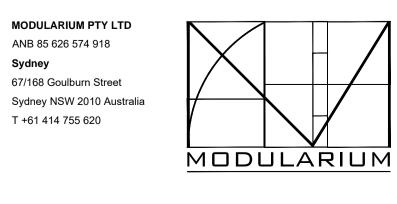


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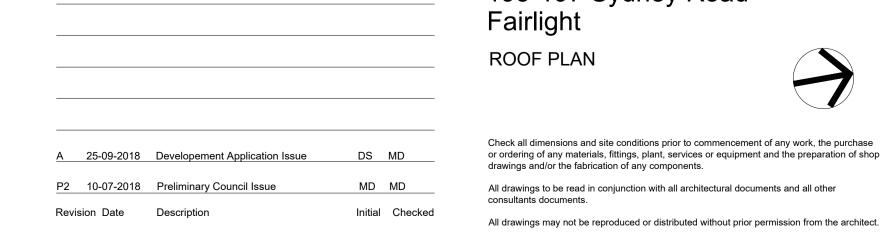
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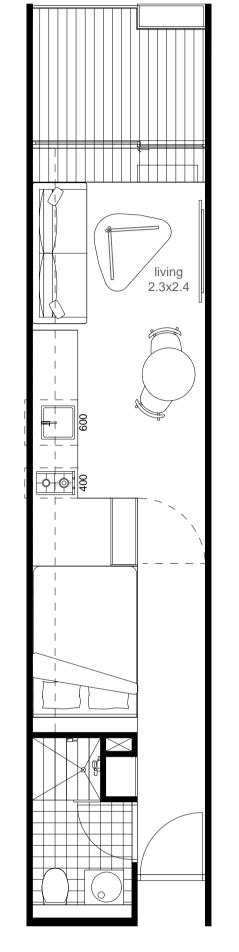


195-197 Sydney Road Fairlight	
ROOF PLAN	
Check all dimensions and site conditions prior to commencement	of any work, the

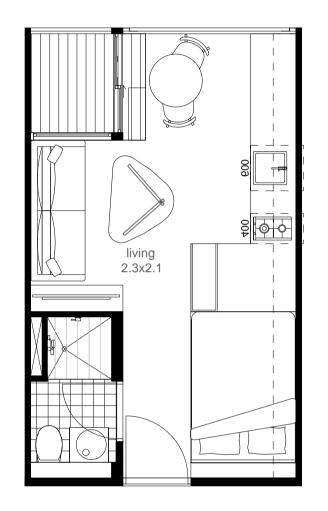
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limensions and site conditions prior to commencement of any work, the purchase of any materials, fittings, plant, services or equipment and the preparation of shop	Plot Fi
nd/or the fabrication of any components.	Drawir
is to be read in conjunction with all architectural documents and all other s documents.	A

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Status			
Plot Date	14/10/2018 5:15	PM	
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Drawing No.		[Revision]	

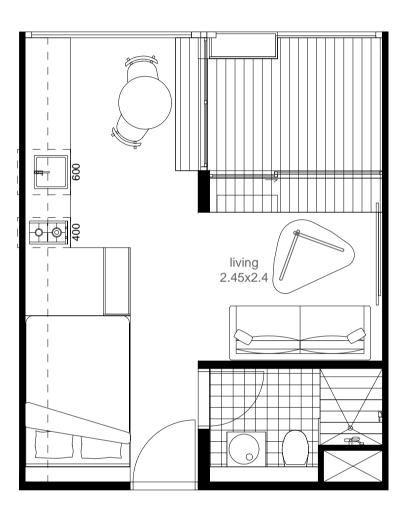
MODULARIUM PTY LTD	
ANB 85 626 574 918	
Sydney	
67/168 Goulburn Street	-
Sydney NSW 2010 Australia	/ \
T +61 414 755 620	
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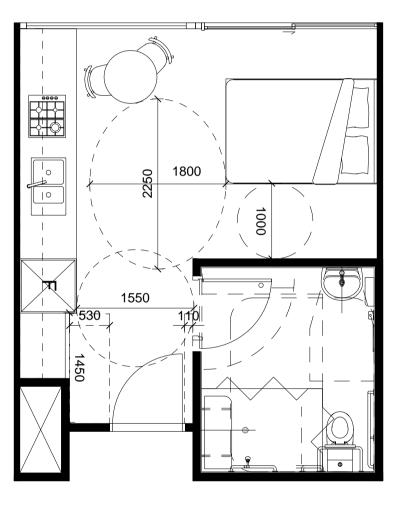
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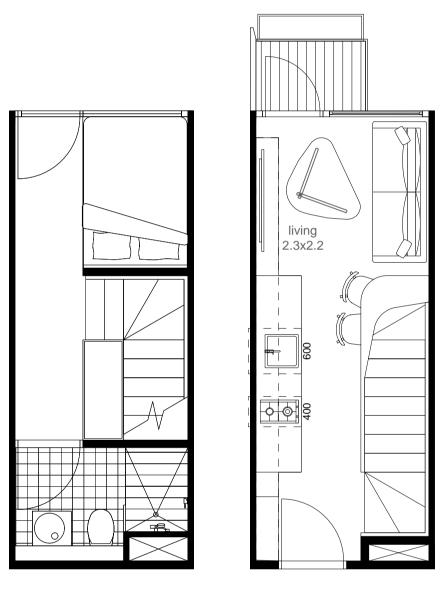
TYPE 1.5 total area: 19 sqm nett area: 16 sqm



TYPE 2.0 total area: 23 sqm nett area: 19 sqm



TYPE 2.0 acc. total area: 25 sqm nett area: 19 sqm



TYPE 2.5 total area: 24 sqm nett area: 21 sqm

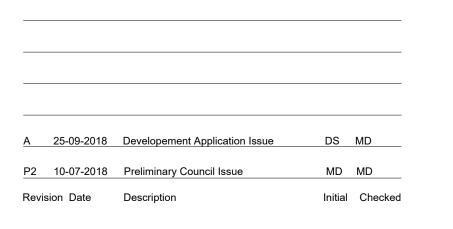
Typical Unit Plan

Layout Floor Plan

1:50 @a3

NOT FOR CONSTRUCTION

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195-197 Sydney Road
Fairlight

TYPICAL UNIT PLANS



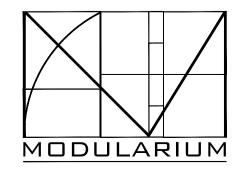
Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and/or the fabrication of any components.

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Plot Date

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Drawing No. [Revision]

A02.01[A]

14/10/2018 5:15 PM

M21701







metal

block screen

ground

horizontal spandrels

195-197 Sydney Road Fairlight

Initial Checked

Sydney Road and Rear Elevations

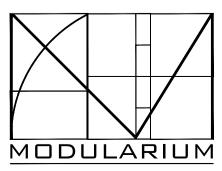
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Scale	1:250@A3 /	1:125@A1	
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Project No.	M21701		
Status			
Plot Date	14/10/2018 5:16	PM	
Plot File			
Drawing No.		[Revision]	

