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WASTE MANAGEMENT REPORT

Demolition, Construction and Operational Waste Assessment

Site Address

**33-35 Fairlight Street, FAIRLIGHT
10-12 Clifford Avenue, FAIRLIGHT**

Client

Allen Group Developments

Proposed Development

Residential Flat Building

Assessment Date

21/11/2024

Lot and DP

**8,9 & 20 DP 3742
SP 20752**

Local Government Area

Northern Beaches

Commissioned by

**Allen Group
Developments**

Reference Number

24110221

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1 INTRODUCTION

This Site Waste Minimisation and Management Plan (SWMMP) Report has been prepared on behalf of Allen Group Developments and should be read in conjunction with the plans encompassing Project No. FSF2 prepared by Platform Architects.

The report summarises the waste minimisation and management practices intended to be implemented as part of the demolition of existing residential buildings and the subsequent construction of a multi-storey residential flat building development and its operational use.

1.1 SUMMARY

The proposed development is described as per the following:

- Demolition of four existing multi storey residential buildings and associated light infrastructure;
- Consolidation of the parcels in to one parcel;
- Clearing of the site and tree removal;
- Excavation of the site and construction of two levels of basement carparking; and
- Construction of two multi-storey residential flat buildings with associated landscaping and civil works.

The development also proposes garbage storage areas within each building core with collection at ground level on Clifford Street from a temporary bin holding area adjacent to the site entrance.

This report is an outline of the waste minimisation and management policies and procedures to be implemented by contractors during the demolition phase, construction phase and the property manager/owners corporation during the post construction (operational phase) of the development.

These policies and procedures will set a framework for all parties to minimise generation of residual (non-recyclable) waste, and to take advantage of the opportunities for re-use of waste materials by ensuring that efficient recovery and segregation measures for all waste materials are provided.

2 SITE CHARACTERISTICS

2.1 SITE DESCRIPTION

The site is identified legally as the following:

- Lot 8 in Deposited Plan 3742;
- Lot 9 in Deposited Plan 3742;
- Lot 20 in Deposited Plan 3742; and
- Strata Plan 20752.

It is commonly known as No. 33-35 Fairlight Street and 10-12 Clifford Avenue, Fairlight. The subject site has an area of 2,352.00 m².

Please refer to the below mapping image.



Figure 1 - Aerial Image

2.2 SITE ANALYSIS

The site is located within a well established residential area with nearby commercial developments. The subject site consists of four separate parcels. 35 Fairlight Street has an existing two storey residential building which is a brick and stone building with a tiled roof. 33 Fairlight Street has an existing three storey residential building which is a brick and stone building with a tiled roof. 10 Clifford Avenue has an existing multi storey residential building which is rendered denseweight material with a mixed tile and metal roof. 12 Clifford Avenue has an existing two storey residential building which is brick and rendered denseweight material with a tile roof.

The existing residential developments have minimal waste infrastructure on site with no apparent holding room.

The subject site has a road frontages to Fairlight Street and Clifford Avenue, with the Clifford Avenue site frontage to be used for general service vehicle access.

3 DESCRIPTION OF PROPOSAL

3.1 PROPOSED DEVELOPMENT

The proposed development includes the demolition of existing residential buildings, site clearing, site consolidation, excavation and the construction of two multi-storey residential unit buildings and ancillary site works.

The proposed building will include the following:

- Parking over two basement level;
- Construction of two residential buildings with one building core in each building;
- Respective lift motor, plant, service and garbage storage area;
- Ground floor level and upper levels consisting of a total of 15 units

3.2 SITE ACCESS

The subject site has frontages to Fairlight Street along the northern property boundary and a second street frontage to Clifford Avenue, along the southern boundary. Vehicular access to the site is via a shared driveway on the southern edge of the site, adjacent to Clifford Avenue.

3.3 SITE SERVICES

The site has access to all necessary essential services including water, sewer, electricity and telecommunications.

4 PURPOSE OF THE REPORT

4.1 AIMS

The aim of the SWMMP is to outline measures to minimise and manage waste and resource recovery during the demolition phase, construction phase and the post construction (operational) phase.

The goal of this document is in line with the DCP as well as the waste hierarchy (avoid, reduce, reuse, recycle, recover (energy), treat and dispose), shown in Figure 2, and aims to:

- Minimise the amount of waste generated;
- Maximise the reuse, recycling and reprocessing of construction waste materials; and
- Minimise the volume of material disposed to landfill.

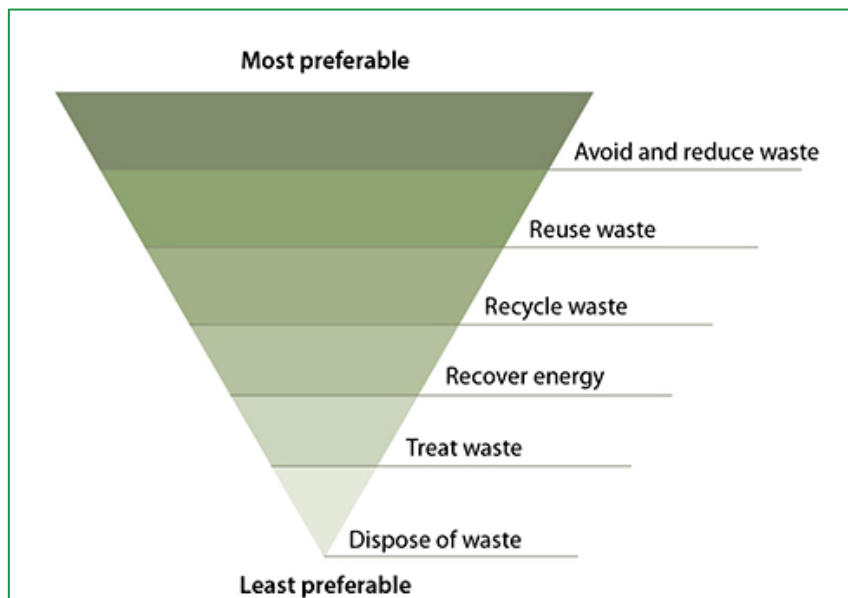


Figure 2 - Waste Hierarchy

The SWMMP will describe;

- Volume and type of waste and recyclables to be generated
- Storage and treatment of waste and recyclables on the development site
- Disposal of residual wastes and reprocessing options for recyclables
- Procedures for post construction (operational) management after handover of the development

4.2 OBJECTIVES

The objective of the SWMMP is to provide a planning system to effectively manage waste and resource recovery associated with this development, including;

- Promote improved project management
- Minimise waste generation
- Maximise reuse and resource recovery
- Minimise the environmental impacts associated with residual waste generated by this development
- Ensure the appropriate storage and collection of residual waste

To ensure ongoing waste management systems are compatible with collection services offered by commercial waste transporters and the Northern Beaches Council.

