2016SYE001 – 668, 668A, 670 Kingsway and 1-3 University Road, Miranda

DA15/1552

ASSESSMENT REPORT APPENDICES

Appendix	A	Draft Conditions of Consent
	B	Architectural Review Advisory Panel Report dated 28 January 2016
	D	NSW Police Comments dated 14 January 2016
	E	Landscape Modification Plans version C dated 5 May 2016

DRAFT CONDITIONS OF CONSENT
Development Application No. DA15/1552

CONDITIONS OF CONSENT

1. Approved Plans and Documents (UNI2005)

The development must be undertaken substantially in accordance with the details and specifications set out on the Plan / Drawings:

Plan number	*Reference*	*Prepared by*	*Date*
No. 4791_DA_02 Issue: B	Site Plan	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_03 Issue: B	Basement 3	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_04 Issue: B	Basement 2	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_05 Issue: B	Basement 1	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_06 Issue: B	Ground Floor Plan	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_07 Issue: B	Level 1 Floor Plan	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_08 Issue: B	Level 2 Floor Plan	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_09 Issue: B	Level 3 Floor Plan	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_10 Issue: B	Level 4 Floor Plan	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_11 Issue: B	Level 5 Floor Plan	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_12 Issue: B	Level 6 Floor Plan	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_13 Issue: B	Level 7 Floor Plan	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_14 Issue: B	Roof Plan	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_20 Issue: B	Section AA	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_21 Issue: B	Section BB	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_22 Issue: B	North Elevation	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_23 Issue: B	East Elevation	Nettleton tribe PTY LTD	29 April 2016
No. 4791_DA_24	South Elevation	Nettleton tribe PTY	29 April 2016

Issue: B		LTD	
No. 4791_DA_25 Issue: B	West Elevation	Nettleton tribe PTY LTD	29 April 2016
No. No. 4791_DA_60	Exterior Finishes	Nettleton tribe PTY LTD	25 May 2016
DWG No. LPDA 16 -252/1 Issue C	Landscape Plan - Ground	Conzept Landscape Architects	5 May 2016
DWG No. LPDA 16 -252/2 Issue C	Landscape Plan Level 1	Conzept Landscape Architects	5 May 2016
DWG No. LPDA 16 -252/3 Issue C	Landscape Plan - Levels 2, 3, 4, 6 & 7	Conzept Landscape Architects	5 May 2016
DWG No. LPDA 16 -252/4 Issue C	Landscape Plan - Level 5	Conzept Landscape Architects	5 May 2016
DWG No. LPDA 16 -252/5 Issue B	Landscape Details and Specification	Conzept Landscape Architects	2 May 2016
DWG No. LPDA 16 -252/6 Issue B	Landscape Details 2	Conzept Landscape Architects	2 May 2016
SW-16 Issue A	Construction Management Plan	Insync Services Pty Ltd	2 December 2015
SW-00 Issue A	Stormwater Services Cover Sheet & Legend	Insync Services Pty Ltd	2 December 2015
SW-01 Issue A	Stormwater Services Site Plan	Insync Services Pty Ltd	2 December 2015
SW-02 Issue A	Basement Level 3 Inground Stormwater Services Plan	Insync Services Pty Ltd	2 December 2015
SW-03 Issue A	Basement Level 3 Stormwater Services Plan	Insync Services Pty Ltd	2 December 2015
SW-04 Issue A	Basement Level 2 Stormwater Services Plan	Insync Services Pty Ltd	2 December 2015
SW-05 Issue A	Basement Level 1 Stormwater Services Plan	Insync Services Pty Ltd	2 December 2015
SW-06 Issue A	Ground Level Stormwater	Insync Services Pty Ltd	2 December 2015

	Services Plan		
SW-07 Issue A	Level 1 Stormwater Services Plan	Insync Services Pty Ltd	2 December 2015
SW-08 Issue A	Level 2 Stormwater Services Plan	Insync Services Pty Ltd	2 December 2015
SW-09 Issue A	Level 3 Stormwater Services Plan	Insync Services Pty Ltd	2 December 2015
SW-10 Issue A	Level 4 Stormwater Services Plan	Insync Services Pty Ltd	2 December 2015
SW-11 Issue A	Level 5 Stormwater Services Plan	Insync Services Pty Ltd	2 December 2015
SW-12 Issue A	Level 6 Stormwater Services Plan	Insync Services Pty Ltd	2 December 2015
SW-13 Issue A	Level 7 Stormwater Services Plan	Insync Services Pty Ltd	2 December 2015
SW-14 Issue A	Roof Level Stormwater Services Plan	Insync Services Pty Ltd	2 December 2015
SW-15 Issue A	Stormwater Detention Tank Detail Sheet	Insync Services Pty Ltd	2 December 2015
SW-15 Issue A	Site Sediment & Erosion Control Plan	Insync Services Pty Ltd	2 December 2015

and any details on the application form and on any supporting information received with the application except as amended by the following conditions.

Note: The following must be submitted to Sutherland Shire Council prior to the commencement of any building or subdivision work

i) A Construction Certificate.
ii) Notification of the appointment of a Principal Certifying Authority and a letter of acceptance from that Principal Certifying Authority.
iii) Notification of the commencement of building and/or subdivision works with a minimum of 2 days notice of such commencement.

Under section 109E(2) of the Environmental Planning and Assessment Act 1979, please note that Sutherland Shire Council must be appointed as the Principal Certifying Authority for all subdivision works.

2. Design Changes Required (UNI2020)

A. Before Construction

The following design changes must be implemented:

i) Windows on Levels 1 - 3 in the southern elevation of the building closest to the southern boundary shall be modified as follows:

Living and dining rooms - highlight windows with a minimum sill height of 1.6m from floor level;
Bedroom 1 - east facing pop-out windows
Bedroom 2 - highlight windows;
Opaque glazing on the central corridor windows

ii) Modification of Unit G04 on the ground floor of the building to provide a minimum 3m pedestrian access from the main lobby through to the communal open space shown on the plan attached marked Appendix D. The remaining floor area can be incorporated within Unit G03 or be utilised as part of the lobby area.

iii) Windows shall be provided in northern elevation of the bedrooms and ensuites of Units 110, 211, 311 and 410.

Details of these design changes must be included in documentation submitted with the application for a Construction Certificate.

3. Public Place Environmental, Damage & Performance Security Bond (FIN1015)

A. Before Issuing of any Construction Certificate

Prior to the issue of a Construction Certificate or the commencement of any works on site, whichever occurs first, the person acting on this consent must provide security to Sutherland Shire Council against damage that may be caused to any Council property and/or the environment as a consequence of the implementation of this consent. The security may be provided by way of a deposit with Council or a bank guarantee. A non refundable inspection/administration fee is included in the bond value.

It is the responsibility of the person acting on this consent to notify Sutherland Shire Council of any existing damage to public areas in the vicinity of the development site by the submission of a current dilapidation report supported by photographs. This information must be submitted to Council at least 2 days prior to the commencement of works.

In the event that the dilapidation report is not submitted 2 days prior to commencement and the public area sustains damage the person acting on this consent may be held liable.

Should any public property and/or the environment sustain damage as a result of the works associated with this consent, or if the works put Council's assets or the environment at risk, Council may carry out any works necessary to repair the damage and/or remove the risk. The costs incurred must be deducted from the bond.

The value of the bond is $20,200

Note: Bond amount includes a non refundable administration fee which must be paid

separately if security is provided by way of a deposit with Council or a bank guarantee.

Use of Bank Guarantee - As bond releases may occur under different timeframes only one bond amount/bond purpose is permitted on a Bank Guarantee. Multiple bonds will require multiple bank guarantees to be lodged.

B. After Occupation

A request for release of the bond may be made to Sutherland Shire Council after all works relating to this consent have been completed. Such a request must be submitted to Council on the 'Bond Release Request Form' signed by the owner or any person entitled to act on the consent and must be accompanied by a current dilapidation report including photographs.

SECTION 94 CONTRIBUTIONS (FIN3000)

The following dedication of land and/or monetary contributions have been levied in relation to the proposed development pursuant to Section 94 of the Environmental Planning and Assessment Act 1979.

The Contributions Plan may be viewed on line on Council's web page (search for S94 Contributions Plan). A copy may also be viewed or purchased at the Customer Service Counter in Council's Administration Centre, Eton Street, Sutherland during office hours.

4. Monetary Contribution for Shire-Wide Open Space and Recreational Facilities (FIN2005)

A. Before Construction

Pursuant to Section 94 of the Environmental Planning and Assessment Act 1979 and Sutherland Shire Council's Contributions Plan - Shire Wide Open Space and Recreation Facilities 2005, a monetary contribution of $499,288.94 must be paid to Sutherland Shire Council toward the cost of land identified for acquisition and works contained in the Works Programme of the Contributions Plan.

This contribution has been assessed and calculated in accordance with the Shire Wide Open Space and Recreation Facilities 2005, Contribution Plan on the basis of 66 proposed Residential Flat Units, Apartments etc, with a concession for 5 existing allotments .

The contribution will be indexed on 1 July in each year in accordance with the Implicit Price Deflator for Gross Fixed Capital Expenditure - Private Dwellings, with amended rates being available from Council.

Payment must be made prior to the issue of the Construction Certificate.

5. Community Facilities, Shire Wide 2003 Plan (FIN2010)

A. Before Construction

A monetary contribution of $84,706.80 must be made for the cost of providing community facilities.

This contribution has been assessed pursuant to s.94 of the Environmental Planning and Assessment Act, and the Sutherland Shire Contributions Plan - Community Facilities in the Sutherland Shire, after identifying the likelihood that this development will require or increase the demand for community facilities within the shire. It has been

calculated on the basis of 66 proposed Residential Flat Units, Apartments etc, with a concession for 5 existing allotments .

The contribution will be indexed on 1 July in each year in accordance with the Implicit Price Deflator for Gross Fixed Capital Expenditure - Private Dwellings, with amended rates being available from Council.

Payment must be made prior to the issue of the Construction Certificate

6. S94 - Miranda Centre (FIN3015)

A. Before Construction

Pursuant to Section 94 of the Environmental Planning and Assessment Act 1979 and Miranda Centre Open Space Embellishment Plan, a monetary contribution of $175,161.12 must be paid to Sutherland Shire Council toward the cost of works contained in the Works Programme of the Contributions Plan.

This contribution has been assessed and calculated in accordance with the Miranda Centre Open Space Embellishment Plan on the basis of 66 proposed Residential Flat Units, Apartments etc, with a concession for 5 existing allotments .

The contribution will be indexed on 1 July in each year in accordance with the Implicit Price Deflator for Gross Fixed Capital Expenditure - Private Dwellings, with amended rates being available from Council.

Payment must be made prior to the issue of the Construction Certificate.

7. Approvals Required under Roads Act or Local Government Act (ENG1005)

A. Before Construction

No occupation or works are to be carried out on public land (including a road or footpath) or access provided over a public reserve adjacent to the development site without approval being obtained from Sutherland Shire Council and the necessary fee paid under the Roads Act 1993 and/or the Local Government Act 1993.

Note: Approval under the Roads Act or Local Government Act cannot be granted by a Principal Certifying Authority or by a Private Certifier. Failure to obtain approval may result in fines or prosecution.

8. Design and Construction of Works in Road Reserve (Council Design) (ENG2005)

A Design

Council has determined that the proposed development generates a need for the following works to be undertaken by the applicant in the road reserve. To this end an application under the Roads Act shall be submitted to Sutherland Shire Council, prior to the release of the Construction Certificate, for a road frontage design drawing and consent to undertake the required frontage works. This design will generally comply with the approved architectural design drawings, except where amended and/or addressing the following;

i) Establish the property alignment levels and crossing profiles,
ii) Construct vehicle crossing,

iii) Construct 1.2m footpath pavement and associated pram ramps against the front boundary along the entire frontage of University Road,
iv) Construct 2.5m wide shared pathway along the Kingsway frontage,
iv) Road pavement construction,
v) Kerb & gutter/edge strip where required,
vi) Alter / install street signage where required,
vii) Regrade, topsoil, turf and landscape the footpath verge to final design levels,
viii) Adjust public services infrastructure where required - Note : undergrounding of wires in both the Kingsway and University Road is required in Draft DCP2015 Ch7.8.2.14. Aerial bundling is acceptable in the Kingsway if undergounding not possible.
ix) Install 3 *Syncarpia glomulifera* (Turpentine) and 3 *Eucalyptus paniculata* (Grey Ironbark) street trees in the Kingsway, and 3 *Syncarpia glomulifera* (Turpentine) and 2 *Eucalyptus globoidea* (White Stringybark) street trees in University Ave
xi) Ensure there are adequate transitions between newly constructed and existing infrastructure.