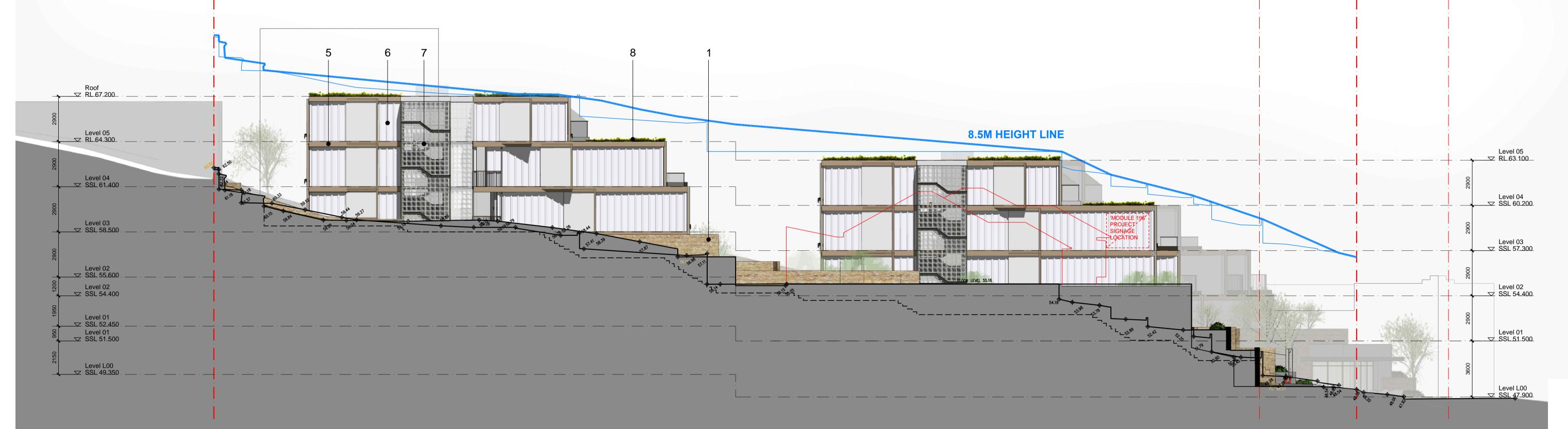
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A 25-09-2018 Developement Application Issue

P2 10-07-2018 Preliminary Council Issue

DS MD

MD MD

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195-197 Sydney Road	
Fairlight	
Side Elevations	

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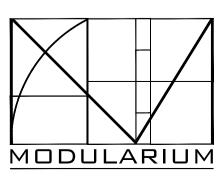
All drawings to be read in conjunction with all architectural documents and all other

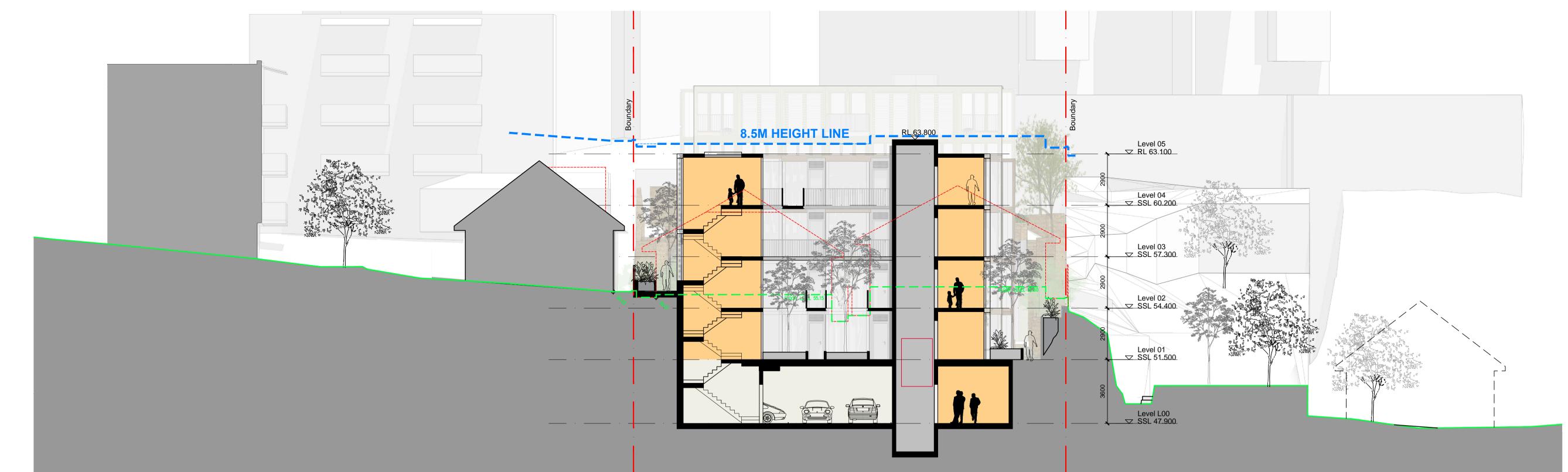
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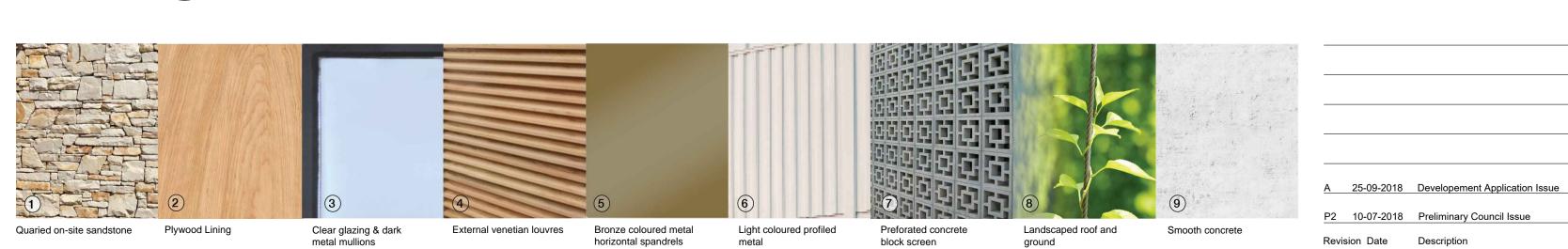
SECTION B - B

Cross Section Through Lobby 1:250 @a3



SECTION A - A Long Section

1:250 @a3



195-197 Sydney Road Fairlight SECTION A-A

DS MD

MD MD

Initial Checked

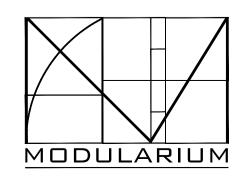
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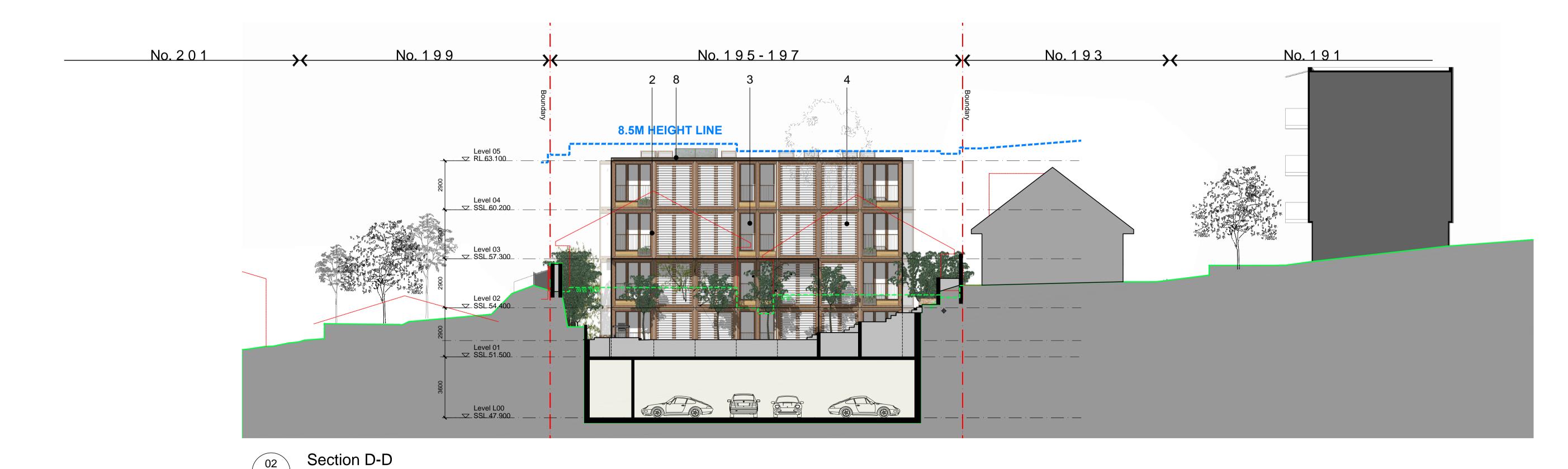
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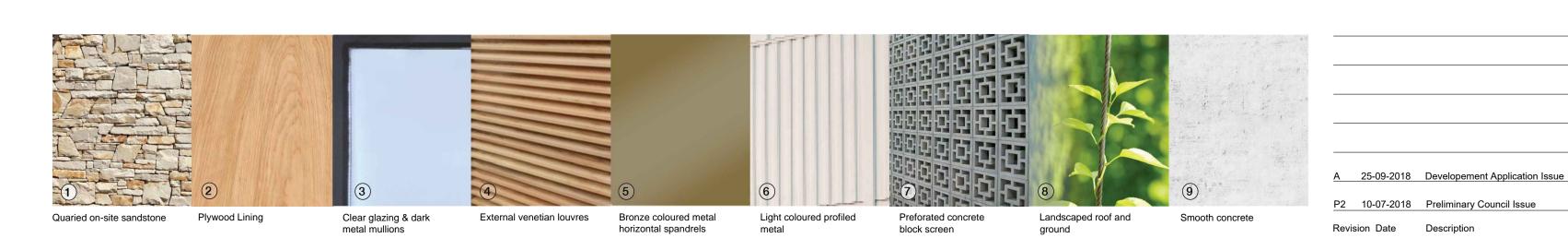
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Courtyard Elevation - South