4.3 LEGISLATIVE DRIVERS

Table 1 - Environmental Legislation specific to waste management

Legislation/Guidelines	Description
Protection of the Environment Operations Act 1997	This Act is the primary NSW environment protection legislation covering air, noise, water, land and waste management
Waste Avoidance and Resource Recovery Act 2001	Sets NSW framework for waste hierarchy and allows the preparation of waste strategies addressing specific waste streams and setting landfill diversion and resource recovery targets
Waste Avoidance and Resource Recovery Strategy 2014-2021	Proposes priority areas for waste management and resource recovery. Details current targets
Northern Beaches Waste Management Guidelines	Aims to facilitate sustainable waste management within the Northern Beaches Shire LGA in a manner consistent with ESD principles.
Model Waste Not DCP Chapter 2008 (DECC)	Provides a framework chapter for NSW LGA’s to address Waste Not DCP
Better Practice Guide for Resource Recovery in residential Developments 2019 (NSW EPA)	Provides guideline for addressing waste management in medium or high density residential developments

5 DEMOLITION AND CONSTRUCTION PROVISIONS

5.1 STAKEHOLDER ROLES AND RESPONSIBILITIES

The project shall be managed by the project delivery team as per the list presented below.

During the construction period, all personnel including the Project Manager, Site Supervisor, Work Assistants and engaged Contractors have responsibilities in the development of a positive environmental management culture and for ensuring all activities are conducted in a manner which is consistent with the SWMP. Specific project responsibilities in relation to environmental management are shown below:

Table 2 - Roles and Responsibilities

Role	Responsibilities
Manager	
	Approving the Site Waste Management Plan (SWMP)
	Approving any revisions to the SWMP
	Approving appointment of the Project Manager
	Periodic management review of the SWMP and its implementation
	Investigating any serious incidents, complaints or non-conformances and ensuring necessary corrective action is implemented
Project Manager	
	Day-to-day management of site
	Assisting in preparing and implementing the SWMP
	Instructing project personnel on how to comply with environmental policy and procedures
	Ensuring the Site Supervisor is aware of and complies with the site waste management obligations as detailed within this SWMP
	Ensuring that employees, contractors and sub-contractors are aware of, and comply with, the conditions of approval and requirements of the SWMP relevant to the respective activities
	Arranging periodic monitoring and inspection by suitably trained personnel
	Regular site inspections and the active pursuit of opportunities to enhance waste outcomes
	Monthly evaluation of how effectively waste controls are performing
	Maintaining environmental performance records
	Engaging consultants where required to provide support in relation to implementing the SWMP
Site Supervisor	
	Managing employees/contractors and construction activities on a daily basis to ensure the appropriate environmental controls are implemented and maintained in accordance with the requirements of the SWMP
	Ensuring all staff are inducted into the site and undertake daily tool box talks
	Undertake daily site inspections of environmental controls and maintain records of waste management actions
	Reporting any waste management concerns or incidents immediately to the Project Manager
	Implementing any corrective actions issued as a result of any site inspections, audits or meetings.
Works Assistants and Contractors	
	Implementing the SWMP as it applies to their works
	Reporting any waste management concerns or incidents immediately to the Site Supervisor

5.2 MANAGEMENT OF ASBESTOS AND OTHER HAZARDOUS MATERIALS

Hazardous waste materials are considered to include any waste that poses a hazard or potential harm to human health or the environment, particularly asbestos waste and asbestos containing material (ACM).

During the construction phase of the development, there must be a commitment to engage qualified and certified contractors to remove all contaminated/hazardous materials (e.g. asbestos) and dispose of all contaminated/hazardous waste at an appropriately licenced facility, where applicable.

In the event that any contaminated or hazardous materials are unexpectedly uncovered during excavation works, the Site Manager is to stop work immediately and contact the relevant hazardous waste contractor prior to further works being undertaken in the area.

The following general mitigation measures will apply:

- Contaminated material stockpiled on site will be minimised as far as possible and should be stored on HDPE liner, in a bunded location which is protected from inclement weather;
- Sediment fences should be installed around the base of stockpiles and the stockpiles should be covered. Where excavated material requires validations, samples should be taken for NATA laboratory testing as per the requirements of the contamination assessment prior to restoration works, backfilling exercises and disposal;
- Any trucks carrying contaminated materials should be securely and completely covered immediately after loading the materials (to prevent windblown emissions and spillage) and must be licensed by the NSW Environmental Protection Authority (EPA);
- Decontamination of all equipment prior to demobilisation from the site is important so that contaminated materials are not spread off-site.

5.3 MANAGEMENT OF EXCAVATION WASTE

Excavation waste consists of material generated from excavation activities such as site preparation and levelling and the excavation of foundations, basements, tunnels and service trenches. This will typically consist of soil and rock.

All excavated material generated on this site may be re-used in the landscaping or used on other sites as fill material, provided no contamination is present. If sandstone is found to be present, this may be sold or incorporated into the building design.

The following measures and safeguards will apply to the development for excavated material:

- Wherever practical, excavation material will be reused as part of the development;
- Excavation material that is not natural (virgin) material will be transported to an approved landfill site or off-site recycling depot;
- A waste classification assessment of the fill material should be undertaken prior to it being acceptable for waste disposal purposes;
- Transportation

5.4 WASTE CONTRACTORS AND SERVICE PROVIDERS

The following is an indicative only list of contractors generally based around the Sydney area that provide various services for handling the recycling, reuse and disposal of Demolition and construction waste from the proposed project. Logs are to be maintained detailing the amount and type of waste, destination and contractors details.