Evidence of the approved application must be provided to the PCA prior to the release of the Construction Certificate.

B. Before Construction

Prior to the release of the Construction Certificate property alignment levels and crossing profiles must be obtained from Sutherland Shire Council.

C. Before Occupation

Prior to the occupation of the building or the issue of an Occupation/Subdivision Certificate the following certification must be provided to Sutherland Shire Council:

i) The supervising engineer must certify the road frontage works were constructed to their satisfaction and in accordance with the development consent and associated Roads Act consent.
ii) The supervising arborist, landscape designer or landscape architect must certify the street trees are the correct species and were installed in accordance with the development consent and associated Roads Act consent.

9. Site Management Plan (ENG2010)

A. Before Commencement of Works including Demolition

An Environmental Site Management Plan must accompany the application for a Construction Certificate. If demolition is to commence prior to the issue of a Construction Certificate the applicant must submit to Sutherland Shire Council a separate Demolition Site Management Plan. These plans must satisfy the Objectives and Controls of Sutherland Shire Development Control Plan 2015 relating to environmental site management and must incorporate the following throughout demolition and construction:

i) safe access to and from the site during construction and demolition
ii) safety and security of the site, road and footpath area including details of proposed fencing, hoarding and lighting
iii) method of loading and unloading excavation machines, building materials

iv) how and where, construction materials, excavated and waste materials will be stored.
v) methods to prevent material being tracked off the site onto surrounding roadways
vi) erosion and sediment control measures

B. During Works

The site management measures set out in the above plan must remain in place and be maintained throughout the period of works and until the site has been stabilised and landscaped.

10. Supervising Engineer (ENG4005)

A. Before Construction

The applicant must engage an Accredited Certifier in civil engineering works or a Charter Civil Engineer to supervise construction of any:
i) Road frontage works.
ii) Construction / installation of stormwater drainage.
iii) Rainwater harvesting & reuse.
iv) All other works that form part of a subdivision.

B. During Construction

The engineer must supervise the works as listed above to ensure compliance with:
i) All relevant conditions of development consent
ii) Any Consent issued under the Roads Act for this development

C. Before Occupation

The supervising engineer must certify the works required in “A” above were undertaken and completed in accordance with the requirements of this Development Consent and to their satisfaction.

11. Internal Driveway Profile (ENG4015)

A. Before Construction

An Access Application must be made to Council to obtain footpath crossing and boundary alignment levels before commencing the final design of internal driveways, paths and car park area.

B. Design

The internal driveway profile must be designed to:

i) Provide adequate sight distance for the safety of pedestrians using the footpath area.
ii) Align with Council's issued footpath crossing levels.
iii) Provide a maximum grade of 5% for the first 3 metres inside the property boundary.
iv) Comply with AS2890.1(2004) in relation to the design of vehicular access, parking and general manoeuvring for the B85 vehicle.
v) Comply with AS2890.2(2002) in relation to the design of vehicular access, parking and general manoeuvring for the B85 vehicle.
vi) The maximum longitudinal grade of the driveway must not exceed 25%.

Certification by an appropriately qualified person to the effect that these design requirements have been met must accompany the application for a Construction

Certificate.

12. Basement Car Park Design (ENG4025)

A. Design

The basement car park must be designed in accordance with AS 2890 and must incorporate the following:

i) A minimum headroom of 2.2m measured from the parking floor to the underside of any beam, ventilation duct or service conduit, or to the underside of any door including a security door and fittings when those doors are in an open position.
ii) Any garage must have a minimum width of 3m with a minimum door opening of 2.75m wide x 2.2m high clear of any necessary hinges, jambs or fixtures required for the operation of garage doors or any services within the garage area.
iii) The proposed security door fitted to the car parking area entrance must be independently mounted on rubber pads to prevent vibration noise transmission through the concrete walls and / or columns.
iv) A parking bay within each double garage must have a clear width of 3.8m, a clear length of 5.4m and a head height clearance in compliance with figure 2.7 of AS2890.6:2009, and
v) Where a remote controlled garage door is fitted when fully opened it not encroach into the space envelope specified in figure 2.7 of AS2890.6:2009.

B. Before Construction

Certification of the above must accompany the application for a Construction Certificate.

13. Drainage Design - Detailed Requirements (ENG5015)

A. Design

The stormwater drainage system must be connected to Council's existing piped system and designed in accordance with the approved stormwater drainage design drawing, Australian Standard AS3500.3:2003 and the BASIX Certificate issued for this development.

The design must include;

i) A detailed drainage design supported by a catchment area plan and drainage calculations (including a Hydraulic Grade Line Analysis).
ii) A layout of the drainage system showing existing and proposed pipe sizes, type, class, grades, lengths, invert levels, finished surface levels and location of all pipes with levels reduced to Australian Height Datum. Impacts on existing trees must be indicated on the plan.
iii) A longitudinal section of the pipeline within the road reserve including existing natural surface levels, design surface levels, design invert levels of the proposed pipeline and the location, size and reduced level of all services to AHD where those services cross the proposed drainage line.
iv) A physical barrier (eg. concrete kerb or earth mound within the landscaping) shall be provided around the perimeter of the site to prevent the discharge of surface water flows onto adjoining properties or the road reserve.
v) Water from pathways and access drives shall be prevented from entering the road reserve as surface flow. This can be achieved by constructing a box drain at the boundary equipped with a 300mm wide grate and frame to collect the flow or directing the flow to a sag pit within the property.

vi) The rate of discharge of stormwater from the site to a drainage system under Council's control shall be controlled so that it does not exceed the pre-development rate of discharge.
vii) The stormwater detention basin shall be densely planted and mulched to augment the landscape character of the site. The mulch shall be stabilised with a biodegradable material. The planting shall not materially reduce the volume of the stormwater detention required by this development.
viii) Where pipelines are located within the "tree protection zone" of significant vegetation to be retained, the lines shall be excavated by hand or by directional underboring techniques to reduce any adverse impact on the root zone of the trees.

B. Before Construction

Certification issued by an appropriately accredited person to the effect that these design requirements have been met must accompany the application for a Construction Certificate.

C. Before Occupation

The above work must be completed in accordance with 'A' above to the satisfaction of the supervising engineer before the issue of any Occupation Certificate.

Note: Upon approval of the stormwater management designs a notation will be added to the 149 certificate in relation to any required detention facility or stormwater treatment device.

14. Noise Control During Construction and Demolition (ENG6010)

To minimise the impact on the surrounding environment:

A. During Works

The LAeq sound pressure level measured over a period of 15 minutes when the construction or demolition site is in operation, must not exceed the ambient background level (LA90 15min) by more than 10dB(A) when measured at the nearest affected premises.

15. Damage to Adjoining Properties (ENG6015)

A. Before Works

To minimise vibration damage and loss of support to buildings / structures and properties in close proximity to the development site, a Geotechnical Engineers Report must be prepared detailing constraints to be placed on earth moving and building plant and equipment and the method of excavation, shoring, underpinning and support. This report must be provided to the person undertaking the excavation and the Principal Certifying Authority.

B. During Works

The constraints and recommendations of the Geotechnical Engineers Report must be implemented.

16. Public Utilities (ENG7005)

This condition is imposed to facilitate the provision of services to the development and reduce conflicts between services and lot boundaries, buildings or associated facilities.

A. Before Construction

Suitable arrangements must be made with all relevant utility service providers to ensure the development is appropriately serviced by electricity, gas, telecommunications and the like, and any necessary underground conduits are provided.

Note: Should these requirements result in any significant change to the approved design an application must be made to modify the consent under s.96 of the Environmental Planning and Assessment Act.

17. Garbage Collection (ORD9001)

A. Ongoing

A private garbage contractor must be engaged to carry out all garbage, recycling and green waste collections. The collection must take place within the loading bay located within the subject property.

18. Approved Landscape Plan (ENV2005)

A. Design Changes

The landscape works on the site must be carried out in accordance with the approved Landscape Plan except as amended by the following:

i) Provision of a second main entry to RL52.075 in the southern block of units from the street, by reconfiguring the fire stairs. Provide stairs and chairlift as required to enable universal access.
ii) Provision of all-weather awnings over the two main entries to help with wayfinding from the street.
iii) Provision of Common Open Space (COS) approx. 10m x 25m in the NW corner of the site, including a gate, seating and stepping stone path as shown in Attachment D.
iv) Provision of Private Open Space (POS) to all ground floor units including side fences and access/steps to deep soil garden areas as shown in Attachment D.
v) Relocation of the raised planters along the edge of the courtyards of units G05 and G06 from the deep soil area to adjoin the basement slab.
vi) Provision of secondary access and gates to the street for ground floor units G01-G03 as shown in Attachment D.
vii) Provision of secondary access, steps and gates to the main entry paths for units G07 and 110 as shown in Attachment D.
viii) Relocation of the 1200mm high palisade fence to 1m inside the front boundary as shown in Attachment D.
ix) To the Level 5 roof terrace:
    - Deletion of the two operable skylights.
    - Deletion of the double doors, Private Open Space (POS) and planter boxes on the southern side of unit 505. Provision of a planter box 2.0m wide with low screen planting to the southern wall of unit 505 as shown in Attachment D.
    - Reduction in size of the services area to approx. 4m x 8m, located in the SE corner of the terrace as shown in Attachment D.
    - Deletion of the small paved area, decking and planter boxes on the eastern and southern side of the toilet. Provision of a sitting area with canopy trees, screen planting to the services area and uninterrupted views to the NE as shown in Attachment D.
    - Provision of a shade structure 6m x 10m over a BBQ, basic kitchen facilities

and tables/chairs on the southern side of the toilet as shown in Attachment D.
- Provision of a privacy screen on the southern edge of the roof terrace as shown in Attachment D.

x) Tree Protection Zones (TPZ) must be shown on plan for all existing trees to be retained and protected.

xi) The communal open space areas and all planter boxes on slab must be provided with a water-efficient irrigation system, connected to a pump and the rainwater tank, to enable effective landscape maintenance.

xii) The private open space of each dwelling must be provided with one tap with a removable water key, connected to a pump and the rainwater tank.

xiii) As the subject site is identified as being within a Greenweb Restoration area, tree and understorey plantings shall be of mixed species at irregular centres, not at equal centres or in rows, to achieve a more informal character.

xiv) Substitution of the following species:
Backhousia myrtifolia (Grey Myrtle) and *Breynia oblongifolia* (Breynia) for *Acacia decurrens,*
Notolea longifolia (Mock Olive)and *Kunzea ambigua* (Tick Bush) for *Leptospermum laevigatum*

xv) New trees must not be planted closer than 3m to any building or structure.

The applicant must engage a suitably qualified Landscape Designer or Landscape Architect to oversee any design changes to the approved Landscape Plan and amendments required above. Details of these design changes must be included in the documentation submitted with the application for a Construction Certificate.

Notes:
A Landscape Designer is a person eligible for membership of the Australian Landscape Designers and Managers and a Landscape Architect is a person eligible for membership of the Australian Institute of Landscape Architects as a Registered Landscape Architect.

If demolition works to occur prior to the Construction Certificate being issued, tree protection measures must be installed prior to commencement of demolition.