1:250 @a3



MD MD

Initial Checked

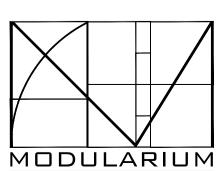
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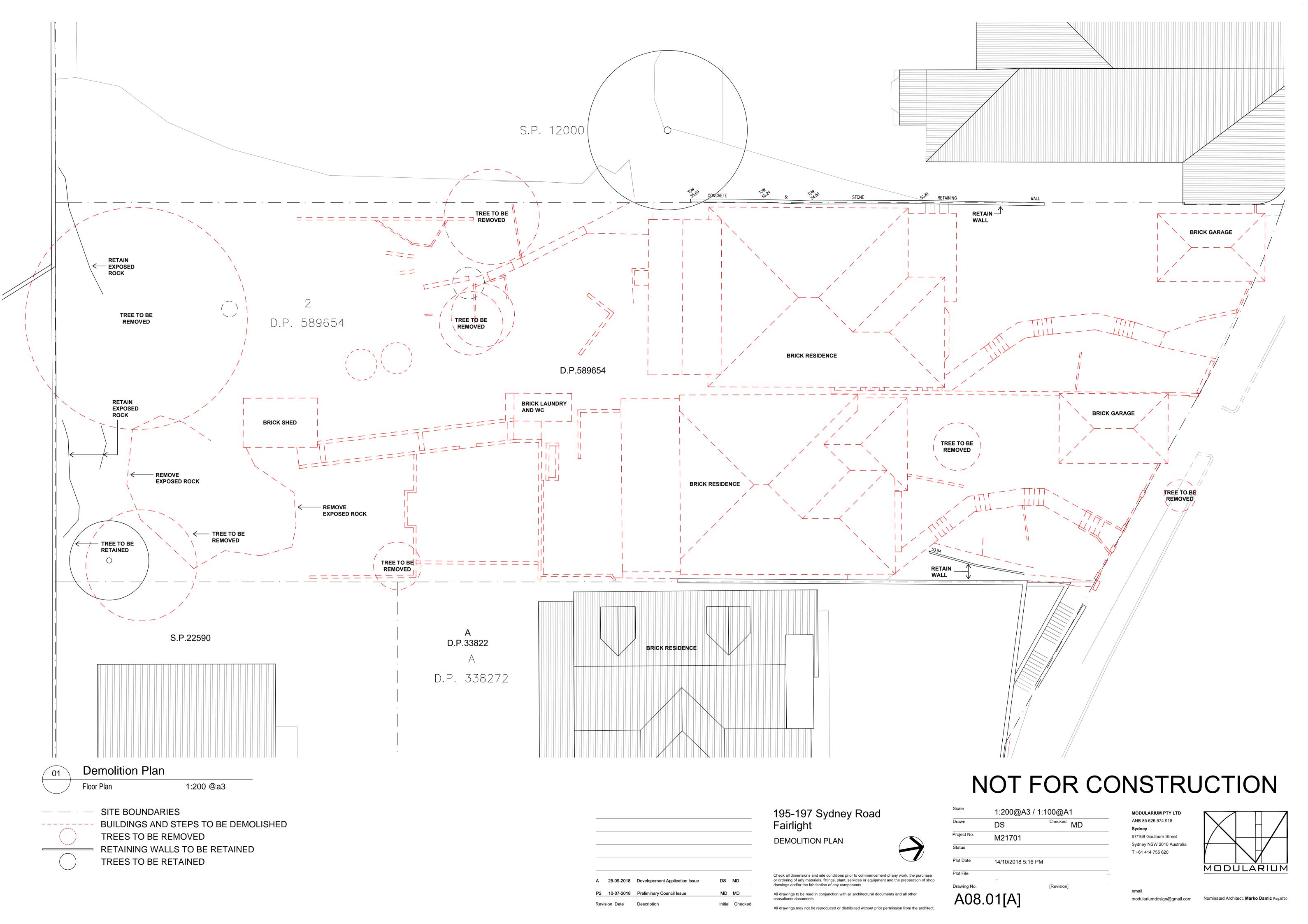
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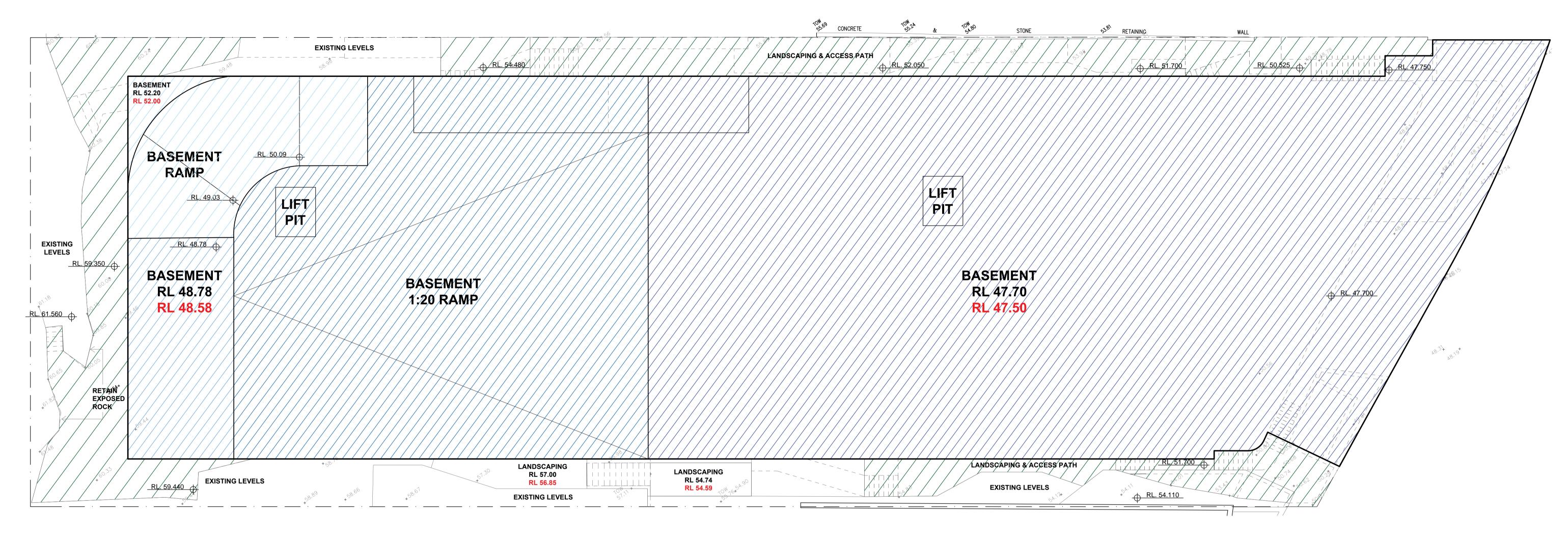
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Plot File			
Drawing No.		[Revision]	