Waste Material	Company	Details
Concrete, blockwork, bricks, porcelain, bitumen/asphalt	<u>Benedict Industries</u> Primarily a rubble recycling company but manages a wider range of waste streams as per below. Benedict will separate loads	W: www.benedict.com.au Recycling sales: E: recycling@benedict.com.au

	by hand or machine, screen some loads and crush masonry products. Non-recyclable elements will go to landfill. Materials accepted: • Clean concrete, blockwork, brick, mortar (masonry), porcelain • Rubble+ soil • Mixed load – concrete rubble and mixed in non-recyclables (incl mixed demolition waste, vegetation, timber, plastics) • Electrical cable • Cardboard • Clean timber • Green waste • Clean and laminated MDF, laminated timbers, stumps and plastics will generally go to landfill . Steel loads – not mixed with other materials that requires sorting Benedict do not accept paints, liquids or food waste.	P: 02 8761 0077 Nearest recycling facility: A: 33-39 Riverside Road, Chipping Norton NSW 2170 Bins & gravel: E: sales@benedict.com.au P: 02 9986 3500 Nearest quarry: A: 146 Newbridge Road, Moorebank NSW 2170
	<u>Bingo Industries</u> Primarily a rubble recycling service similar to Benedict Industries, but they also provide their own bins.	A: 35 Wentworth St, Greenacre NSW 2190 W: www.bingoindustries.com.au P: 1300 424 646
	<u>Boral Recycling</u> Provides concrete, cement, asphalt, timber, roof tiles, bricks and masonry blocks removal and disposal.	A: 25 Burrows Road South, St Peters NSW 2044 W: www.boral.com.au P: 1300 134 002
	<u>Concrete Recyclers</u> Provides concrete, brick, asphalt waste removal	A: 14 Thackeray St, Camellia NSW 2142, W: ww.concreterecyclers.com.au P: 02 8832 7400
	<u>M and K Demolition Group</u> Demolition, asbestos removal, strip outs and any other earthmoving service.	A: Tusmore St, Punchbowl NSW 2196 W: http://www.mkdemogroup.com.au
Plasterboard / Gypsum	<u>1300 Rubbish</u> General rubbish removal (waste and recycling) from residential and commercial buildings, construction sites and deceased and hoarding affected estates, including gyprock.	A: various locations around Australia, incl. Sydney area W: www.1300rubbish.com.au P: 1300 78 22 47
	<u>Gyprock</u> Only new, clean Gyprock products / plasterboard waste is accepted. Do not provide bins.	A: various locations in Sydney area (Gyprock Trade, Bunnings) W: https://www.gyprock.com.au/about-us/plasterboard-recycling P: 13 17 44
	<u>ReGyp</u>	A: 330 Captain Cook Drive, Kurnell NSW 2231

	Regyp provide and collect their own bins for new and old plasterboard per below: • Plasterboard and cornice off-cuts • Plasterboard with paint or wallpaper • Non-laminated plasterboard tiles • Gypsum blocks, gypsum prefab wall panels e.g. RFC rapid wall • Chemical precipitate gypsum (e.g. flue gas desulphurisation) • Suitable industrial gypsum waste	W: http://www.regyp.com.au/waste P: 1300 473 497
	<u>Redmondis</u> Accepted materials: • Chemical & FGD gypsum and other construction materials including • Scrap metal, • Organic waste, • Paper • Glass • Plastics	W: www.remondis.com.au E: info@remondis.com.au P: 02 9032 7100 Nearest facilities in: A: 32-36 Christie Street, St. Marys NSW 2760 (depot) P: 02 9623 4733 A: Bay Road 2, Taren Point NSW 2229 (transfer station) P: 02 9526 2642
Asbestos	<u>M and K Demolition Group</u> As above	As above
	<u>Jim's Asbestos Removal</u> Licensed asbestos removalists. • Asbestos removal • Asbestos encapsulation • Asbestos Testing and other services	W: https://www.jimsasbestosremoval.com.au/locations/asbestosremoval-sydney P: 13 15 46
Green Waste	<u>Australian Native Landscapes</u> Green waste off-site composting	A: 4-6 Tollis Place, Seven Hills NSW 2147; 210 Martin Road, Badgerys Creek NSW 2171 W: www.anlscape.com.au Ph. 13 14 58
	<u>Benedict Industries</u> As above	As above
Paints	<u>Paintback</u> Taking unwanted paint and packaging for innovative reuse and responsible disposal. Further information regarding acceptable paints can be found on the website.	A: various sites in Western Sydney, e.g. Liverpool Community Recycling Centre, 99 Rose Street, Liverpool NSW 2170 W: https://www.paintback.com.au P: 1300 390 380
Metal	<u>Benedict Industries</u> As above	As above
	<u>Kimbriki Resource Recovery Centre</u> Items must be at least 80% metal	As above
	<u>Liberty Group</u>	A: various locations in Sydney area, nearest at 79-81 Stephen Road, Botany NSW 2019

	Mixed metals recycling, full site clean-up and bin services. Also have other recycling services.	W: https://www.libertygfg.com/recycling E: recycling@libertyonesteel.com P: 02 8335 8470
	Redmondis As above	As above
	<u>Veolia</u> All waste metal in large volumes	A: various sites across Australia W: https://www.veolia.com/anz/ourservices/our-services/recycling-wasteservices/construction-demolition-waste P: 13 29 55
Timber	<u>Benedict Industries</u> As above	As above
	<u>Boral Recycling</u> As above	As above
Cardboard/Polystyrene	<u>Brandown</u> Privately owned and operated resource recovery centre. General solid waste (non-putrescible), landfill and quarry.	A: Lot 90 Elizabeth Drive, Kemps Creek NSW 2170 W: http://www.brandown.com.au E: info@brandown.com.au P: 02 9826 1256
	<u>Cleanaway</u> Sustainability for recycling, reuse, repurposing, treating or shredding across the following areas: • General Waste • Recycling • Hazardous Chemical Waste Disposal Services • Used Oil and Oily Water • Construction and Demolition Waste	A: various locations across Australia W: https://www.cleanaway.com.au/
	<u>Redmondis</u> As above	As above
Soft plastics from packaging	<u>Cleanaway</u> As above	As above
	<u>Redmondis</u> As above	As above
	<u>Suez</u> Sustainability across the following areas: • Commercial Waste Management • Waste Removal & Disposal • General Waste Management • Commercial Waste Recycling • Advanced Resource Recovery Technology • Diversion Solutions • Households & Small Business	A: multiple locations across Australia; Chullora Resource Recovery Park: 15 Muir Rd, Chullora NSW 2190 W: https://www.suez.com.au/ P: 13 13 35 (general enquiries)

	• Collection & Disposal • General Waste Management • Skip Bins	
Skip Bin Hire	<u>Bingo Industries</u> As above. Provides skip bins 2 m ³ and 30 m ³ .	As above
	<u>Bins Express</u> Provides skip bins between 1.5 m ³ and 13.5 m ³ , available 7 days a week. Servicing Sydney metro area.	A: PO Box 505 Merrylands NSW 2160 W: https://www.binsexpress.com.au E: info@binsexpress.com.au
	<u>Jims Skip Bins</u> Provides skip bins between 2 m ³ and 9 m ³ . Recycle at least 90% of all wastes collected.	A: multiple locations across Australia W: www.jimsskipbins.com.au E: admin@jims.net P: 13 15 46
	<u>Suez</u> As above	As above