B. Prior to Occupation/Occupation Certificate
The landscape works must be completed in accordance with the approved Landscape Plan and amendments required by ‘A’ above. A Final Landscape Inspection must be carried out and a certificate issued by Council's landscape officer prior to occupation or the issue of an occupation certificate (interim or final). This certificate is required to ensure that all landscaping works and the deep soil percentage requirements have been carried out in accordance with ‘A’ above, and that all new indigenous plants on the site and within the road reserve are the correct species.
To arrange a Final Landscape Inspection please phone 9710-0333 48 hours prior to the required inspection date. An inspection fee of $225 is required to be paid, prior to the inspection. Additional inspections will be charged at a rate of $150 each.

C. Ongoing
All landscaping works required by ‘A’ above must be maintained for 12 months following the final landscape inspection date.

Any plants found faulty, damaged, diseased or dead shall be replaced with the same species in the same sized container within one month with all costs borne by the owner.

Note: If difficulty is experienced sourcing suitable indigenous plants from other suppliers, plants grown from locally provenance seed may be available from:

Sutherland Shire Council Nursery
345 The Boulevarde, Gymea
Ph: 02 9524 5672

19. Trees on Private Land (Projects larger than Dual Occupancies) (ENV2030)

A. Tree Removal

The removal of the following trees is approved:

i) Trees identified on the approved Landscape Plan as "existing tree to be removed"

ii) Any declared noxious plant. The applicant is to ensure that all noxious plants are properly identified and controlled/removed.

iii) Any tree species exempted by the Sutherland Shire Local Environmental Plan 2015.

All other vegetation that would require approval to be removed must be protected.

20. Tree Retention and Protection (ENV2040)

A. Before Works

Prior to the commencement of any demolition, excavation or construction works on site the applicant shall engage a suitably qualified and experienced Arborist to oversee the measures for the protection of existing trees as listed below.

Note: An Arborist is a person with a current membership of the National Arborist's Association of Australia at a grade of General Member, Affiliate Member or Life Member, or alternatively a person who has obtained an Australian Qualifications Framework AQF Level 5 in Arboriculture.

Prior to the commencement of any works, including demolition, the supervising Arborist must oversee the protection of the following trees as listed in the table below and as marked on the approved Landscape Plan prepared by Conzept Landscape Architects (Issue C dated May 2016) to ensure the installation and adequacy of all tree protection measures.

Tree No.	Tree Species (botanical and common name)	Location
2	*Syzygium* spp. (Lilly Pilly)	Neighbouring property, SW corner of site
11	*Cinnamomum camphora* (Camphor Laurel)	Neighbouring property, middle of western boundary
14	*Eriobotrya japonica* (Loquat)	Neighbouring property, middle of western boundary
15	*Callistemon* spp. (Bottlebrush)	Neighbouring property, NW corner of site
16	*Acer negundo* (Box Elder)	Neighbouring property, NW corner of site
17	*Angophora costata* (Sydney Red Gum)	Middle of front (Kingsway) setback,

The trees identified for retention must be protected by the following measures:

i) Protective fencing constructed of 1.8m high chain wire mesh supported by robust posts must be installed in accordance with the Arborist's advice. Signage must be erected on the fence with the following words clearly displayed "TREE PROTECTION ZONE, DO NOT ENTER".
ii) The tree protection zone within the protective fencing must be mulched with a maximum depth 75mm of suitable organic mulch (woodchips or composted leaf chip mulch) and kept regularly watered for the duration of the works subject to this consent.
iii) No development or associated activity is permitted within the fenced tree protection zone for the duration of works subject to this consent. This includes vehicular or pedestrian access, sheds, washout areas, excavations, backfilling, installation of services (including stormwater), removal of top soil, stockpiling of soil or building materials.
iv) Where site access/egress is required over the roots of trees identified for retention and protection, provide hardwood rumble boards over a 200mm thick layer of wood chip.

B. During Construction

i) The tree protection measures detailed in 'A' above must be maintained during construction.
ii) The supervising Arborist must be present during any approved hand excavation or under boring works within the Tree Protection Zone (TPZ) of any tree identified for retention and protection and have the authority to direct works to ensure the trees long term preservation;
iii) The supervising Arborist must strictly supervise that there is no disturbance or severing of roots greater than 30mm diameter and to cleanly cut those roots between 10-30mm in diameter.
iv) If the trees identified for retention in 'A' above are damaged or destabilised during construction then works must cease and Council's Tree Assessment Officer (ph. 9710 0333) must be contacted to assess the trees and recommend action to be taken.

21. Car Wash Bays (HLT2005)

To prevent contamination of the stormwater drainage system 2 car-wash bay must be provided on site:

A. Design

The wash-bays must be graded to an internal drainage point and connected to the sewer.

B. Before Construction

Details of the design satisfying 'A' above must accompany the application for a Construction Certificate.

C. Before Occupation

The Principal Certifying Authority must be satisfied that

i) 'A' above has been complied with and
ii) any discharge to the sewer from the premises is in accordance with the requirements of Sydney Water.

D. Ongoing

All car-wash, engine degreasing and steam cleaning must be conducted in the wash-bays detailed in 'A' above. Wastewater must be treated in accordance with the requirements of Sydney Water.

22. Garbage, Recycling and Green-waste Storage Area (HLT3015)

To ensure the proper storage of waste from the premises:

A. Design

The garbage and recycling storage area must have a smooth impervious floor that is graded to a floor waste. A tap and hose must be provided to facilitate regular cleaning of the bins and all waste water must be discharged to the sewer in accordance with the requirements of Sydney Water. Garbage bins must be designed to prevent the escape of any liquid leachate and must be fitted with a lid to prevent the entry of vermin.

B. Before Construction

Details of compliance with 'A' above must form part of the documentation accompanying the applications for a Construction Certificate.

C. Before Occupation

The works must be completed prior to the issue of any Occupation Certificate.

D. Ongoing

All waste and recycling bins must be stored wholly within the approved waste storage area. The bins must only be put out for collection in the evening prior to pick-up and returned to the storage area as soon as possible after pick-up.

23. External Lighting - (Amenity) (HLT3025)

To ensure that any lighting on the site does not cause a nuisance to neighbours or motorists on nearby roads:

A. Design

All lighting must be designed in accordance with Australian Standard AS4282 - Control of the Obtrusive Effects of Outdoor Lighting.

B. Ongoing

All lighting must be operated and maintained in accordance with the Standard above.

24. Noise Control - Residential Air Conditioning Unit / Heat Pump Water Heater (HLT4005)

To minimise the noise impact on the surrounding environment:

A. Design

The unit must be designed and/or located so that noise generated does not cause an LAeq (15min) sound pressure level in excess of 5 dB(A) above the ambient background level when measured on or within any residential property.

B. Ongoing

i) The unit must be operated in accordance with 'A' above.

ii) Between the hours of 10.00pm and 8.00am on weekends and public holidays and 10.00pm and 7.00am any other day, noise emitted must not be heard within any residence with its windows and/or doors open or closed.

25. Noise Control - Design of Plant and Equipment (General Use) (HLT4010)

To minimise the impact of noise from the development, all sound producing plant, equipment, machinery, mechanical ventilation system or refrigeration systems:

A. Design

All plant and equipment must be designed and / or located so that the noise emitted does not exceed an LAeq sound pressure level of 5dB above the ambient background level when measured at the most affected point on or within any residential property boundary.

Note: The method of measurement of sound must be carried out in accordance with Australian Standard 1055.1.

B. Before Occupation

Certification must be provided by a qualified acoustic engineer that all work associated with the installation of the acoustic measures has been carried out in accordance with 'A' above.

C. Ongoing

All plant and equipment must be operated and maintained in accordance with 'A' above.

26. Noise from Road and / or Rail (HLT4050)

To minimise the impact of noise from the adjoining major road and / or rail corridor on the occupants:

A. Design

The building design must be in accordance with the recommendations of the acoustic report by Renzo Tonin & Associates dated 12 June 2015 approved as part of this application.

B. Before Construction

Details of the acoustic attenuation treatment must accompany the documentation forming part of the Construction Certificate.

C. Before Occupation

Details of the acoustic attenuation treatment must accompany the application for a Construction Certificate in accordance with 'A' above and must include all post construction validation test results.

27. Noise and Vibration Control - Residential Car Park (HLT4060

To minimise noise and vibration from use of the security door in the car park:

A. Design

The proposed security door fitted to the car parking area entrance must be independently mounted on rubber pads or otherwise installed to prevent vibration noise transmission through the concrete walls and / or columns.

B. Before Occupation

The Principal Certifying Authority must be satisfied that 'A' above has been complied with.

28. Building Ventilation (HLT5005)

To ensure adequate ventilation for the building:

A. Design

The building mechanical and / or natural ventilation systems must be designed, in accordance with the provisions of:

i) The Building Code of Australia;
ii) AS 1668 Part 1 - 1998;
iii) AS 1668 Part 2 - 1991;
iv) The Public Health Act - 2010;
v) The Public Health Regulation 2012;
vi) AS 3666.1 - 2002;
vii) AS 3666.2 - 2002; and
viii) AS 3666.3 - 2000.

B. Before Construction

Details of compliance with the above must form part of the documentation accompanying the application for a Construction Certificate.

C. Before Occupation

i) Certification must be provided by a qualified mechanical ventilation engineer that the installation of the ventilation system has been carried out in accordance with 'A' above.
ii) Occupation of the premises must not occur until a registration application has been submitted to Council's Environment and Health Regulation Department for any cooling tower / warm water system

D. Ongoing

The ventilation system must be operated and maintained in accordance with 'A' above.

29. Car-Park Ventilation - Alternate System (HLT5010)

To ensure adequate ventilation for the car park:

A. Design

As the basement car-park does not appear to comply with the natural ventilation requirements of Section 4 of Australian Standards AS1668.2 -1991, the car-park must be either mechanically ventilated by a system complying with AS1668.2 -1991 or alternatively, the natural ventilation system must be certified by a qualified mechanical ventilation engineer to the effect that the system is adequate. The certification shall confirm that the system will protect the health of occupants of the car park at anytime it

is used and satisfies the atmospheric contaminate exposure rates specified in the Worksafe Australia document: Workplace Exposure Standards for Airborne Contaminants.

B. Before Construction

Details of compliance with 'A' above must form part of the application for a Construction Certificate.

C. Before Occupation

Certification must be provided by a qualified mechanical ventilation engineer that the installation of the ventilation system has been carried out in accordance with 'A' above.

D. Ongoing

The ventilation system must be operated and maintained in accordance with 'A' above.

30. Demolition Work (HLT5015)

To ensure that demolition of structures is carried out in an environmentally acceptable and safe manner:

A. Before Commencement

If works involve the removal of more than 10 square metres of asbestos material, a bonded asbestos licence is required. A friable asbestos licence is required to remove, repair or disturb any amount of friable asbestos. For further information contact the NSW Workcover Authority.

B. During Works

i) The demolition of the existing building must be carried out strictly in accordance with Australian Standard 2601 - The Demolition of Structures.
ii) The applicant must ensure that the demolition contractor has a current public risk insurance coverage for a minimum of $5 million. A copy of the Policy must be submitted to the Council prior to demolition.

To ensure that the removal and transportation of any asbestos material, regardless of the quantity, is carried out in an environmentally acceptable and safe manner, all work must comply with the following:

a) Work Health and Safety Act 2011;
b) Work Health and Safety Regulation 2011;
c) Safe Work Australia Code of Practice - How to Manage and Control Asbestos in the Workplace;
d) Code of Practice for the Safe Removal of Asbestos 2nd Edition [NOHSC:2002(2005)];
e) Workcover NSW 'Working with Asbestos - Guide 2008';
f) Protection of the Environment Operations Act 1997; and
g) Protection of the Environment Operations (Waste) Regulation 2005.

Asbestos waste in any form must be disposed of at a waste facility licensed by the NSW EPA to accept asbestos waste. Any asbestos waste load over 100kg (including asbestos contaminated soil) or 10m² or more of asbestos sheeting must be registered with the EPA on-line reporting tool WasteLocate. More information can be found at <https://wastelocate.epa.nsw.gov.au>.