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BUILDINGS / BASEMENT EXCAVATION

LANDSCAPING RE-CONTOURING

⊕ RL. XX.XX

PROPOSED FFL

RL. XX.XX

SLAB EXCAVATION LEVELS

RL. XX.XX EXISTING LEVELS

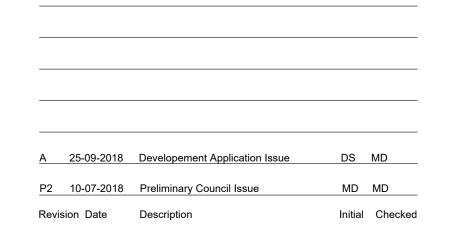
01

Excavation Plan

Floor Plan

1:200 @a3

NOT FOR CONSTRUCTION



195-197 Sydney Road Fairlight



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M21701		
14/10/2018 5:16 PM		
	[Revision]	
-	14/10/2018 5:16 PM 	14/10/2018 5:16 PM

1:200@A3 / 1:100@A1

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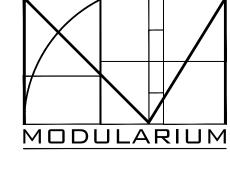
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Sydney

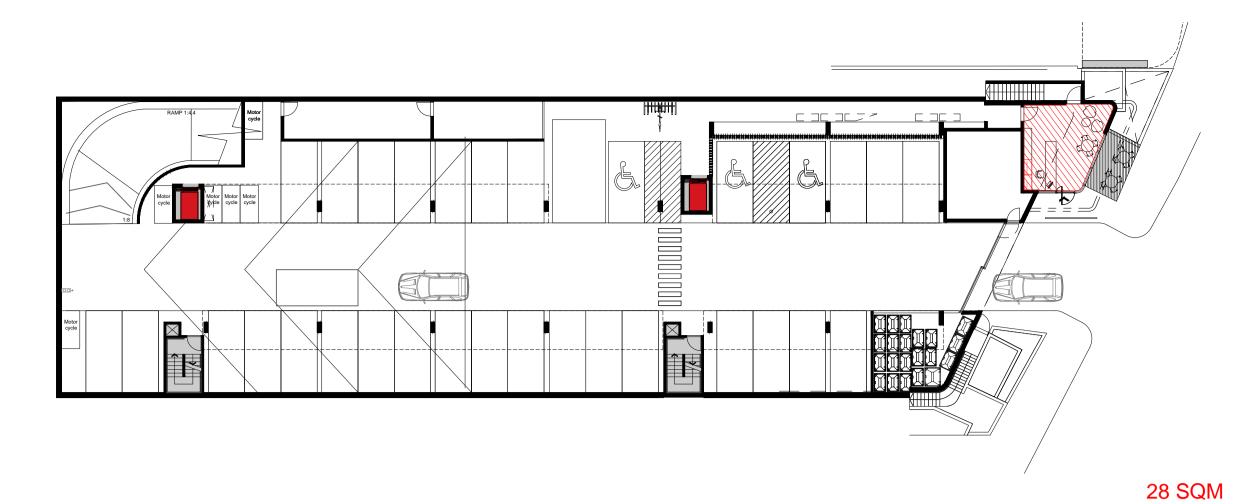
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[Revision] email modulariumdesign@gmail.com Nominated Architect: Marko Damic Reg.8730



Level 00 Plan Floor Plan 1:500 @a3

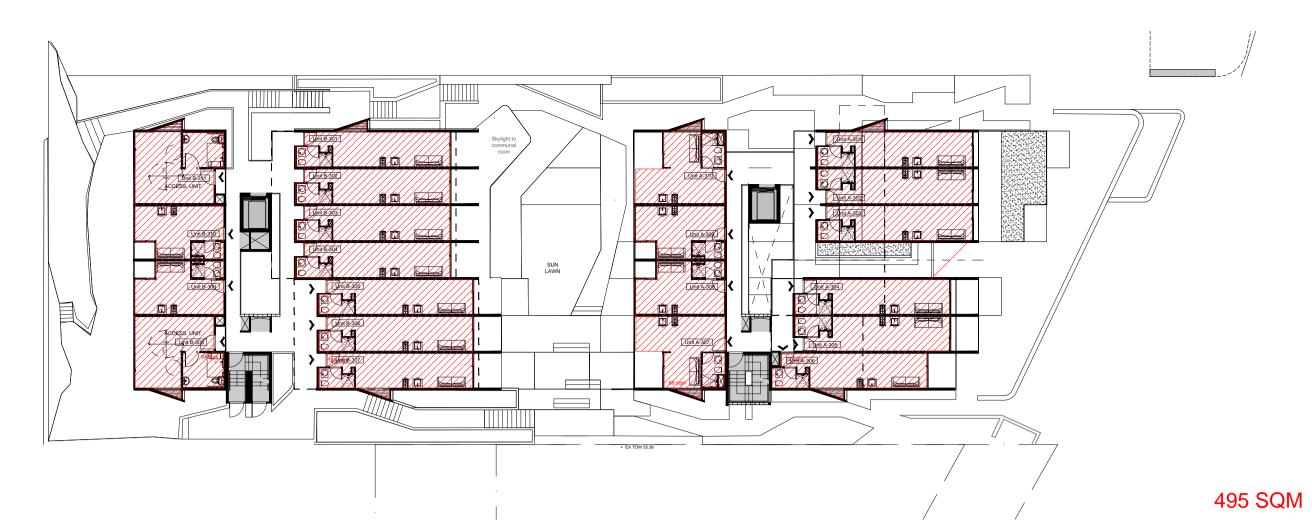


Level 01 Plan Floor Plan 1:500 @a3



Level 02 Plan Floor Plan 1:500 @a3

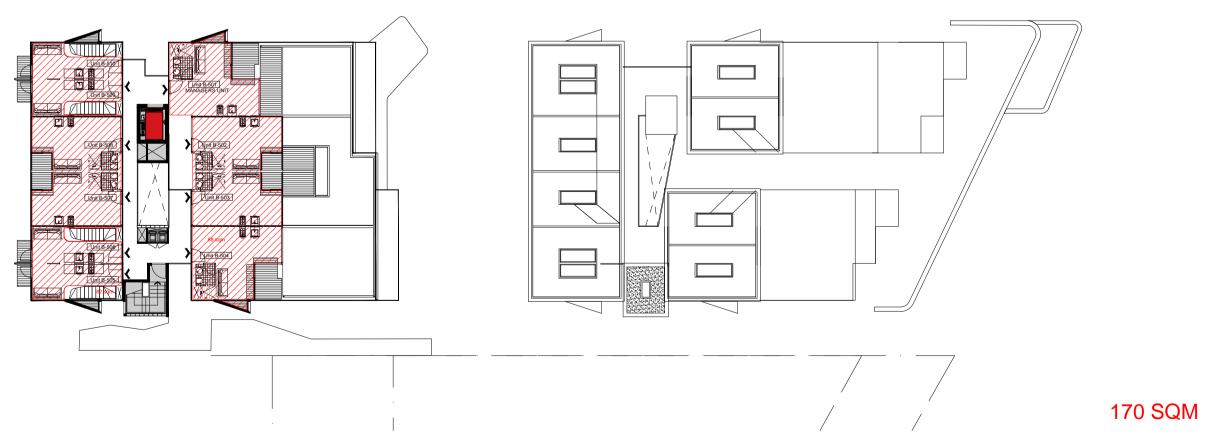
GFA Area Shown Hatched



Level 03 Plan Floor Plan 1:500 @a3



Level 04 Plan Floor Plan 1:500 @a3



Level 05 Plan Floor Plan 1:500 @a3

NOT FOR CONSTRUCTION

195-197 Sydney Road Fairlight GROSS FLOOR AREA PLANS



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modulariumdesign@gmail.com Nominated Architect: Marko Damic Reg.8730