Material	Estimated Volume (m ³)	Estimated Weight (t)	Waste Management Strategy			Approximate Recovery Rate	Estimated Amount of Material Diverted from Landfill (t)
			Re-Use	Recycle	Landfill		
Bricks	2,702.40	3,242.88	Full bricks retained and set aside for re-use	Broken Bricks stored for collection to crushing	N/A	100%	3,242.88
Concrete	5,079.60	7,619.40	Re-use for filling, levelling and road base	Slabs/footings broken up on site and stored for collection/crushing	N/A	100%	7,619.40
Timber	373.09	70.89	De-Nail useful pieces and set aside for re-use	Unused larger pieces recycled for timber salvage	Transported to Green Waste processing facility	33%	23.39
Plasterboard	301.09	60.22	Stored for recycling	Stored for recycling	N/A	100%	60.22
Metal	264.00	132.00	Stored for recycling	Stored for recycling	N/A	100%	132.00
Tiles	148.36	148.36	Full tiles set aside for re-use	Broken tiles stored for collection to be crushed and use for road base	N/A	100%	148.36
Green Waste	22,080.00	3,312.00	Processed on site and stored to be used as mulch and/or compost in future gardens	N/A	Dispose of non re-useable vegetation to processing facility	80%	2,649.60
Other Waste	165.60	49.68	Separated in to re-usable materials	Separated in to recyclable materials	Transported to Waste Facility	50%	24.84

Estimated Total Waste Amounts	
Estimated Total Volume of Waste Generated (m ³)	31,114.15
Estimated Total Weight of Waste Generated (t)	14,635.43
Estimated Total Weight of Waste Diverted from Landfill (t)	13,900.69
Estimated Percentage of Waste Diverted from Landfill	94.98%

6 CONSTRUCTION PHASE

6.1 GENERAL OUTLINE

The management of the site will be the responsibility of the project manager, who will administer waste handling systems, as specified by Northern Beaches Council, SafeWork NSW and as detailed in this report.

The construction phase of this development is to comply with the aims and objectives outlined in Section 4 of this report.

The construction phase will involve constructing carparking over two basement levels, lift motor, plant, service and garbage room, two multi-level residential flat buildings, associated light infrastructure and ancillary site works.

6.2 CONSTRUCTION PHASE OPERATIONAL MEASURES

TRAINING AND SITE INDUCTIONS

All staff employed during the construction stage of the development must undertake site-specific induction training regarding the procedures for waste management.

Employees of the head contractor will undertake a specific induction outlining their duties and how they are to enforce the waste management procedures.

Induction training will include the following at a minimum:

- Legal obligations;
- Emergency response procedures on site;
- Waste storage locations and separation of waste;
- Litter management in transit and on site;
- The implications of poor waste management practices;
- Correct use of general-purpose spill kits;
- Responsibility and reporting (including identification of personnel responsible for waste management and individual responsibilities).

WASTE REDUCTION THROUGH MATERIALS SELECTION AND ORDERING

- Selection of all materials will be undertaken by architectural contractors;
- Prefabrication of materials off-site where possible is to be encouraged;
- Materials sizing and requirements are to be accurately calculated to minimise waste from over-ordering;
- Materials ordering process is to minimise material packaging wherever possible;
- Material Safety Data Sheets (MSDS) are to accompany all materials delivered to site, where required, to ensure that safe handling and storage procedures are implemented.
- Where possible limit unnecessary excavation of site material;
- Selection of construction materials giving preference for longer life items and their potential for re-use;
- Reuse of formwork;
- Planned work staging with emphasis on reuse of materials;
- Use of naturally ventilating buildings to reduce ductwork;
- Reducing packaging waste on-site by returning packaging to suppliers where possible, purchasing in bulk and requesting cardboard or metal drums rather than plastics;
- Requesting metal straps or similar, rather than shrink wrap and using returnable packaging such as pallets and reels;
- Reduction of PVC use;
- Use of low VOC (volatile organic compounds) paints, floor coverings and adhesives;
- Use of fittings and furnishings that have been recycled or incorporate recycled materials;
- the use of building materials, fittings and furnishings with consideration to their longevity, adaptation, disassembly, reuse and recycling potential.

SITE PROCEDURES

- Excavated materials will be used onsite where possible;
- Green waste will be mulched and reused in landscaping either onsite or taken to licensed facility;
- Concrete, tiles and bricks will be reused or recycled offsite;
- Steel will be recycled offsite; all other metals will be recycled where economically viable;
- Framing timber will be reused on-site or recycled off-site;
- Windows, doors and joinery will be recycled off-site where possible;
- Plumbing, fittings and joinery will be recycled off-site where possible;
- Plasterboard will be re-used in landscaping on-site or returned to the supplier for recycling where possible;
- Glass to be recycled where feasible;
- All solid waste timber, brick, concrete, rock, plasterboard and other materials that cannot be reused or recycled will be taken to an appropriate facility for treatment to recover further resources or for disposal to landfill in an approved manner;
- All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with WorkCover Authority and EPA requirements;
- Provision for the collection of batteries, fluorescent tubes, smoke detectors and other recyclable resources will be provided on site;
- Beverage container recycling will be provided on-site for employee use;
- All waste and recycling will be disposed of via council approved systems.

6.3 LOCATION AND DESIGN OF WASTE MANAGEMENT FACILITIES

GENERAL REQUIREMENTS

All waste management facilities onsite should:

- Be conveniently located to enable easy access for on-site movement and collection;
- Be incorporated with other loading/unloading facilities;
- Have sufficient space for the quantity of waste generated and careful source separation of recyclable materials;
- Have sufficient space to contain any on-site treatment facilities, such as compaction equipment;
- Have adequate weather protection and, where required, be enclosed or undercover;
- Be secure and lockable, where feasible;
- Be well-ventilated and drained to the sewer;
- Be clearly sign-marked to ensure appropriate use.

WASTE AND RECYCLING RECEPTACLES

Skip bins should be provided for the separate storage of each type of construction and demolition material generated on site. This will assist in maximising source separation and resource recovery, while reducing the costs and quantity of materials disposed of at landfill.

The size and quantity of the receptacles should be appropriate to the nature of waste generated and the available storage area.

Separate receptacles for the safe disposal of hazardous waste types (i.e. light bulbs, batteries, etc) will also be provided where applicable.

Where possible, additional bins will be provided in common areas for the collection of commingled recyclables such as beverage containers (glass, plastic, aluminium), paper products, recyclables food containers, etc.

SAFETY AND SIGNAGE

The following safety measures should be considered for the waste storage area:

- Location should not interfere with sight lines of drivers entering or leaving the site;

- Skip bins should be clearly visible and located in well-lit areas;
- Safe paths of travel should be designated using reflective tape, barriers and cones;
- Skip bins must be secured and must not be over-filled to reduce risk of injury through bins moving and falling objects.