31. Dilapidation Report - Adjoining Properties (ORD1005)

A. Before Works

To assist in the resolution of any future disputes about damage to properties adjoining the development site, prior to commencement of any work on site the Applicant or principal contractor must provide dilapidation reports on the adjacent buildings at No 5 University Road and 672-674 Kingsway, including any basements and ancillary structures. The reports must be provided to the Principal Certifying Authority and to the owners of the properties that are the subject of the report.

The reports must be prepared by a suitably qualified and experienced person, such as a structural engineer.

32. Design Requirements for Adaptable Housing (ORD4010)

A. Design

A report prepared by a suitably qualified Adaptable Housing Specialist must be submitted with the Construction Certificate, demonstrating that the development complies with the requirements of AS4299 - Adaptable Housing. The report must contain a completed checklist (Appendix A - AS4299) demonstrating compliance with the requirements of a Class C Adaptable House.

33. Verification of Design for Construction - SEPP 65 (ORD4015)

A. Design

Design verification must be provided by a registered Architect pursuant to SEPP 65 stating that the design intent approved by the Development Consent has been maintained in the building / architectural plans submitted with the Construction Certificate. This must accompany the application for a Construction Certificate.

B. Before Occupation

Prior to the issue of the final Occupation Certificate design verification must be provided in accordance with SEPP 65.

34. Certification Requirement of Levels (ORD4035)

A. During Construction

At the following stages of construction:

i) Prior to the pouring of each floor or roof slab,
ii) Upon completion of the roof frame.

A registered surveyor must provide the Principal Certifying Authority with Certification that the stage of structure complies with the development consent in respect of levels.

B. Before Occupation

The certification referred to above must form part of the application for an Occupation Certificate.

35. Sydney Water Tap in™ & Compliance Certificate (ORD4040)

A. Before Construction

The plans approved as part of the Construction Certificate must be submitted to a

Sydney Water Tap in™ to determine as to whether the development will affect Sydney Water's sewer and water mains, stormwater drains and / or easements, and if further requirements need to be met. Customers will receive an approval receipt. Please refer to the web site www.sydneywater.com.au.

B. Before Occupation / Prior to issue of Subdivision Certificate

A Compliance Certificate under s73 of the Sydney Water Act, 1994, must be submitted to Council by the Principal Certifying Authority. Sydney Water may require the construction of works and/or the payment of developer charges.

Sydney Water Advice on Compliance Certificates:

An application must be made through an authorised Water Servicing Coordinator. For details see the Sydney Water web site at www.sydneywater.com.au\customer\urban\index\ or by telephone 13 20 92.

Following application a "Notice of Requirements" will be forwarded detailing water and sewer extensions to be built and charges to be paid. Please make early contact with the Coordinator, since building of water / sewer extensions can be time consuming and may impact on other services as well as building, driveway or landscaping design.

36. Dial Before You Dig (ORD4050)

A. Before Construction

Underground assets may exist in the area that is subject to your application. In the interests of health and safety and in order to protect damage to third party assets please contact Dial Before You Dig at www.1100.com.au or telephone on 1100 before excavating or erecting structures (this is the law in NSW).

It is the individual's responsibility to anticipate and request the nominal location of plant or assets on the relevant property via contacting the Dial before you dig service in advance of any construction or planning activities.

37. Noise Control and Permitted Hours for Building and Demolition Work (ORD5006)

A. During Works

To minimise the noise impact on the surrounding environment:

i) The LAeq sound pressure level measured over a period of 15 minutes when the construction or demolition site is in operation, must not exceed the ambient background level (LA90 15min) by more than 10dB(A) when measured at the nearest affected premises.

ii) All building and demolition work must be carried out only between the hours of 7.00am and 6.00pm Monday to Friday inclusive, 8.00am and 3.00pm Saturdays. No work must be carried out on Sundays and Public Holidays.

Only for the purpose of pouring large floor or roof slabs, work may be carried out on the site from 7.00am to 8pm Monday to Friday, excluding Public Holidays on a week day.

In order to activate the extended hours of operation both Council and affected neighbours must be notified a minimum of 48 hours prior to commencement. Affected neighbours include those in the immediate vicinity, adjacent or adjoining the development site. Notification must be by way of written advice including:

- Date/s the extended hours will be utilised.

- The purpose of the extended hours - pouring large slab.
- Address of the development works / site.
- Contact name and number of appropriate site officer (supervisor or manager) for enquiries.

Notification to Council must include a copy of the letter and a map or list identifying those affected neighbours who have been notified.

38. Toilet Facilities (ORD5010)

A. During Works

Toilet facilities must be available or provided at the work site at a ratio of one toilet plus one additional toilet for every 20 persons employed at the site before works begin and must be maintained until the works are completed.

Each toilet must:

i) be a standard flushing toilet connected to a public sewer, or
ii) have an on-site effluent disposal system approved under the Local Government Act 1993, or
iii) be a temporary chemical closet approved under the Local Government Act 1993

39. Street Numbering and Provision of Letter Box Facilities (ORD6005)

A. Before Occupation

i) Street / unit / shop numbers must be clearly displayed.
ii) Suitable letterbox facilities must be provided in accordance with Australia Post specifications.
iii) The dwellings must have the following street address format:

The building must be known as 1 University Road, Miranda.
The units must be numbered in accordance with the approved plans

40. Car parking Areas (ORD7015)

A. Ongoing

To ensure that the car parking area satisfies the demands of the development:

i) it must be made available on an unrestricted basis and free of charge at all times for visitors' vehicles
ii) any parking nominated as visitor parking or common property must be continually available as common property.

41. Car Parking Allocation (ORD7020)

A. Before Subdivision

Car parking must be allocated to individual strata lots as part of their unit entitlement.

Visitor parking facilities and/or car wash bays must be designated as common property on any strata plan.

Parking must be allocated on the following basis:

- Residential dwellings: 97 spaces
- Residential visitors: 17 spaces
- Car wash bay(s): 3 spaces

- Loading/servicing: 1 space

B. Ongoing

The car-parking provided must only be used in conjunction with the dwellings and/or tenancies contained within the development and not for any other purpose.

42. Loading and Unloading (ORD7035)

To preserve the amenity and ensure the safety of the public:

A. Ongoing

All loading and unloading of vehicles must be carried out within the site and not from the public roadway. All service/delivery vehicles must enter and leave the site in a forward direction.

43. Endorsement of Linen Plan of Subdivision for Consolidation

A. Before Construction

To facilitate the issue of the Plan of Subdivision for the consolidation of Lots 1, 2, 3, 4 & 5 in Deposited Plan No.7580 into one lot, a film eight (8) paper copies of the Plan of Subdivision shall be submitted together with any necessary Instrument under the Conveyancing Act, where required for ultimate lodgement with the Land Titles Office prior to issue of any construction certificate.

Amanda Treharne
Sutherland Shire Council

Attached are the prescribed conditions that must be complied with under the Environmental Planning and Assessment Regulations 2000.

PRESCRIBED CONDITIONS

Division 8A of the Environmental Planning and Assessment Regulation Prescribes the following conditions of development consent

S98 Compliance with Building Code of Australia and insurance requirements under the Home Building Act 1989

(cf clauses 78 and 78A of EP&A Regulation 1994)

(1) For the purposes of section 80A (11) of the Act, the following conditions are prescribed in relation to a development consent for development that involves any building work:
   (a) that the work must be carried out in accordance with the requirements of the Building Code of Australia,
   (b) in the case of residential building work for which the Home Building Act 1989 requires there to be a contract of insurance in force in accordance with Part 6 of that Act, that such a contract of insurance is in force before any building work authorised to be carried out by the consent commences.

(1A) For the purposes of section 80A (11) of the Act, it is prescribed as a condition of a development consent for a temporary structure that is used as an entertainment venue, that the temporary structure must comply with Part B1 and NSW Part H102 of Volume One of the Building Code of Australia.

(2) This clause does not apply:
   (a) to the extent to which an exemption is in force under clause 187 or 188, subject to the terms of any condition or requirement referred to in clause 187 (6) or 188 (4), or
   (b) to the erection of a temporary building, other than a temporary structure to which subclause (1A) applies.

(3) In this clause, a reference to the Building Code of Australia is a reference to that Code as in force on the date the application is made for the relevant:
   (a) development consent, in the case of a temporary structure that is an entertainment venue, or
   (b) construction certificate, in every other case.

Note. There are no relevant provisions in the *Building Code of Australia* in respect of temporary structures that are not entertainment venues.

S98A Erection of signs

(1) For the purposes of section 80A (11) of the Act, the requirements of subclauses (2) and (3) are prescribed as conditions of a development consent for development that involves any building work, subdivision work or demolition work.

(2) A sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:
   (a) showing the name, address and telephone number of the principal certifying authority for the work, and

(b) showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and
(c) stating that unauthorised entry to the work site is prohibited.

(3) Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

(4) This clause does not apply in relation to building work, subdivision work or demolition work that is carried out inside an existing building that does not affect the external walls of the building.

(5) This clause does not apply in relation to Crown building work that is certified, in accordance with section 109R of the Act, to comply with the technical provisions of the State's building laws.

(6) This clause applies to a development consent granted before 1 July 2004 only if the building work, subdivision work or demolition work involved had not been commenced by that date.

Note. Principal certifying authorities and principal contractors must also ensure that signs required by this clause are erected and maintained (see clause 227A which currently imposes a maximum penalty of $1,100).

S98B Notification of Home Building Act 1989 requirements

(1) For the purposes of section 80A (11) of the Act, the requirements of this clause are prescribed as conditions of a development consent for development that involves any residential building work within the meaning of the Home Building Act 1989.

(2) Residential building work within the meaning of the Home Building Act 1989 must not be carried out unless the principal certifying authority for the development to which the work relates (not being the council) has given the council written notice of the following information:
(a) the case of work for which a principal contractor is required to be appointed:
(i) the name and licence number of the principal contractor, and
(ii) the name of the insurer by which the work is insured under Part 6 of that Act,
(b) in the case of work to be done by an owner-builder:
(i) the name of the owner-builder, and
(ii) if the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.

(3) If arrangements for doing the residential building work are changed while the work is in progress so that the information notified under subclause (2) becomes out of date, further work must not be carried out unless the principal certifying authority for the development to which the work relates (not being the council) has given the council written notice of the updated information.

(4) This clause does not apply in relation to Crown building work that is certified, in accordance with section 109R of the Act, to comply with the technical provisions of the State's building laws.

S98E Condition relating to shoring and adequacy of adjoining property

(1) For the purposes of section 80A (11) of the Act, it is a prescribed condition of development consent that if the development involves an excavation that extends below the level of the base of the footings of a building on adjoining land, the person having the benefit of the development consent must, at the person's own expense:
   (a) protect and support the adjoining premises from possible damage from the excavation, and
   (b) where necessary, underpin the adjoining premises to prevent any such damage.

(2) The condition referred to in subclause (1) does not apply if the person having the benefit of the development consent owns the adjoining land or the owner of the adjoining land has given consent in writing to that condition not applying.

Please be advised if this consent is for an entertainment venue, then there are further prescribed conditions that apply under clauses 98C and 98D of the Environmental Planning and Assessment Regulation.

NOTES

1. The cutting down, lopping, injury and destruction of trees is regulated by Sutherland Shire Local Environmental Plan 2015 and Sutherland Shire Development Control Plan 2015. A person who contravenes, causes or permits the controls in relation to trees to be contravened is guilty of an offence. Trees designated to be removed on the approved plans under this consent may be removed unless specified otherwise in the conditions in this consent. All other trees on the site covered by Council's controls referred to above must be retained.

2. Section 82A of the Environmental Planning and Assessment Act confers on an applicant who is dissatisfied with the determination of the application the right to lodge an application with Council for a review of such determination. Any such review must however be completed within 6 months from this determination. Should a review be contemplated sufficient time should be allowed for Council to undertake public notification and other processes involved in the review of the determination.

   Note: Review provisions do not apply to Complying Development, Designated Development, State Significant Development Integrated Development or any applications determined by the Joint Regional Planning Panel or the Land and Environment Court.