A 25-09-2018 Developement Application Issue

1:250@A3 / 1:125@A1

M21701

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10AM JUNE 21ST

11AM JUNE 21ST









1PM JUNE 21ST

2PM JUNE 21ST

3PM JUNE 21ST





<u>A</u>	25-09-2018	Developement Application Issue	DS MD
P2	10-07-2018	Preliminary Council Issue	MD MD

195-197 Sydney Road Fairlight	
WINTER SOLSTICE VIEWS FROM THE SUN: PROPOSED	

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Drawn	DS	Checked	
Project No.	M21701		
Status			
Plot Date	14/10/2018 5:17	PM	
Plot File			
 Drawing No.		[Revision]	

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Sydney

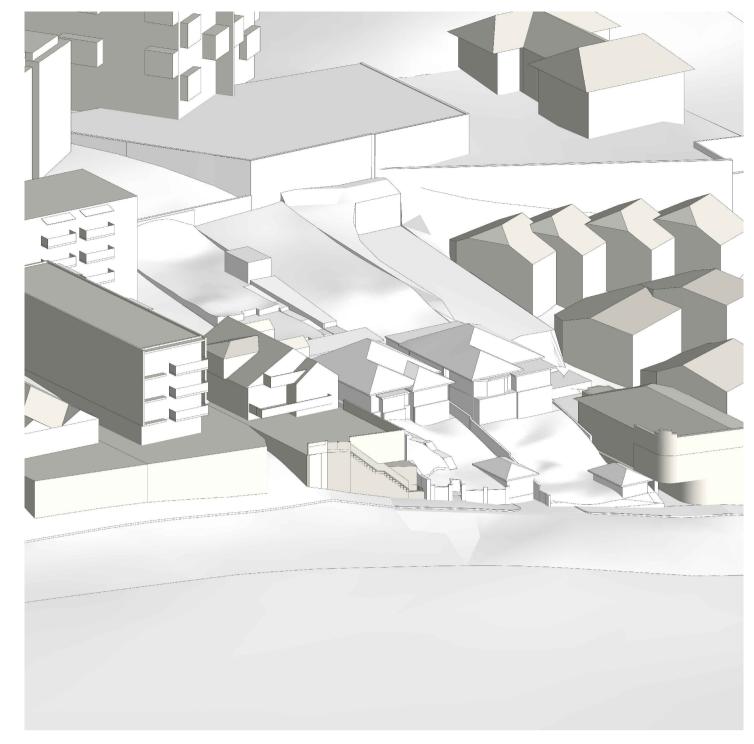
67/168 Goulburn Street

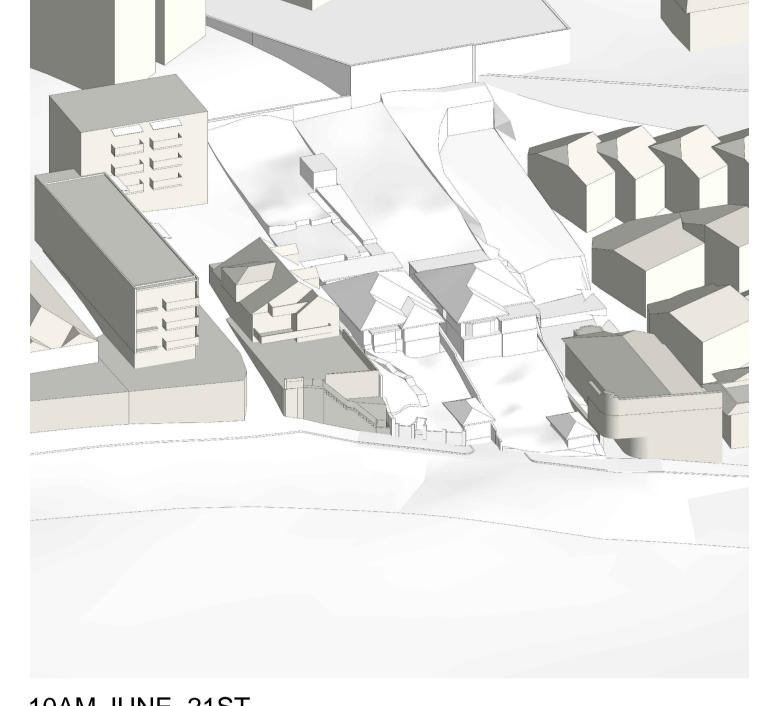
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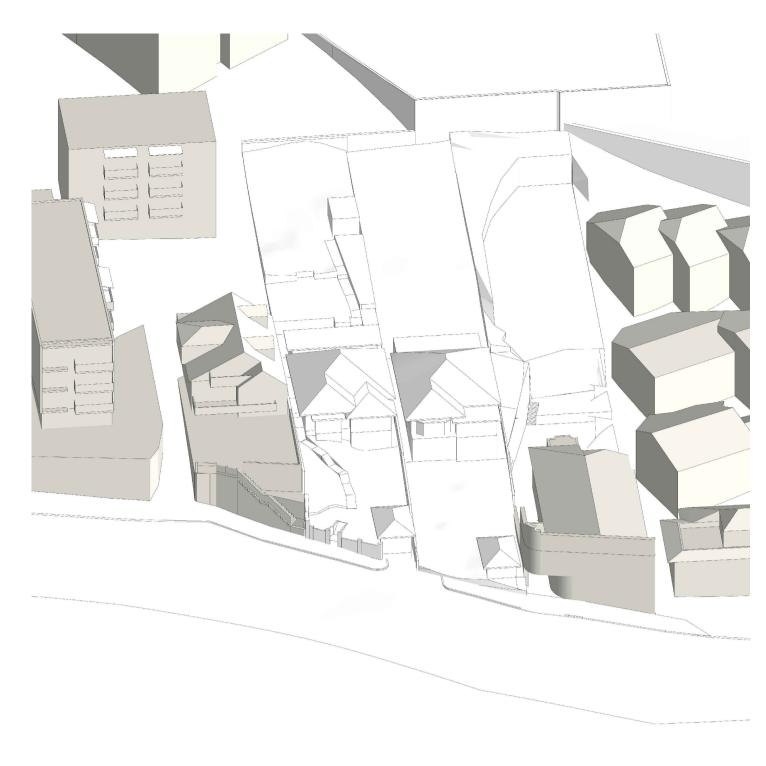
MODULARIUM