Standard signage will be installed in all waste areas, with all skip bins colour coded and labelled appropriately on all sides to allow clear identification of the type of waste to be deposited into each bin.

SPACE AND SITING REQUIREMENTS

The waste storage area will be located adjacent to the Fairlight Street entrance to the site to enable access and allow sufficient space for the required skip bins and servicing requirements. The storage area will also need to be flexible in order to cater for change of use throughout construction works.

Where space is restricted, dedicated stockpile areas will be allocated onsite, with regular transfers to the dedicated skip bins for sorting and collections. The position of the designated waste holding area onsite may change according to building works and the progression of the development.

Access, visual amenity and WHS will always be integral to the selection of waste storage area locations. Any stockpile locations will take into account slope and drainage factors to avoid contamination of stormwater drains during rain events.

SERVICING AND TRANSPORT

The frequency of waste removal from site will be determined by the volume of materials deposited into the dedicated skip bins. Skip bins will be monitored on a daily basis by the Construction Site Manager to ensure they do not overflow. If skip bins are reaching capacity, removal and replacement should be organised for within 24 hours.

All skip bins leaving the site will be covered with a suitable tarpaulin to reduce spillage of waste while in transit.

All waste collection for construction works will be conducted between approved hours as per Council requirements (typically between 7am and 7pm Monday to Friday, and between 7am and 1pm on Saturdays). All waste generated on site will be transported to an approved and appropriately licensed resource recovery facility and/or landfill site.

Project manager to retain all weighbridge or re-processing facility dockets to ensure responsible disposal and recycling options are being employed by contractors.

All waste generated is to be documented and handled in accordance with Table 3 Construction Volumes and Reuse/Recycling Potential

6.4 CONSTRUCTION WASTE VOLUMES AND REUSE POTENTIAL

Construction waste volumes have been calculated using available data and industry standard figures available for the construction of similar developments. An estimation is provided below, however the figures are indicative .

Table 3 - Construction Volumes and Reuse/Recycling Potential

Material	Estimated Volume (m ³)	Estimated Weight (t)	Waste Management Strategy			Approximate Recovery Rate	Estimated Amount of Material Diverted from Landfill (t)
			Re-Use	Recycle	Landfill		
Bricks	21,672.00	26,006.40	Full bricks retained and set aside for re-use	Broken Bricks stored for collection to crushing	N/A	100%	26,006.40
Concrete	31,777.00	47,665.50	Re-use for filling, levelling and road base	Slabs/footings broken up on site and stored for collection/crushing	N/A	100%	47,665.50
Timber	430.00	81.70	De-Nail useful pieces and set aside for re-use	Unused larger pieces recycled for timber salvage	Transported to Green Waste processing facility	33%	26.96
Plasterboard	645.00	129.00	Stored for recycling	Stored for recycling	N/A	100%	129.00
Metal	602.00	301.00	Stored for recycling	Stored for recycling	N/A	100%	301.00
Tiles	1,075.00	1,075.00	Full tiles set aside for re-use	Broken tiles stored for collection to be crushed and use for road base	N/A	100%	1,075.00
Green Waste	35,432.00	5,314.80	Processed on site and stored to be used as mulch and/or compost in future gardens	N/A	Dispose of non re-useable vegetation to processing facility	80%	4,251.84
Other Waste	1,118.00	335.40	Separated in to re-usable materials	Separated in to recyclable materials	Transported to Waste Facility	50%	167.70

Estimated Total Waste Amounts	
Estimated Total Volume of Waste Generated (m ³)	92,751.00
Estimated Total Weight of Waste Generated (t)	80,908.80
Estimated Total Weight of Waste Diverted from Landfill (t)	79,623.40
Estimated Percentage of Waste Diverted from Landfill	98.41%

6.5 RECYCLING OF MATERIALS

Construction materials generated during the construction phase of the proposed development will need to be managed in accordance with the provisions of current legislation.

Generally, this will include segregation by material type classification in accordance with *NSW EPA (2014) Waste Classification Guidelines, Part 1: Classifying Waste* and disposal at facilities appropriately licensed to receive the particular materials.

The nearest locations to the subject site for licenced facilities can be sourced via www.businessrecycling.com.au.

7 POST CONSTRUCTION (OPERATIONAL) PHASE

The following assessment of waste volumes is an estimate only and will be influenced by building management, cleaning arrangements, individual tenant's attitude and obligation regarding waste disposal and recycling.

7.1 WASTE AND RECYCLING GENERATION RATES

The below waste generation rates are taken from Appendix 3 of the Northern Beaches Council Development Control Plan 2013.

Waste Type	Waste Generation Rate (Litres per Unit per Week)
General Waste	80
Recycling (Paper and Cardboard)	50
Recycling (Glass and containers)	50
Garden Waste	2 x 240L MGBS + 1 x 240L MGB per 200m ² of open space

Northern Beaches Council Waste Management Guidelines – *Appendix A* identifies that 240L MGBs would be considered appropriate for a development of this scale. The proposed development is proposed to be serviced, for general waste and recycling, twice weekly by Council or contractor.

Based on the information provided by Council the waste generated and the required number of 240L MGB's have been identified in Table 4.

Table 4 - Waste Generation Rates

Address	Units	General Waste	Paper and Cardboard	Glass and Containers	Green Waste	Total
33-35 Fairlight Street	9	3	2	2	2	9
10-12 Clifford Avenue	6	2	2	2	--	6
TOTAL	15	5	4	4	2	15

During operation, it is the responsibility of the building manager/waste caretaker to monitor the number of bins required for development. Volumes of Waste, recycling and organics generated by the development may change according to future tenant's attitudes to waste disposal and recycling, building occupancy levels or changes to building management.

Any requirements for adjusting the capacity of the waste facilities can be achieved by changing the number of bins, the bin sizes or collection frequencies. Prior to these being undertaken, building management will be required to negotiate any changes to bins or collections with the Council and or their contractor.

7.2 SOURCE SEPARATION - RESIDENTIAL

Best practice waste management includes the avoidance, reuse, and recovery of unwanted items, and the prevention of cross contamination of waste streams, which can be achieved through source separation.

The table below outlines what is typically included in various waste streams and how they can be managed. Various options can be accessed online to find other facilities that recover unwanted items.