3. Division 8 (Appeals and Related Matters) Part 4 of the Environmental Planning and Assessment Act 1979 confers on an applicant who is dissatisfied with the determination of the application a right of appeal to the Land and Environment Court of New South Wales.

4. This consent will lapse unless the development is physically commenced within 5 years from the Date of Operation of this consent, in accordance with Section 95 of the Environmental Planning and Assessment Act 1979 as amended.

DECISION

Pursuant to the provisions of Section 80(1)(a) of the Environmental Planning and Assessment Act 1979, Development Application No DA15/1552 is determined by the granting of approval subject to the conditions outlined in the Development Assessment Report attached to Council's file.

Architectural Review Advisory Panel

Proposal:
Demolition of 5 existing dwellings and construction of a residential flat building containing 66 residential units
Property:
668, 668A & 670 Kingsway MIRANDA NSW 2228
1 & 3 University Road MIRANDA NSW 2228
Applicant:
Livorno Two Pty Limited
File Number:
DA15/1552

The following is the report of the Architectural Review Advisory Panel Meeting held on 28 January 2016 at the Administration Centre, Sutherland Shire Council, Eton Street, Sutherland. The report documents the Panel's consideration of the proposed development described above.

1. **"DA15/1552 – Demolition of Existing Structures & Construction of a Seven (7) Storey Residential Flat Development Comprising Sixty-Six (66) Residential Apartments Over Three (3) Levels of Basement Car Parking at 1-3 University Road and 668-670 Kingsway, Miranda - JRPP**

Council's David Jarvis, Carine Elias and Barbara Buchanan outlined the proposal for the Panel, including providing details of Council's relevant codes and policies.

Jeremy Bishop, Simon Dahdah, Arthur Gartrell, Rob Frew and Andrew Darroch addressed the Panel regarding the aims of the proposal and the constraints of the site.

Description of the Site and Proposal
This DA proposal is for the demolition of existing structures and construction of a seven (7) storey residential flat development comprising sixty-six (66) residential apartments over three (3) levels of basement car parking at 1-3 University Road and 668-670 Kingsway, Miranda. The proposal will be determined by the JRPP. The site area is 2,872sqm.

The site is within Zone R4 - High Density Residential - the maximum FSR is 2.0:1 (5,747sqm GFA), maximum height of building is 25 metres and the minimum landscaped area is 30% of the site.

Key Controls
Sutherland Shire Local Environmental Plan 2015 (SSLEP 2015)
Sutherland Shire Draft Development Control Plan 2015 (SSDDCP 2015)

Applicant's Submission
The functions and responsibilities of the Panel were explained to the Applicant. The application is subject to State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development (Amendment No. 3), June 2015 and the Apartment Design Guide, June 2015.

PRINCIPLE 1 – CONTEXT AND NEIGHBOURHOOD CHARACTER

This large corner site is located in an evolving context site opposite a high school on a busy arterial road adjacent to the Miranda Town Centre. The site falls to its north and appears considerably higher than its Kingsway context. The proposal will provide beautiful local and district views from upper levels.

While the Architect was able to give an intelligent account for the building's siting and general organization, very little contextual information was provided, making its assessment quite difficult. Floating in the middle of the site, the proposal itself seems quite disengaged from its context, which includes an evolving development of the area also undertaken by the same Architect. This is disappointing, especially for a building of this scale.

The context will change rapidly with RFBs of a similar height and scale. It would have been useful to see the planning context on which the developable envelope for the lower height building to the south was based.

PRINCIPLE 2 – SCALE AND BUILT FORM

The plan of the building – a large T-shaped mass - appears to be more governed by generic setbacks and containment of solar impacts than a genuine strategic response to the corner, the site's topography, the emerging urban pattern or the local streetscape. While the building presents it highest massing to the north and steps down to its south, it does not produce two wings as much as a singular form subject to subtraction and elimination. The resultant open space is hard to access, lacking on spatial character, and appears largely defensive.

The circulation of the building – a double lift and scissor stair core that extends a double loaded corridor to the south - is very basic. Apart from an unpleasant entry and access experience, this strategy produces a very low level of solar and natural ventilation compliance. While the corridor shortens at upper levels, the building's sheer bulk is clearly hard to manage, especially given its width and proportions.

Rather than stepping the building or using a sectional strategy to address site levels, the proposal is buried in part, with many units located below street level. This is a sub-standard outcome for the site and its context. The snorkel bedrooms of the single sided units do not meet ADG requirements and should be redesigned.

While the built form is premised on the lower height building to the south, no urban framework drawing was presented. As a result the lift core is consolidated where the height is massed, creating a double loaded corridor, which in turn creates a building with apartments well under the natural cross ventilation requirement of the ADG.
An L-shaped layout with both wings defining the streets may be more responsive.

It would have been better if these more fundamental issues (layout, massing, access, built form) could have been presented and discussed at a pre-DA meeting.

PRINCIPLE 3 – DENSITY
The density is consistent with what is allowable and possible on the site. However such density requires a better resolution of site planning and apartment amenity. The proposed bulk and mass are not well handled nor successfully modelled into the site.

PRINCIPLE 4 – SUSTAINABILITY
The circulation strategy appears not to be able to produce sufficient cross ventilating units to satisfy ADG requirements.

Many of the apartments face north and are competently planned and laid out.

PRINCIPLE 5 – LANDSCAPE
The site is located in a restoration zone of the Greenweb. As such particular attention must be paid to ensuring appropriate species selection, which should be agreed with Council.

While no spot levels were provided on the landscape drawings, the survey shows a level change of up to 4 metres across the site. The floor level of the proposed building however is constant across the site at RL 48.60, so that there will be a significant volume of excavation; some apartments are well below natural ground level (up to 2 metres); a large amount of retention is necessary to maintain adjacent site levels at the boundaries; and access to open space is significantly compromised. It is not clear how the transition between building and boundaries levels is to be achieved without high retaining walls. Cut and fill should be balanced and the use of retaining walls minimised. Generally the landscape around the building has a poor relationship with adjacent street levels.

The communal open space is formed by the areas ‘left over’ after the building footprint has been determined. There is no easily identifiable primary open space area, and open space areas have insufficient access or provision for circulation and varied use. Functional and accessible (both physical and visual) open space should be incorporated as part of the site planning, with a variety of spaces provided (for individuals, groups, various ages and various activities).

Planting in the undercroft or significantly enclosed areas at the ground floor level and on level 3 may not perform or be easily maintained in constrained conditions and the design and specific treatment of these spaces should be reviewed. The location of the barbeque in a semi-enclosed, undercroft on level 3 should also be reviewed or a specific outdoor kitchen provided to suit the enclosed conditions.

There are two bedroom windows facing on to the communal open space area on level 3 which compromises the amenity of these rooms. Either the relevant apartments or rooms or the open space should be redesigned as necessary to avoid this conflict. This space has sufficient dimensions to provide a variety of spaces however only one use is proposed. An area could be provided that is more engaging for families with children.

PRINCIPLE 6 – AMENITY
The single core and double loaded corridor circulation strategy creates an unpleasant entry and access to the building and restricts natural cross ventilation compliance. It also restricts the building form from addressing its corner and creating a two winged form,

each with its own circulation. This exacerbates the building's bulk and scale. Refer to Landscape above regarding floor levels below adjacent street level.

Many of the adaptable units require the relocation of walls, which is untenable. It is not clear how the west facing façade controls solar access. Too many apartments have deep single orientation plans. If the built form followed the two streets for the allowable height plane there would be a greater surface area to volume ratio and there would be more opportunity for more apartments to have a less depth, wider aperture ratio. Two lift cores would also be more viable. Some of the ground floor apartments to the rear appear too low and may be too dark - again due to the single core not allowing the floor plate to step with the topography. The last one bedroom apartment will be further inundated with lights and noise from cars entering and leaving the building.

PRINCIPLE 7 – SAFETY

It is not clear how the building is accessed. The entry is below street level and appears to require a substantial descent from the footpath. The rear and side gardens appear inaccessible – this could become a security issue.

The entry could be more legible, light and airy. Currently a heavy planted terrace sits awkwardly over a single level. The height of the awning should be raised to at least the balustrade of the window above and separated from the fire stair to make it more directional and distinctive in the lift slot of the building.

PRINCIPLE 8 – HOUSING DIVERSITY AND SOCIAL INTERACTION

Acceptable. The window to the street from the lift core is commendable. There is a good mix of apartments.

PRINCIPLE 9 – AESTHETICS

At first glance, the building elevations appear to be well composed, utilizing a variety of differently sized panels to create a texture of open and closed elements. However, this requires refinement in terms of material and constructability. The panels for example look as though they should span between slabs, especially if they are lightweight and prone to deterioration.

While side elevations show promise, the street side is pushed into the ground, which is disturbing and should be reviewed. The front elevation appears quite settled in elevation but too exposed in the perspective with a dominance of glazed balustrades and an apparently unresolved assemblage of planters and columns. The expression of the building appears a bit rushed and requires more diligence and time to make it acceptable.

It is not clear what the building is made from and how it is put together. The elevations are at odds with the perspectives. Slabs appear at times to cap the fibre cement sheet blades and not at other times. Waterproofing and long term maintenance of the building needs careful detailing. Such a large project needs more consistency in the drawings and approach.

RECOMMENDATIONS/CONCLUSIONS:

The proposal is very schematic – perhaps rushed - with poor decisions affecting its siting and layout. The building is too large to rely on a single core and suffers as a result – especially in terms of bulk and proportion, internal amenity, streetscape and expression.

The built form and height to the north, stepping symmetrically back without any acknowledgement or variation to University Road, appear a lost opportunity to create a more positive built form and engagement with both streets. In so doing, a greater surface area to volume envelope with two cores should be explored to provide a much more airy and light-filled building.

The floor levels, building form and landscape design should be reviewed so that functional open space is better integrated into the development.

The Applicant is requested to respond to the suggestions of this ARAP report as part of the resolution of design quality issues arising from its submission. The Applicant's response should be descriptive and adopt a format of Panel suggestion and response, clearly transcribing the suggestion from the report, followed by the Applicant's response under each Principle."

Frank Stanisic
ARAP Chairman

16 February 2016

DA15/1552

Sensitive: Legal

NSW Police Force
www.police.nsw.gov.au

ISSUE:
Submission regarding Development Application No. DA15/1552 at Kingsway, Miranda and Universtiry Road, Miranda, submitted by Senior Constable Christopher Shade Reg'd No. 27402.

BACKGROUND:
See attached file.

RECEIVED
21 JAN 2016
AT

COMMENT:

Development Application No.: DA15/1552
Proposal: Demolition of 5 existing dwellings and construction of a residential flat building containing 66 residential units.

Property: 688 Kingsway, Miranda, 670 Kingsway, Miranda, 3 University Road, Miranda, 1 University Road, Miranda and 688A Kingsway, Miranda.

Police Ref: D/2015/ 674767

We refer to your development application which seeks approval for the development of a 6 level unit complex containing 66 residential apartments and three levels of basement car parking for 114 vehicles. The proposed development will result in an increase in activity, both in and around the location. Such activity will subsequently increase the risk of crime, along with increasing crime opportunities and potential offenders to the development and its surroundings.

After perusing the paperwork the following suggested treatment options are submitted for consideration including a number of Crime Prevention through Environmental Design (CPTED) factors that should be considered in this development.

Surveillance

The attractiveness of crime targets can be reduced by providing opportunities for effective surveillance, both natural and technical. Good surveillance means that people can see what others are doing. People feel safe in public areas when they can easily see and interact with others. Would-be offenders are often deterred from committing crime in areas with high levels of surveillance.

Miranda Local Area Command
34 Kingsway, Cronulla
Telephone 02 9527 8199 Facsimile 02 9527 8137 E/Net 58199 E/Fax 58137 TTY 9211 3776 (Hearing/Speech impaired)
ABN 43 408 613 180

Sensitive: Legal

Lighting and Technical Supervision

Lighting should meet minimum Australian standards. Effective lighting contributes to safety by improving visibility, increasing the chance that offenders can be detected and decreasing fear. Special attention should be made to lighting the entry and exit points from the buildings, pathways throughout the site, car park and access/exit driveways.