email modulariumdesign@gmail.com

om Nominated Architect: Marko Damic R

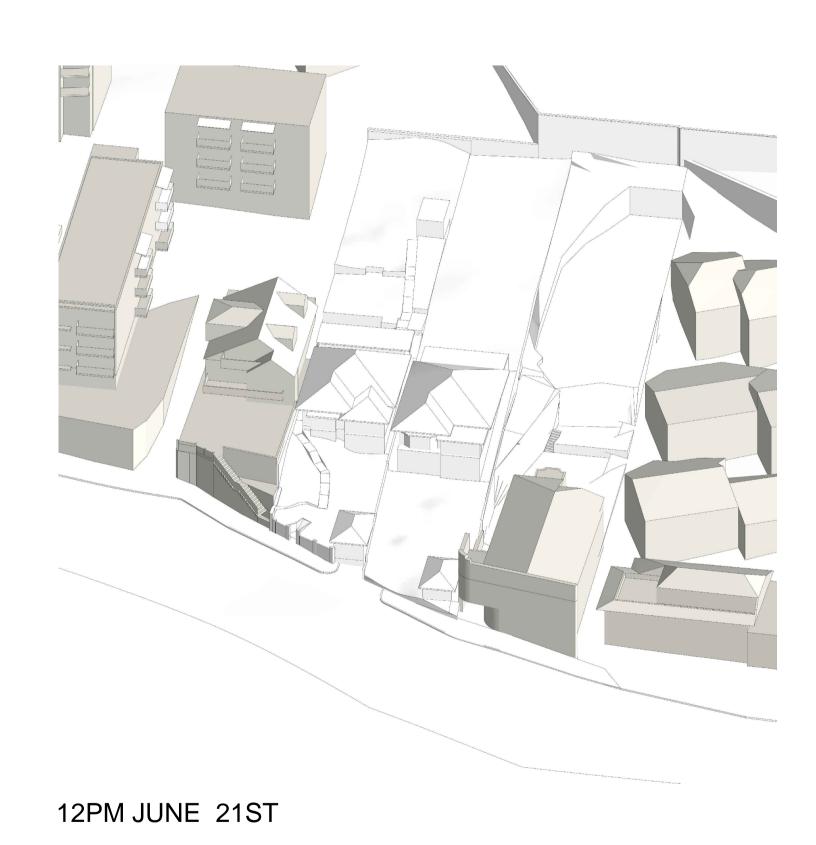


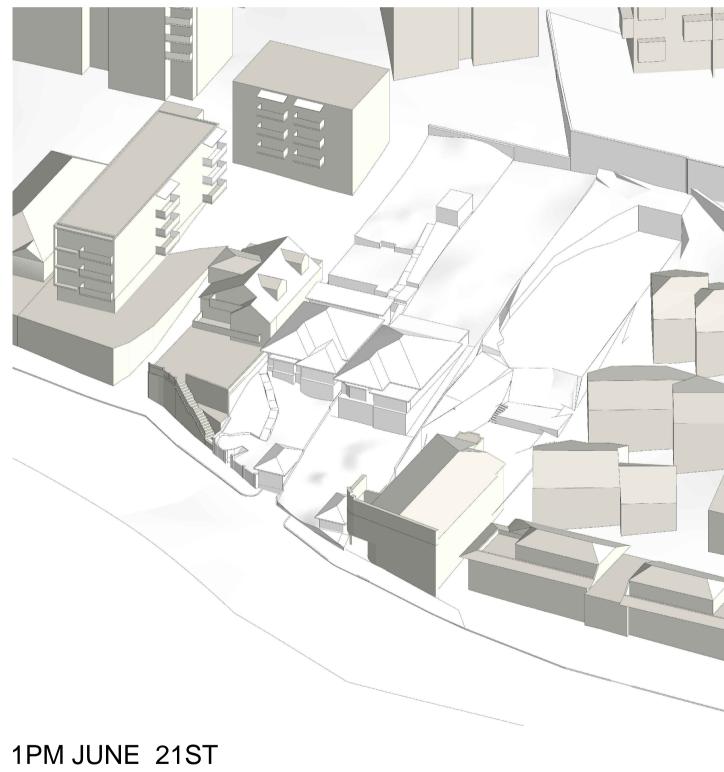


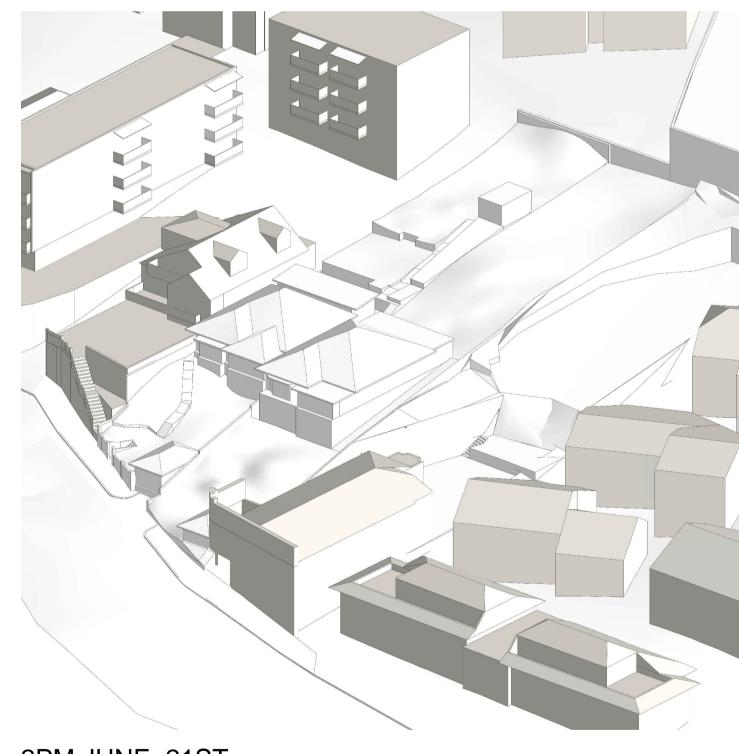


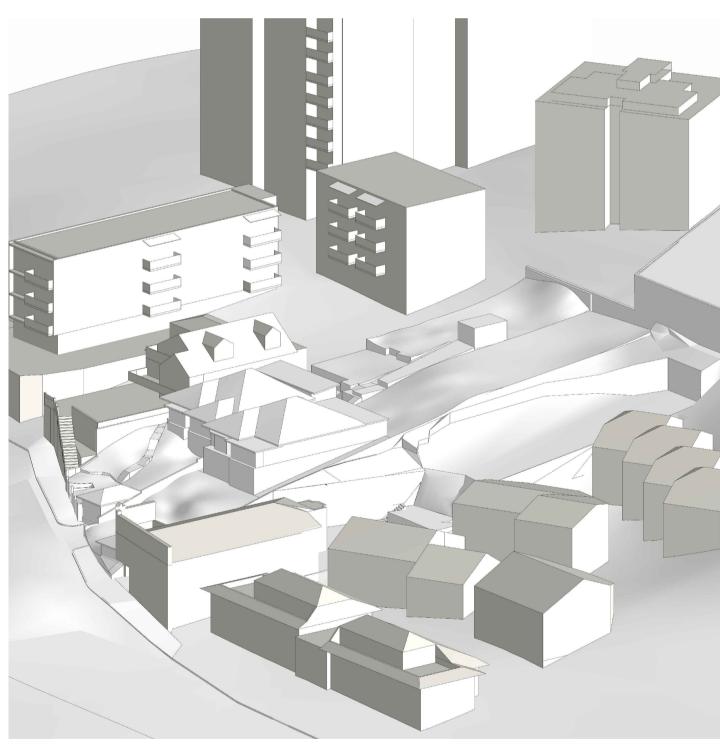
10AM JUNE 21ST

11AM JUNE 21ST









2PM JUNE 21ST

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 25-09-2018	Developement Application Issue	DS	MD