Waste Stream	Description	Disposal Details
Waste		
General Waste	The remaining portion of the overall waste stream not recovered for reuse, processing or recycling.	Waste bins should always be lined with bags and the bags tied before removal. General waste should weigh approximately 3 kg or less. Waste bins should be accompanied by a commingled recycling bin in order to facilitate separation of general waste and recycling.
Food and Organic Waste	Separating organic or food waste from general waste may be considered to reduce the total amount of general waste produced.	Apartment style equipment such as organic household composter or worm farms are available for use where practical and space allows. On-site composting should be arranged with the building management.
Recycling		
Comingled	A mixture of items that are commonly recycled. Typically include food and beverage containers (e.g., aluminium, glass, steel, hard plastics, cartons). Also included cardboard and paper products.	Items for recycling must not be bagged and should be disposed of in loose form. <i>Residential Apartments</i> Residents will have receptacles within their individual units for collection and storage of at least one day of recycling. Recycling bins are typically placed under the kitchen sink next to the general waste bin. Additional recycling bins can be placed in other areas as required. Once full residents will dispose of their recycling materials directly into the recycling MGB within their respective waste holding room in their individual building cores. Recycling bins will usually be split between paper/cardboard and glass/recycling. Residents are encouraged to make use of any container refund scheme and separate eligible containers from the recycling material.
Other Waste		
Green Waste	Green waste consists of unwanted organic materials that are easily biodegradable and/or compostable (e.g., lawn clippings, branches)	Green waste is not typically produced from this type of development other than from surrounding landscaped areas or potted plants. Green waste is usually removed by the designated maintenance contractor. The engaged contractor will be required to send this material to a composting or resource recovery facility rather than to a landfill if locally available.
Hard Waste/Bulky Items	Items that are too large to place into general rubbish collection. This includes disused and/or broken furniture, mattresses, white goods, etc.	Bulky items may be stored in a designated room which is located in the basement level. Residents are to liaise with building management to arrange for pickup and removal.

Electronic Waste	Discarded e-waste, electronic components and materials such as computers, mobile phones, keyboards, etc.	Building manager is to arrange collection for e-waste recycling as needed by residents.
Hazardous and other waste	Other recyclable items that require special recovery may include ink cartridges, batteries, chemical waste, fluorescent tubes, etc.	It is an expectation that the building management assist with disposal of hazardous, electronic or liquid waste and any paint or chemicals as required and requested. Hazardous waste must be handled with due care, separated and securely stored for collection by a specialist waste contractor.

7.3 WASTE DISPOSAL PROCESSES

All residents will be provided with a waste storage cupboard in each unit. The waste storage cupboard is to be located within the kitchen area and be capable of storing a minimum of 40L of waste and to enable a minimum of 20L of recycling waste to be stored in a separate container and not in plastic bags.

Suitable space is to be provided within the kitchen area to allow for a 3-5L kitchen caddy to collect food waste. Suitable space is to be provided for other recyclable items such as light globes and batteries.

Once these have been filled the resident will then transport the waste to the waste holding room in their respective building.

The storage of residential waste will be within a waste holding room for each individual building adjacent to each lift core. The waste holding room for 10-12 Clifford Avenue is at the Ground Floor Level of the building, whereas the waste holding room for Fairlight Street is at the Lower basement level of this respective building.

The waste storage rooms will contain enough bins to accommodate MGB's required for the generation in the tables above. The bins will be clearly labelled to identify the respective materials that are acceptable in the relevant bin.

All residential waste generated by residents will be transported to their respective waste holding room as identified above. Residents will sort their refuse in to general waste and the relevant type of recycling materials and dispose of them accordingly.

General waste should be wrapped, bagged or otherwise secured before it is disposed of in the MGB. Recyclable materials must not be bagged and must be separated in to paper/cardboard and glass/containers or other recyclable materials. Larger cardboard boxes and other cardboard objects should not be placed in the MGB, but transported to the bulky waste room within the lower basement level.

Each individual residential dwelling shall be no more than 75 metres from the nearest waste room. This distance should be shortened to 50 metres for aged or disabled residents.

All equipment movements in the garbage room and from the garbage room to the loading space are to be managed by the building manager or custodial staff.

The waste caretaker and building management shall be responsible for ensuring the waste rooms and related equipment are kept in a clean and working order.

The waste caretaker and building management shall also ensure that the waste and recycling bins are provided in the waste collection point area on the relevant servicing days by the required times. Once serviced the bins are to be moved back to the main Waste room.

Occupational health and safety of bin transfers must be considered for larger bins (e.g. ability to safely move a bin that may weigh more than the person trying to move it).

7.4 EDUCATION AND IMPROVED PRACTICES

On-going education is important to ensure people continue to use the facilities as originally intended. All body corporate and leasing contracts should contain clauses pertaining to waste management arrangements and use of any associated equipment.

Educational materials encouraging correct separation of general waste and recyclables must be provided to each resident. This should include the correct disposal process for bulky waste such as old furniture, large discarded items, and other materials including electronic and chemical wastes.

It is recommended that the building caretaker provides information in multiple languages to support correct behaviours, and to minimise the possibility of contamination in communal waste bins.

7.4.1 SIGNAGE

Signage and education are essential components to support best practice waste management including resource recovery, source separation, and diversion of waste from landfill.

All receptacles, bins and other refuse management equipment will have adequate signage. Standard signage will be provided in and around waste collection and storage areas.

Signage should include:

- Clear and correctly labelled waste and recycling bins,
- Instructions for separating and disposing of waste items. Different languages should be considered,
- Locations of, and directions to, the waste storage areas with directional signs, arrows, or lines,
- The identification of all hazards or potential dangers associated with the waste facilities, and
- Emergency contact information should there be issues with the waste systems or services in the building.

The building manager is responsible for waste room signage including safety signage. Appropriate signage must be prominently displayed on doors, walls and above all bins, clearly stating what type of waste or recyclables is to be placed in each bin.

It is the Building Management's responsibility to ensure that all signage conforms to the relevant Australian Standards.

7.4.2 POLLUTION PREVENTION

Building management shall be responsible for the following to minimise dispersion of site litter and prevent stormwater pollution to avoid impact to the environment and local amenity:

- Promoting adequate waste disposal into the bins
- Securing all bin rooms (access to be provided to residents, staff and contractors)
- Prevent overfilling of bins, keep all bin lids closed and bungs leak-free
- Taking action to prevent dumping or unauthorised use of waste areas
- Require collection contractor/s to clean up any spillage when clearing bins

7.5 WASTE TRANSPORT ROUTES FROM UNIT TO WASTE ROOM/WASTE CHUTES

The transfer of waste from individual units to the communal waste holding rooms should minimise manual handling and distances where possible, ensuring the safest and most direct route,

The routes are to be consistent with the following:

- Allow for a continuous route that is wholly within the property boundary;
- All routes are to comply, where required, with Australian Standard 1428, NCC and relevant legislation;
- Be constructed of solid materials with a non-slip surface;
- Door widths within the travel path are to comply with the NCC and relevant access legislation;
- Be a minimum of 300mm wider than the largest bin used on site;
- Not exceed a grade of 1:14;

- Allow for the use of lifts as required by access standards and legislation;
- Minimise travel distances wherever possible

7.6 WASTE HOLDING ROOMS

The storage of residential waste will be within a Waste Holding Rooms attached to each building core, located as shown in the submitted plans.