The access/exit driveways need to be adequately lit to improve visibility and increase the likelihood that offenders will be detected and apprehended. At the same time throughout the site transition lighting is needed to reduce vision impairment, i.e. reducing a person walking from dark to light places.

Security lighting should not illuminate observers or vantage points. Within the residential complex, observers are likely to be "inside" dwellings. Light should be projected away from buildings towards pathways and gates – not towards windows and doors. Additionally, the central pathway through the complex should provide adequate lighting for pedestrian safety. The attached development application does not specify such lighting considerations.

Landscaping

The safety objective of "to see and be seen" is important in landscaped areas. Research and strong anecdotal evidence suggests that vegetation is commonly used by criminals to aid concealment through the provision of entrapment pockets. Dense vegetation can provide concealment and entrapment opportunities.

Species can be selected for different locations on the basis of their heights, bulk and shape. A safety convention for vegetation is: lower tree limbs should be above average head height, and shrubs should not provide easy concealment. It is recommended that 3-5m of cleared space be located either side of residential pathways. Thereafter, vegetation can be stepped back in height to maximise sightlines.

Given the inclusion of shrubs and trees throughout the site within the proposed development, it must be emphasised that the vegetation be kept trimmed and maintained at all times.

Access Control

Physical and symbolic barriers can be used to attract, channel or restrict the movement of people. They minimise opportunities for crime and increase the effort required to commit crime. By making it clear where people are permitted to go or not go, it becomes difficult for potential offenders to reach and victimise people and their property.

Illegible boundary markers and confusing spatial definition make it easy for criminals to make excuses for being in restricted areas. The proposed development application does not specify access control measures throughout the development. It is, however, crucial that these access control measures be considered.

Consideration should be given to installing security shutters at the entry to the underground car park area. It is noted that the following 'can be conditioned' - "*where security measures to car parks are provided an intercom system shall be installed for visitors to gain entry. This system shall incorporate a CCTV system to ensure that the visitor space availability can be determined*" (Annexure B, SSDCP 2006 Compliance Table, p.15). **This security control measure should strongly be considered prior to approval of this development application.**

Police would recommend that all residents are allocated access cards to provide temporary activation of security shutters to the basement area. This security access control measure could also be used to gain access into the pool area – access/safety control measures are not specified within the development application.

The proposal does not specify the type of locks to be fitted to roller doors within the basement car park area. Police would recommend that garage doors are designed and installed to the Australian Standards, fitted with quality locks. Within the local area, a common modus operandi of break and enter offenders whilst targeting premises of similar nature, is to access the residential premise via the garage area Hence, quality deadlock sets should be fitted to internal doors leading from the garage area into individual townhouses. Storage doors within the garage area should also be fitted with quality deadlocks.

Police recommend that the underground car parking areas be painted white to greatly help to reflect light. Painted facilities not only look larger and more spacious than unpainted car parks, but can greatly reduce the number of lights required to illuminate the car park and on-going energy costs.

Police would suggest the use of CCTV to monitor the common areas, access/exit driveways and underground car parks to ensure resident safety and security.

Internal residential entrance doors and frames should be of solid construction. These doors should be fitted with quality deadlock sets, which comply with the Australian/New Zealand standards and Fire Regulations (Australian Building Code) to enable occupants to escape in emergency situations such as a fire. Consideration should be given to installing key operated locks to windows. In addition to this, consideration should be given to installing locks that allow for windows and doors in a partially open position.

Territorial Reinforcement

With few exceptions, criminals do not want to be detected, challenged or apprehended. For offenders, the capability of guardianship (to detect, challenge or apprehend) is an important consideration. It is argued that residents are more effective as guardians (crime deterrents) than passing members of the community.

Territorial reinforcement can be achieved through:

- ✓ Design that encourages people to gather in public space and to feel some responsibility for its use and condition
- ✓ Design with clear transitions and boundaries between public and private space
- ✓ Clear design cues on who is to use the space and what it is to be used for. Care is needed to ensure that territorial reinforcement is not achieved by making public spaces private spaces, through gates and enclosures.

Environmental Maintenance

Clean, well-maintained areas often exhibit strong territorial cues. Rundown areas negatively impact upon perceptions of fear and may affect community confidence to use public space and ultimately, it may affect crime opportunity. Vandalism can induce fear and avoidance behaviour in a public space, therefore the rapid repair of vandalism and graffiti, the replacement of car park lighting and general site cleanliness is important to create a feeling of ownership. Ownership increases the likelihood that people will report or attempt to prevent crime.

Many graffiti vandals favour porous building surfaces, as 'tags' are difficult to remove. Often a ghost image will remain even after cleaning. Easily damaged building materials may be less expensive to purchase initially, but their susceptibility to vandalism can make them a costly proposition in the long term, particularly in at-risk areas. This should be considered when selecting materials for construction.

The overall design of the outdoor "common areas" should include low barrier vegetation, bright/even lighting, wide/even paving, effective guardianship and an absence of entrapment opportunities. In addition to visible street numbering at the entrance to the complex, and throughout, this development should contain clearly signposted directional signage to assist both visitors and emergency services personnel.

Other Matters

Lighting

Offenders within the area target this type of development, both in its construction phase and when the units are occupied. Police would recommend the use of security sensor lights and a security company to monitor the site while construction is in progress.

Car Park Security

One of the major issues that have been brought to Police attention in this Local Government Area is the prevalence of offenders breaching the security access to the car park areas, and breaking into the vehicles. Due to the isolation of the garages, these offences are not usually noticed by the owners until much later. It is suggested that this area be monitored by CCTV and appropriately sign-posted to deter potential offenders.

Way-finding

Way-finding in large environments such as this proposed development site can be confusing. Design and definitional legibility is an important safety issue at these locations. Knowing how and where to enter and exit, and find assistance within the development, can impact perceptions of safety, victim vulnerability and crime opportunity. Signage should *reinforce*, but not be an alternative to legible design.

Letter Boxes

Mail theft/identity theft costs the community millions of dollars annually and due to the size of this proposal (66 units) and the volume of mail that will be delivered, it is highly recommended the letter boxes are secured in the foyer area with access via a 'swipe card' or the entry door be fitted with quality locks that are approved by Australian Standards. Multi storey residential apartment's are prime targets for mail and identity theft offenders. Letter boxes that are positioned on the outside of the unit complex are easily accessible by a 'master key' or residents leaving their letter boxes unlocked.

Windows

Chemically hardened glass and toughened glass with PVB interlayer and transparent polycarbonate sheeting can be an effective alternative to 'normal' glass in certain high risk applications. When properly fitted, they are resistant to breakage. Older stylr polycarbonates can be negatively affected by UV and scratching. New protective films have reduced this problem.

The NSW Police Force (NSWPF) has a vital interest in ensuring the safety of members of the community and their property. By using recommendations contained in this evaluation any person who does so acknowledges that:

- *It is not possible to make areas evaluated by the NSWPF absolutely safe for the community and their property*
- *Recommendations are based upon information provided to, and observations made by the NSWPF at the time the evaluation was made*
- *The evaluation is a confidential document and is for use by the Council or the organisation referred to on page one*
- *The contents of this evaluation are not to be copied or circulated otherwise than for the purpose of the Council or the organisation referred to on page one.*
- *The NSWPF hopes that by using recommendations contained within this document, criminal activity will be reduced and the safety of members of the community and their property will be increased. However, it does not guarantee that the area evaluated will be free from criminal activity if its recommendations are followed.*

LEGEND & SCHEDULE

Note: *Landscape Contractor to confirm plant quantities with Landscape Architect prior to ordering*

(*) indicates trees selected from Sutherland Shire Councils Native Plant Selector

TREES

Botanical Name: *Tristaniopsis laurina**
Common Name: Watergum (Native)
Pot size: 75Lt
Mature H x S: 5-8m x 3-5m
Qty Required: 11

Botanical Name: *Eucalyptus haemastoma*
Common Name: *Scribbly Gum* (Native)
Pot size: 100Lt
Mature H x S: 12m x 7m
Qty Required: 6

Botanical Name: *Eucalyptus punctata**
Common Name: Grey Gum (Endemic)
Pot size: 200Lt
Mature H x S: 13-25m x 5-10m
Qty Required: 1

Botanical Name: *Syncarpia glomulifera**
Common Name: Turpentine (Endemic)
Pot size: 75Lt
Mature H x S: 13-25m x 5-10m
Qty Required: 1

Botanical Name: *Angophora floribunda**
Common Name: Rough Barked Apple (Native)
Pot size: 200Lt
Mature H x S: 6-8m x 12-15m
Qty Required: 1

Botanical Name: *Allocasuarina torulosa**
Common Name: Forest Oak (Native)
Pot size: 75Lt
Mature H x S: 8m x 3-5m
Qty Required: 5

Botanical Name: *Acacia decurrens **
Common Name: Green Wattle (Exotic)
Pot size: 45Lt
Mature H x S: 6m x 3m
Qty Required: 19

SHRUBS AND HEDGES

Botanical Name: *Westringia 'Naringa'*
Common Name: Costal Rosemary (Native)
Pot size: 300mm
Mature H x S: 1.5m x 1.5m
Qty Required: 13

Botanical Name: *Syzygium 'Cascade'*
Common Name: Cascade Lilly Pilly (Native)
Pot size: 300mm
Mature H x S: 2m x 1.5m
Qty Required: 22

Botanical Name: *Backhousia myrtifolia**
Common Name: Grey Myrtle (Native)
Pot size: 200mm
Mature H x S: 2.5m x 2m
Qty Required: 12

Botanical Name: *Acmena 'Firescreen'*
Common Name: Firescreen Lilly Pilly (Native)
Pot size: 300mm
Mature H x S: 3-5m x 2m
Qty Required: 43

Botanical Name: *Leptospermum laevigatum **
Common Name: Coastal Tea Tree (Native)
Pot size: 300mm
Mature H x S: 4-6m x 2-3m
Qty Required: 9

ENDEMIC UNDERSTOREY MASSED PLANTING

Shrubs: Acacia longifolia*, Breynia oblongifolia*, Notelaea longifolia*, Persoonia pinifolia
Groundcovers: Calochlaena dubia*, Dianella caerulea, Hardenbergia violacea*, Imperata cylindrica*, Lomandra longifolia*, Themeda australis*
Pot size: Refer Inset Plan 1
Mature H x S: Varies
Qty Required: To fill 330m2 - Refer Inset Plan 1