195-197 Sydney Road Fairlight	
WINTER SOLSTICE VIEWS FROM THE SUN: EXISTING	

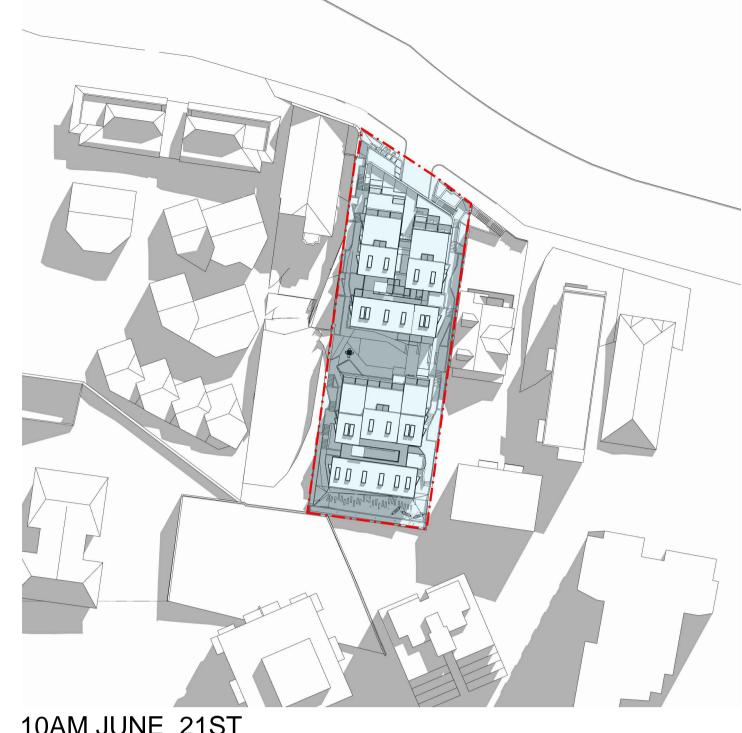
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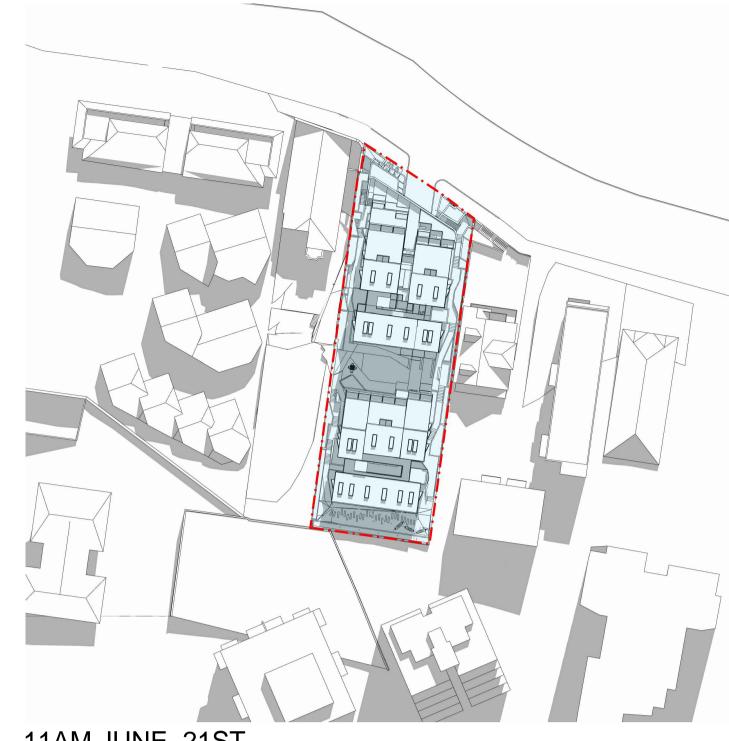
Il drawings to be read in conjunction with all architectural documents and all other onsultants documents.	
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Drawn	DS	Checked	
Project No.	M21701		
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Plot Date	14/10/2018 5:17 PM		
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Drawing No.		[Revision]	

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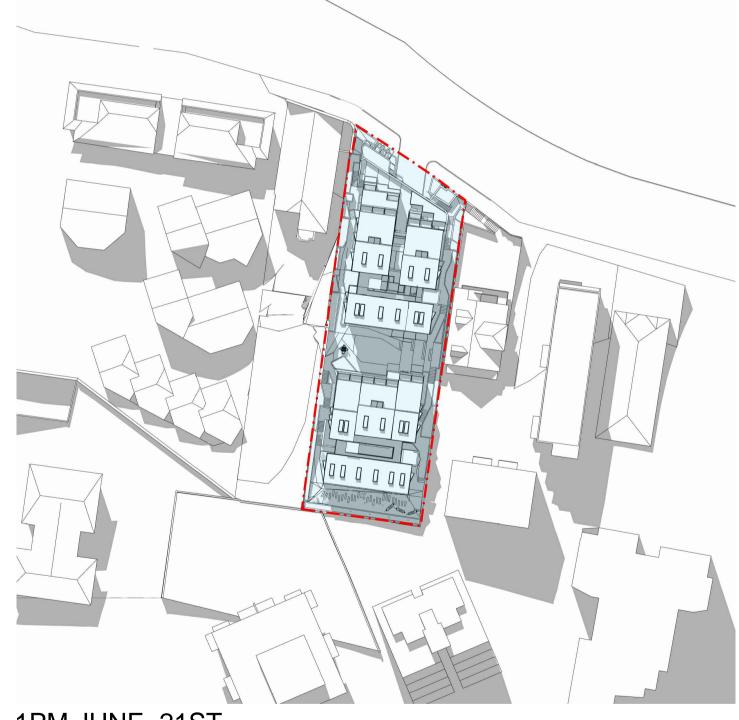


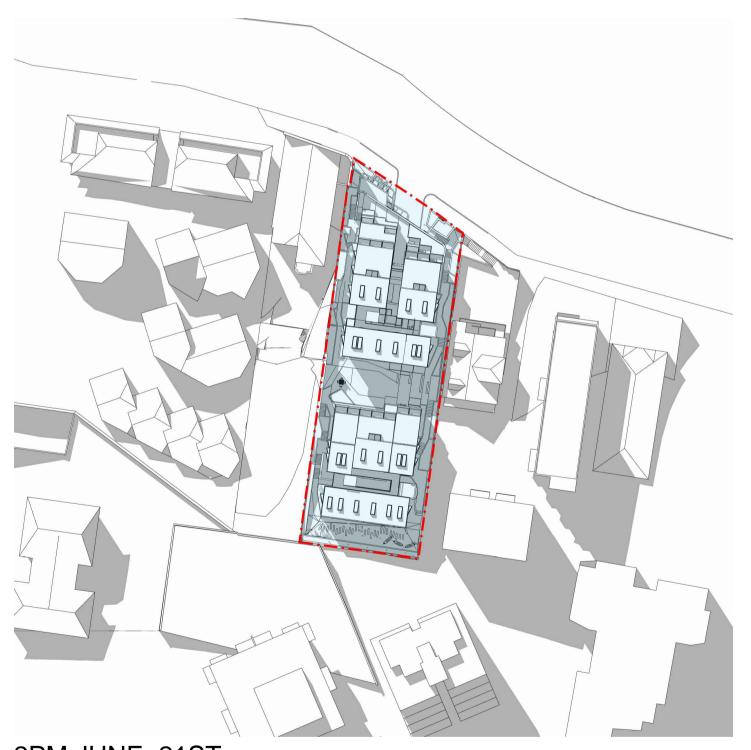


10AM JUNE 21ST

11AM JUNE 21ST









1PM JUNE 21ST

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3PM JUNE 21ST





<u>A</u>	25-09-2018	Developement Application Issue	DS	MD
P2	10-07-2018	Preliminary Council Issue	MD	MD

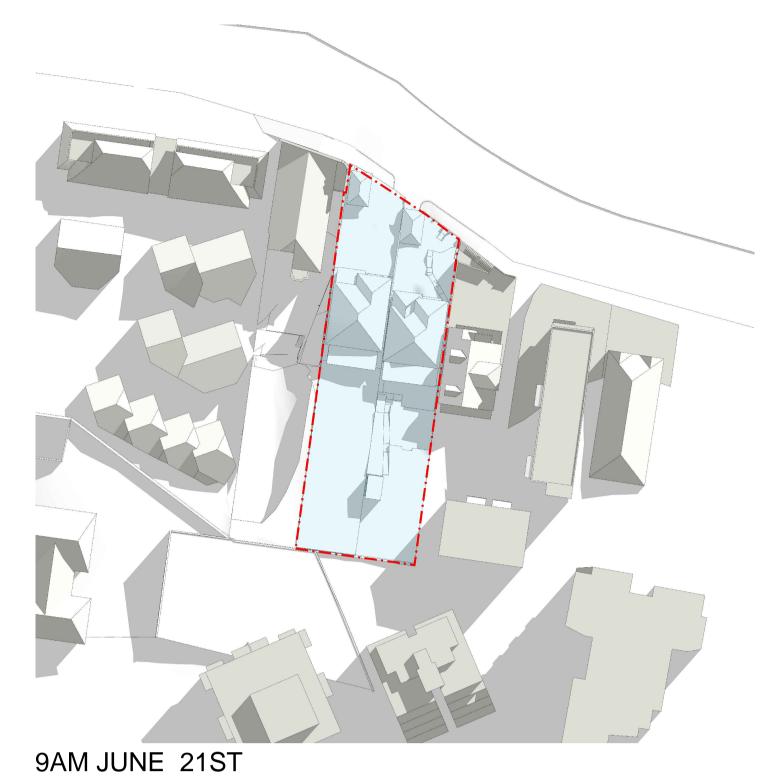
195-197 Sydney Road Fairlight
WINTER SOLSTICE SHADOW STUDY: PROPOSED
Check all dimensions and site conditions prior to commencement of any work, th or ordering of any materials, fittings, plant, services or equipment and the prepardrawings and/or the fabrication of any components.