Waste MGB's will be stored in a single stacked arrangement with a minimum of 300mm distance provided between each MGB and a minimum of 1,500mm between the opposing rows of MGB's to allow for the logistical movement of the MGB's for collection.

This room shall be constructed in accordance with the Northern Beaches Waste Management Guidelines, ensuring compliance with the National Construction Code and at a minimum be of approved solid impervious material and shall be cement rendered internally to a smooth even smooth even surface coved at all intersections.

The ceiling of the waste room will be finished with a rigid smooth faced non-absorbent material capable of being cleaned. The walls, floor and ceilings of the garbage room shall be finished with a light colour.

Provision for cleaning and bin washing facilities are to be provided within the Bin Holding Room. A hot and cold water tap and drainage with connection to the sewer are to be provided within the waste holding room.

Hose cocks shall be protected or located so that they cannot be damaged. The hose cocks must be easily accessible, even when the room is at capacity.

A hose of adequate length and fitted with a nozzle is to be connected to the hose cock to allow for adequate cleaning of the waste room and receptacles.

The floor of the Waste Holding Rooms are to be constructed of a minimum of 75mm thick concrete, finished with a two-pack epoxy or similar substance and be graded so that any water is directed to a sewer connected floor waste to ensure that the Bin Holding Area does not discharge flow in to the stormwater system.

All corners are to be coved and sealed for a minimum height of 100mm above the ground level.

The size of the waste room will be sufficient to house the recommended number of mobile garbage bins for the development. The minimum sizes for the proposed bins are identified in Appendix B.

A close fitting and self-closing door openable from within the room must be fitted to the waste room. The waste room will be constructed so, as to prevent the entry of vermin.

The doors are to be sized to comply with the requirements of AS1428 – Design for Access and Mobility.

The room will be adequately ventilated, well lit, and appropriately signposted to distinguish paper/cardboards recycling bins from container recycling bins and residual waste (garbage) bins.

The waste room must be ventilated by either:

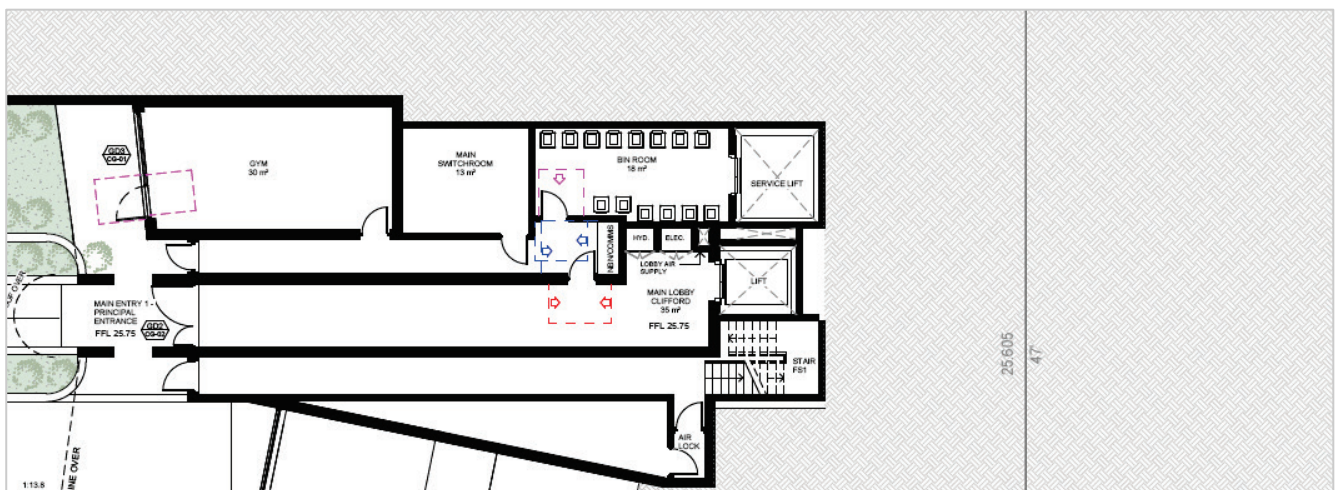


Figure 3 - Waste Bin Room No. 1 Location

- Permanent unobstructed natural ventilation openings direct to the external air, not less than 5% of the floor area,
- Mechanical exhaust ventilation system exhausting at a rate of 5L/m² floor area, with a minimum rate of 100L/s min.

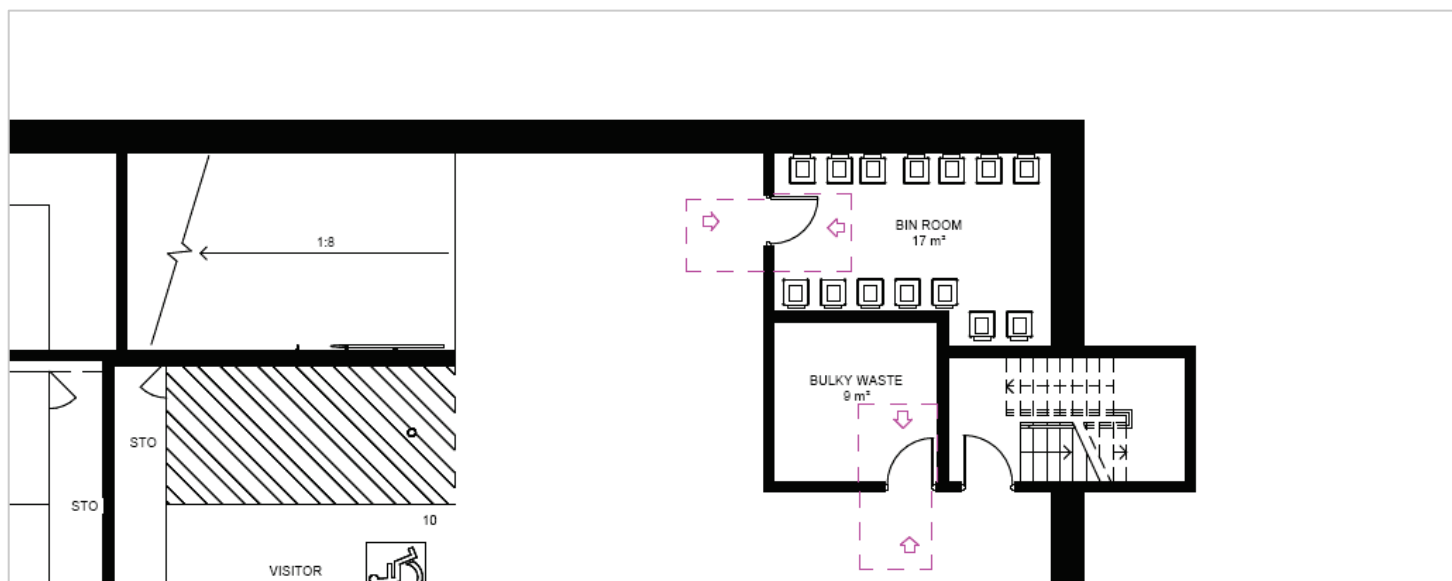


Figure 4 - Waste Bin Room No. 2 Location

Mechanical exhaust systems shall comply with AS1668.4 and not cause any inconvenience, noise or odour problem.