GRASSES + GROUNDCOVERS

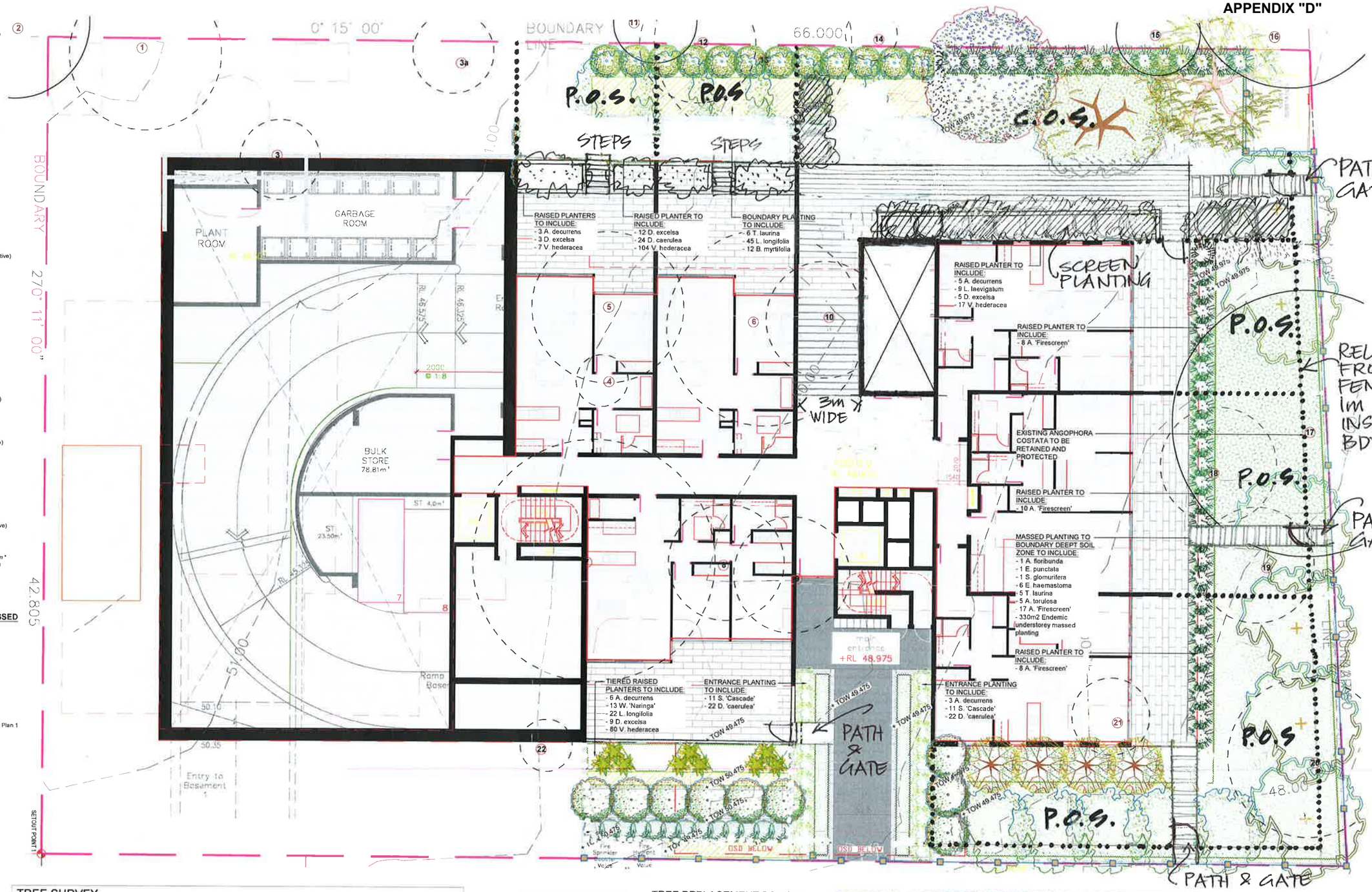
Botanical Name: *Lomandra longifolia **
Common Name: Mat Rush (Native)
Pot size: 200mm
Mature H x S: 1m x 1m
Qty Required: 67

Botanical Name: *Dianella caerulea*
Common Name: Blue Flax Lily (Native)
Pot size: 150mm
Mature H x S: 8m x 7m
Qty Required: 44

Botanical Name: *Viola hederacea*
Common Name: Star Jasmine (Exotic)
Pot size: 100mm
Mature H x S: 3m x 6m
Qty Required: 215

ACCENT PLANTS

Botanical Name: *Doryanthes excelsa*
Common Name: Gymea Lily (Native)
Pot size: 300mm
Mature H x S: 1m x 1m
Qty Required: 32



TREE SURVEY

Existing Trees based on Arborists Report by TLC Tree Solutions *05.12.15*

No.#	Species	Size (Ht x Sp)	Condition	Action
1	Cupressus sp.**	9x3	Good	Remove
2	Syzygium sp.	6x2	Good	Retain
3	Palm Trees**	9x4	Good	Remove
3a	Mangifera indica**	3x2	Good	Remove
4	Michelia figo	5x1	Fair	Remove
5	Cinnamomum camphora**	10x3	Fair	Remove
6	Cupressus sp.**	12x5	Fair	Remove
7	Cupressus sp.**	9x3	Fair	Remove
8	Acacia sp.**	3x6	Poor	Remove
9	Olea europea**	6x3	Poor	Remove
10	Schefflera**	6x2	Poor	Remove
11	Cinnamomum camphora**	6x2	Poor	Retain
12	Olea europea**	6x3	Poor	Remove
13	Cupressus sp.**	12x5	Fair	Remove
14	Eriobotrya japonica**	5x3	Fair	Remove
15	Callistemon sp.	8x3	Poor	Retain
16	Acer negundo**	5x6	Poor	Retain
17	Angophora costata	15x8	Poor	Retain
18	Pittosporum undulatum	6x3	Poor	Remove
19	Acer negundo**	5x6	Fair	Remove
20	Acacia sp.**	3x6	Poor	Remove
21	Michelia figo	6x3	Good	Remove
22	Pittosporum sp	5x2	Good	Remove

** (Exempt species)

OTHER LANDSCAPE ITEMS

- Retaining wall - refer detail
- 1.2m fence - Refer detail
- Trees proposed to be removed and replaced with new landscaping
- Existing trees proposed to be retained and protected

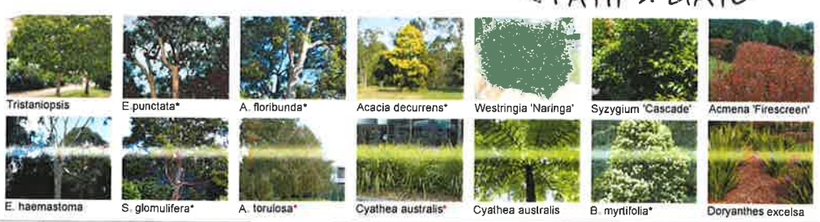
TREE REPLACEMENT POLICY

There are 6 existing trees that are to be removed that come under Sutherland Shire Councils 4 to 1 tree replacement policy. The site will require 24 new trees to be planted in order to satisfy councils policy. (Numbers exclude palms and exempt species and neighboring trees.)

The proposed landscape plan provides 30 endemic trees selected from Sutherland Shire Council Plant Selector

DEEP SOIL CALCULATIONS

SITE AREA:	**2872.2m²**
BASEMENT AREA:	**1660.2m² (57.8)**
REQUIRED DEEP SOIL AREA:	**861.7m² (30%)**
PROPOSED DEEP SOIL:	**895.9m² (31.2%)**



Bar Scale 0 1 2 3 4 5m 10m

ARCHITECT: NOVATI

LANDSCAPE ARCHITECT: Conzept Landscape Architects
Suit 101, 506 Mate Street, CAMBERAY NSW 2062
Phone 9922 5312
Fax 9329 4982
Mob 0413 551 351
www.conzept.net.au
enquiries@conzept.net.au

COUNCIL: SUTHERLAND
CLIENT: NOVATI

REV	DATE	NOTATION/AMENDMENT
A	05.04.16	Preliminary DA prepared for review
B	02.05.16	Amended to council comments and revised Architecture
C	05.05.16	Coordinated with revised Architecture

PROJECT: PROPOSED APARTMENT DEVELOPMENT
1-3 UNIVERSITY RD / 668a, 700 KINGSWAY
MIRANDA NSW

TITLE: LANDSCAPE PLAN - GROUND
DWG No: LPDA 16 - 252 / 1
ISSUE: C
STATUS: DEVELOPMENT APPLICATION
SCALE: 1:100 @ A1
DATE: MAY 2016
DRAWN: E.H
CHECKED: R.F

ANNEXURE D-1

LEGEND & SCHEDULE

Note: Landscape Contractor to confirm plant quantities with Landscape Architect prior to ordering
(*) indicates trees selected from Sutherland Shire Councils Native Plant Selector

TREES

Botanical Name: *Eucalyptus punctata**
Common Name: Grey Gum (Endemic)
Pot size: 200Lt
Mature H x S: 13-25m x 5-10m
Qty Required: 2

Botanical Name: *Syncarpia glomulifera**
Common Name: Turpentine (Endemic)
Pot size: 200Lt
Mature H x S: 13-25m x 5-10m
Qty Required: 1

Botanical Name: *Angophora floribunda**
Common Name: Rough Barked Apple (Native)
Pot size: 200Lt
Mature H x S: 6-8m x 12-15m
Qty Required: 2

Botanical Name: *Eucalyptus paniculata**
Common Name: Grey Ironbark (Endemic)
Pot size: 100Lt
Mature H x S: 13-25m x 5-10m
Qty Required: 2

Botanical Name: *Elaeocarpus reticulatus*
Common Name: Blueberry Ash (Native)
Pot size: 75Lt
Mature H x S: 8-10m x 6-7m
Qty Required: 3

SHRUBS AND HEDGES

Botanical Name: *Acmena 'Firescreen'*
Common Name: Firescreen Lilly Pilly (Native)
Pot size: 300mm
Mature H x S: 3-5m x 2m
Qty Required: 26

Botanical Name: *Acmena smithii **
Common Name: Lilly Pilly (Native)
Pot size: 200mm
Mature H x S: 3-6m x 2-4m
Qty Required: 9

Botanical Name: *Westringia 'Naringa'*
Common Name: Costal Rosemary (Native)
Pot size: 300mm
Mature H x S: 1.5m x 1.5m
Qty Required: 61

Botanical Name: *Syzygium 'Cascade'*
Common Name: Cascade Lilly Pilly (Native)
Pot size: 300mm
Mature H x S: 2m x 1.5m
Qty Required: 47

Botanical Name: *Backhousia myrtifolia**
Common Name: Grey Myrtle (Native)
Pot size: 200mm
Mature H x S: 2.5m x 2m
Qty Required: 10

ACCENT PLANTS

Botanical Name: *Cyathea australis*
Common Name: Rough Tree Fern (Native)
Pot size: 45L
Mature H x S: 2.5m x 3m
Qty Required: 4

Botanical Name: *Asplenium australasicum*
Common Name: Birds Nest Fern (Native)
Pot size: 200mm
Mature H x S: 1m x 1.4m
Qty Required: 10

Botanical Name: *Doryanthes excelsa*
Common Name: Gymea Lily (Native)
Pot size: 300mm
Mature H x S: 1m x 1m
Qty Required: 6

ACCENT PLANTS

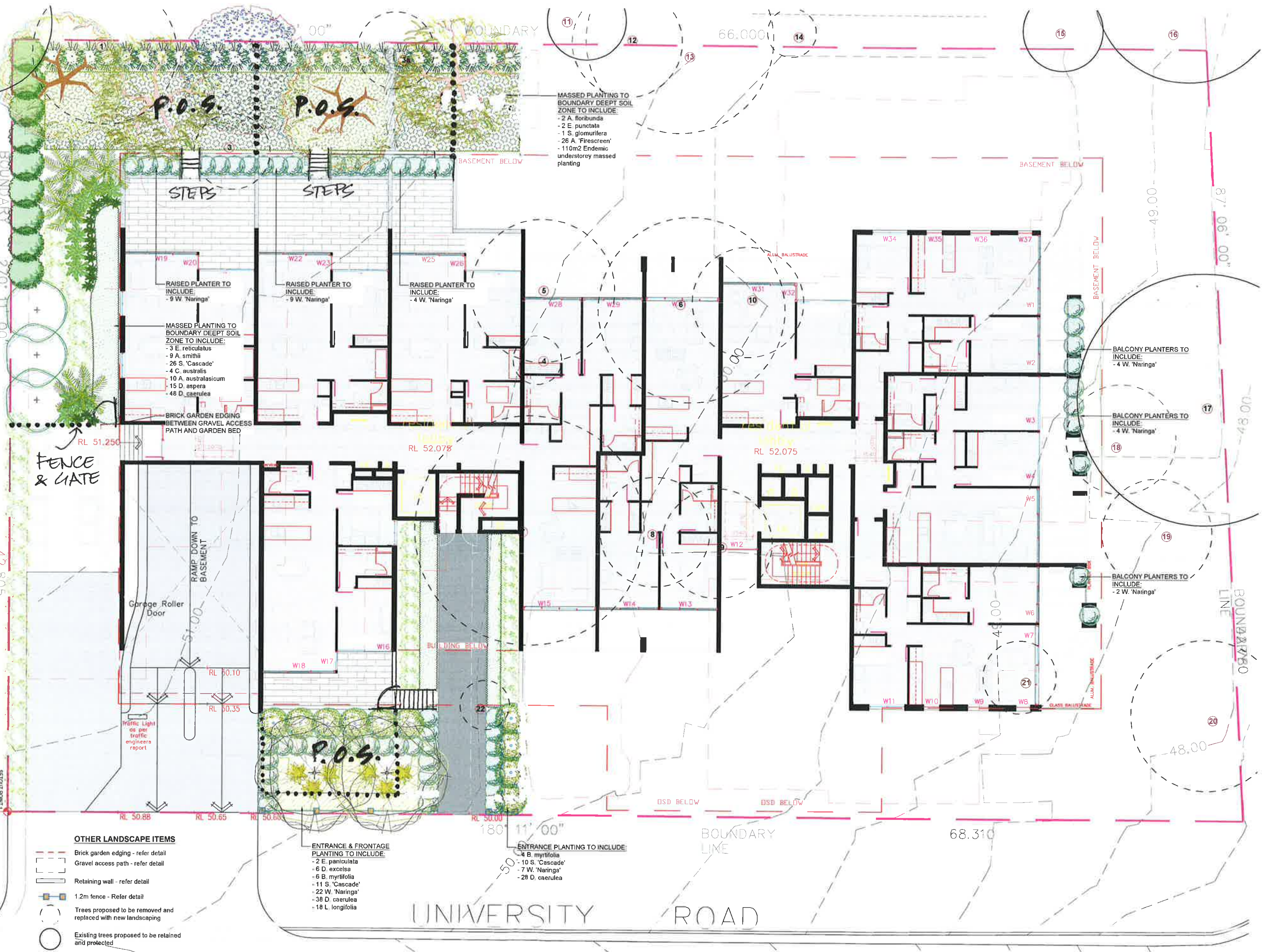
Botanical Name: *Dianella caerulea*
Common Name: Blue Flax Lily (Native)
Pot size: 150mm
Mature H x S: .8m x .7m
Qty Required: 114