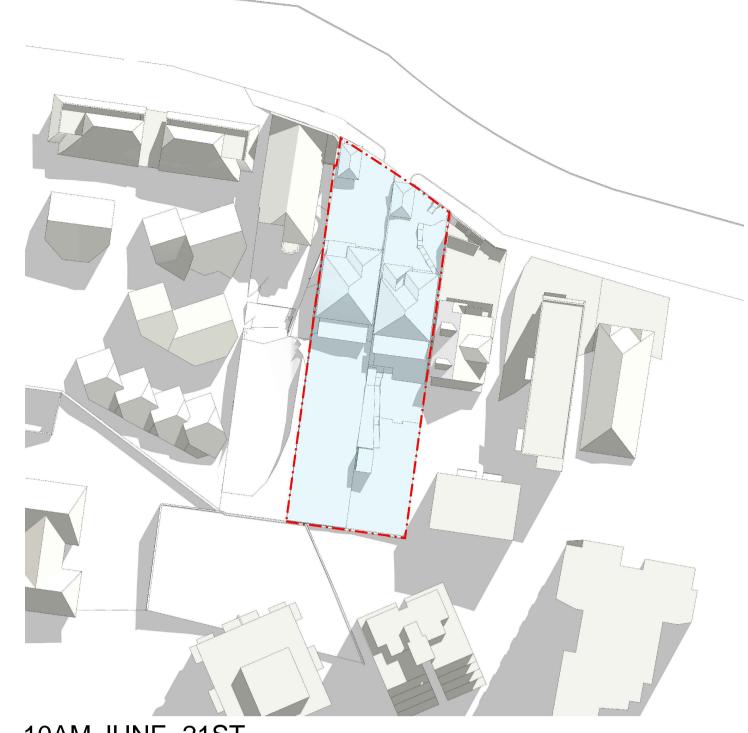
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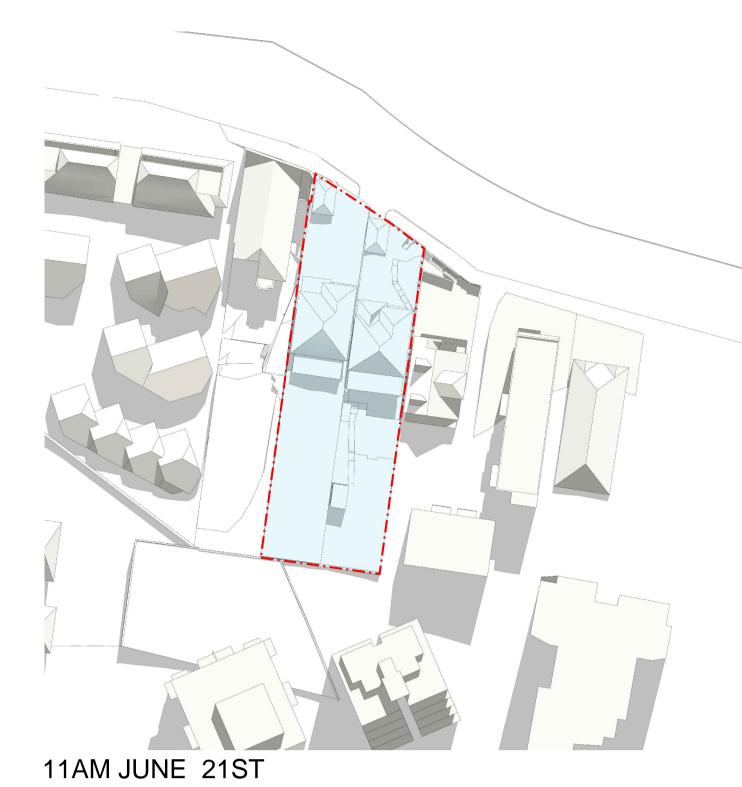
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Drawn	DS	Checked
Project No.	M21701	
Status		
Plot Date	14/10/2018 5:17 PM	
Plot File		
Drawing No.		[Revision]

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1PM JUNE 21ST



3PM JUNE 21ST



12PM JUNE 21ST

WINTER SOLSTICE
SHADOW STUDY: EXISTING

NTS

Revision Date	Description	Initial	Checked

 25-09-2018	Developement Application Issue	DS	MD

2PM JUNE 21ST

195-197 Sydney Road Fairlight
WINTER SOLSTICE SHADOW STUDY: EXISTING
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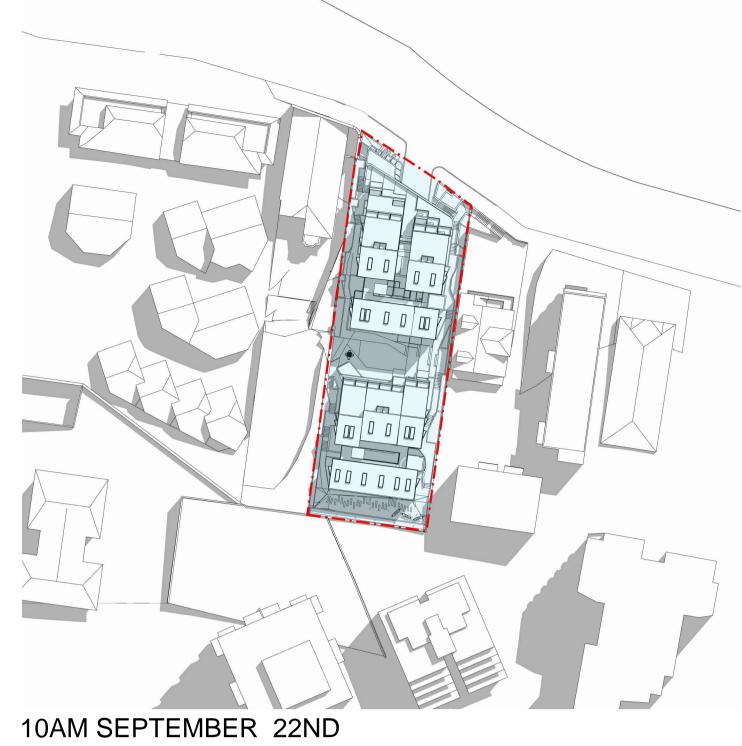
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Drawn	DS	Checked	
Project No.	M21701		
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Plot Date	14/10/2018 5:17	PM	
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2PM SEPTEMBER 22ND

3PM SEPTEMBER 22ND



12PM SEPTEMBER 22ND

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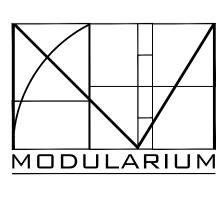
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<u>A</u>	25-09-2018	Developement Application Issue	DS	MD
P2	10-07-2018	Preliminary Council Issue	MD	MD
Revis	sion Date	Description	Initial	Checked

195-197 Sydney Road Fairlight
SPRING EQUINOX SHADOW STUDY: PROPOSED
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3PM DECEMBER 22ND



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Revision Date	Description	Initial	Checked	Rev

<u>A</u>	25-09-2018	Developement Application Issue	DS	MD
P2	10-07-2018	Preliminary Council Issue	MD	MD
Revi	sion Date	Description	Initial	Checked

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SUMMER SOLSTICE SHADOW STUDY: PROPOSED
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Plot File		
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