Botanical Name: *Doodia aspera*
Common Name: Prickly Rasp Fern (Native)
Pot size: 200mm
Mature H x S: 0.4m x 0.5m
Qty Required: 15

Botanical Name: *Lomandra longifolia **
Common Name: Mat Rush (Native)
Pot size: 200mm
Mature H x S: 1m x 1m
Qty Required: 18

ENDEMIC UNDERSTOREY MASSED PLANTING

Shrubs: Acacia longifolia*, Breynia oblongifolia*, Notelaea longifolia*, Persoonia pinifolia
Groundcovers: Calochlaena dubia*, Dianella caerulea, Hardenbergia violacea*, Imperata cylindrica*, Lomandra longifolia*, Themeda australis*
Pot size: Refer Inset Plan 1
Mature H x S: Varies
Qty Required: To fill 110m2 - Refer Inset Plan 1



OTHER LANDSCAPE ITEMS

- Brick garden edging - refer detail
- Gravel access path - refer detail
- Retaining wall - refer detail
- 1.2m fence - Refer detail
- Trees proposed to be removed and replaced with new landscaping
- Existing trees proposed to be retained and protected

Bar Scale 0 1 2 3 4 5m 10m

COUNCIL	REV	DATE	NOTATION/AMENDMENT
SUTHERLAND	A	05.04.16	Preliminary DA prepared for review
	B	02.05.16	Amended to council comments and revised Architecture
CLIENT: NOVATI	C	05.05.16	Coordinated with revised Architecture

LANDSCAPE ARCHITECT: Conzept Landscape Architects

ARCHITECT: NOVATI

PROJECT: PROPOSED APARTMENT DEVELOPMENT
1-3 UNIVERSITY RD / 668a, 700 KINGSWAY
MIRANDA NSW

TITLE: LANDSCAPE PLAN - LEVEL 1

STATUS	DEVELOPMENT APPLICATION	
SCALE	1:100 @ A1	DATE: MAY 2016
DWG No: LPDA 16 - 252 / 2	ISSUE: C	DRAWN: E.H / CHECKED: R.F

ANNEXURE D-2

LEGEND & SCHEDULE

Note: *Landscape Contractor to confirm plant quantities with Landscape Architect prior to ordering*
(*) indicates trees selected from Sutherland Shire Councils Native Plant Selector

SMALL TREES

Botanical Name: *Banksia serrata**
Common Name: Old Man Banksia (Native)
Pot size: 75L
Mature H x S: 5m x 3m
Qty Required: 4

SHRUBS

Botanical Name: *Grevillea 'Superb'*
Common Name: Superb Grevillea (Native)
Pot size: 300mm
Mature H x S: 1.5m x 2m
Qty Required: 29

Botanical Name: *Metrosideros 'Tahiti'*
Common Name: NZ Christmas Bush (Exotic)
Pot size: 150mm
Mature H x S: 1m x 1m
Qty Required: 37

Botanical Name: *Westringia 'Aussie Box'*
Common Name: Westringia Aussie Box (Native)
Pot size: 300mm
Mature H x S: .9m x .9m
Qty Required: 57

Botanical Name: *Banksia spinulosa 'Birthday Candles'*
Common Name: Banksia Birthday Candles (Native)
Pot size: 200mm
Mature H x S: 0.6m x 0.9m
Qty Required: 22

Botanical Name: *Callistemon 'Better John'*
Common Name: Better John Bottlebrush (Native)
Pot size: 200mm
Mature H x S: 1m x .9m
Qty Required: 35

GRASSES + GROUNDCOVERS

Botanical Name: *Carpobrotus 'Aussie Rambler'*
Common Name: Aussie Rambler Pigface (Native)
Pot size: 140mm
Mature H x S: .25m x spreading
Qty Required: 105

Botanical Name: *Isolepis 'Livewire'*
Common Name: Livewire Club Rush (Native)
Pot size: 140mm
Mature H x S: .35m x .35m
Qty Required: 120

Botanical Name: *Lomandra longifollia 'Tanika'*
Common Name: Dwarf Mat Rush (Native)
Pot size: 200mm
Mature H x S: 0.8m x 0.8m
Qty Required: 48

ACCENT PLANTS

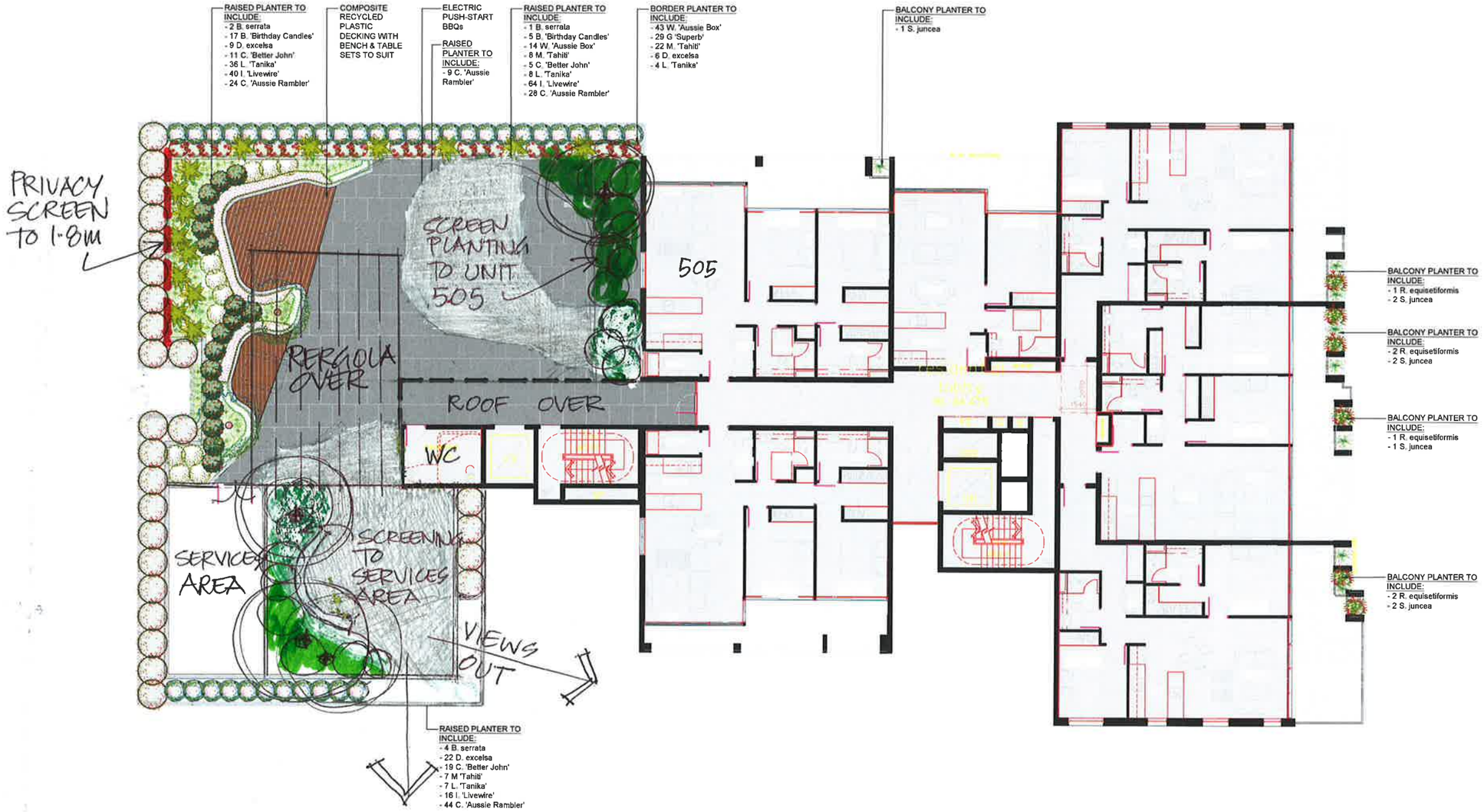
Botanical Name: *Doryanthes excelsa**
Common Name: Gymea Lily (Native)
Pot size: 300mm
Mature H x S: 1m x 1m
Qty Required: 37

Botanical Name: *Russelia equisetiformis*
Common Name: Firecracker (Exotic)
Pot size: 200mm
Mature H x S: 1m x 1.2m
Qty Required: 6

Botanical Name: *Strelitzia juncea*
Common Name: Rush-leaved Strelitzia (Exotic)
Pot size: 200mm
Mature H x S: 1.5m x 1m
Qty Required: 8

OTHER LANDSCAPE ITEMS

Raised planter wall - refer detail




Russelia equisetiformis | Strelitzia juncea | Grevillea 'Superb' | Banksia serrata | Westringia 'Aussie Box' | Callistemon 'Better John' | *Lomandra longifollia 'Tanika'* | Banksia spinulosa 'Birthday Candles' | Carpobrotus 'Aussie Rambler' | Metrosideros 'Tahiti' | Isolepis 'Livewire'

GENERAL NOTE

Bar Scale 0 1 2 3 4 5m 10m

ARCHITECT

LANDSCAPE ARCHITECT
Conzept Landscape Architects
Suit 101, 906 Miller Street, CAMMERAY NSW 2062
Phone 9922 5312
Fax 9299 4982
Mob 0413 961 351
www.conzept.net.au
enquiries@conzept.net.au

COUNCIL: SUTHERLAND
CLIENT: NOVATI

REV	DATE	NOTATION/AMENDMENT
A	05.04.16	Preliminary DA prepared for review
B	02.05.16	Coordinated with revised Architecture
C	05.05.16	Coordinated with revised Architecture

PROJECT: PROPOSED APARTMENT DEVELOPMENT
1-3 UNIVERSITY RD / 668a, 700 KINGSWAY MIRANDA NSW

TITLE: LANDSCAPE PLAN - LEVEL 5

STATUS: DEVELOPMENT APPLICATION
SCALE: 1:100 @ A1
DATE: MAY 2016
DWG No: LPDA 16 - 252 / 4
ISSUE: C
DRAWN: E.H
CHECKED: R.F

ANNEXURE D-3