The waste room will be provided with artificial light controlled by switches located both outside and inside the room.

Where storage and drainage racks are provided, they will be constructed of galvanised metal or other approved materials which are durable, impervious and non-corrosive.

Racks should be installed at least 50mm clear of walls with the lowest racks installed at least 300mm above the floor. Racks should be designed to prevent receptacles/containers placed thereon from coming in to contact with the walls.

Clear and easy to read "NO STANDING" and "DANGER" signs must be fixed to the external face of each waste and recycling room as appropriate. Clear and easy to read signs designating the storage of recyclables and general waste must be fixed to the internal walls as appropriate.

The location of the waste rooms have been designed to be easily accessible with door clearances that are consistent with AS1428.1. The waste room will not affect the amenity of any adjacent properties and has been designed as an integrated part of the overall design.

7.7 BIN MOVEMENTS

The transfer of bins should minimise manual handling where possible and is to be completed by the waste caretaker or building management.

The travel paths from the waste holding rooms to the collection point are to comply with the following:

- Allow for a continuous route that is wholly within the property boundary.
- Be free from obstruction and obstacles such as steps and kerbs.
- Be constructed of solid materials with a non-slip surface.
- Be a minimum of 300mm wider than the largest bin used on site.
- Not exceed a grade of 1:14 (for 240L MGBs), and 1:30 (for 660L MGBs and larger) if the bins are moved manually.
- Should not exceed the maximum operating grade of a bin moving device if one is used to transfer bins.
- If the transfer of bins is longer than 10m, then a bin moving device should be used.

Where required, the property management is responsible for supplying all equipment required for moving bins including bin lifters, bin moving devices, and waste transfer bins. This equipment must be new and appropriate for the site.

The building management is responsible for supplying all equipment required for moving bins this includes any bin lifters, bin moving devices and waste transfer bins. This equipment must be new and appropriate for the site. The building management should contact the relevant suppliers to provide equipment recommendations.

Once the site becomes operational, it will be the responsibility of the building proprietors/strata for maintaining, repairing, and replacing waste management equipment

7.8 SERVICING (COLLECTION)

Council will service all the waste MGB's weekly and the recycling MGB's weekly via a Wheel out Wheel Back (WOWB Service). The proposed development includes a temporary bin holding area located adjacent to the southern border of the subject site.

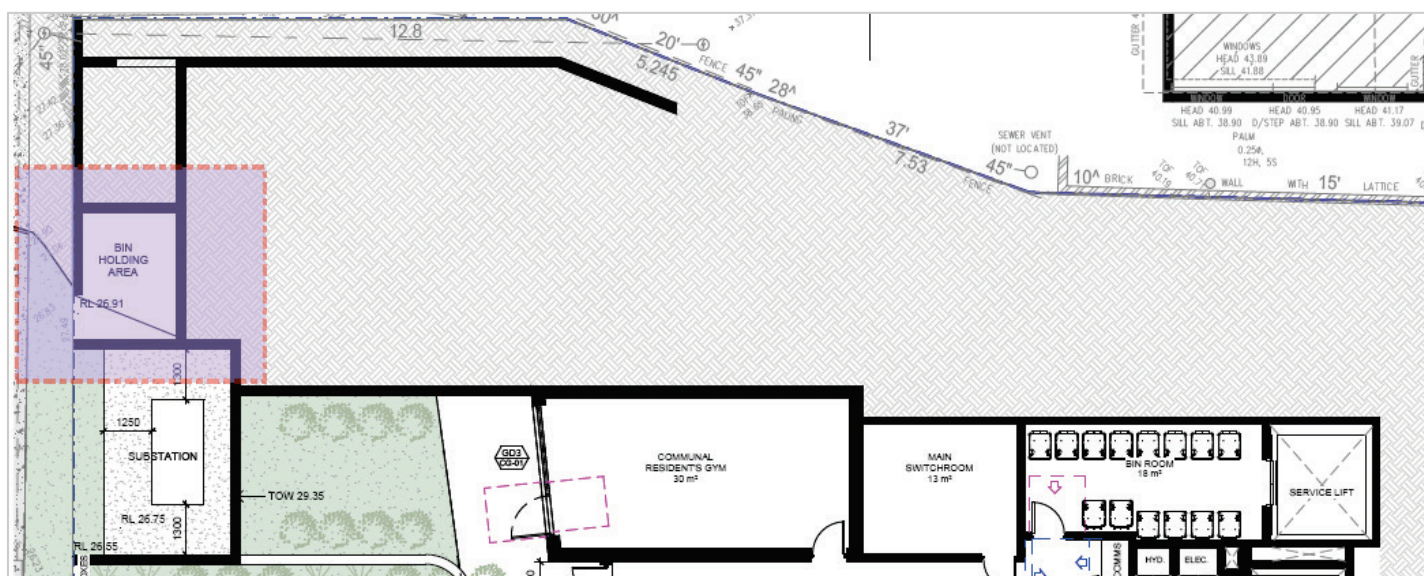


Figure 5 - MGB Temporary Holding Area

The temporary bin holding area is located adjacent to the kerbside for Clifford Avenue. The property manager/owners corporation will ensure that all bins are prepared and presented within the temporary bin holding service area, before 5:00am on service day.

Council is to be provided with access to the temporary bin holding area via a key pad lock, or similar device, to the area. On collection days the collection vehicle will stop on Clifford Avenue and service the bins from the temporary bin holding area.

The design of the development allows for the garbage and recyclables to be transported from the temporary bin holding area to a kerbside collection point by Council staff or contractors for collection.

The distance the bins are to be transported is to be less than 30 metres and the maximum surface grade is to be less than 1:14.

The development has been designed so as to allow Northern Beaches Shire Council or private contractor's waste management contractor to collect the garbage from the kerbside collection loading space without impacting on local traffic flow.

Collection vehicles must be able to service the development without the need to travel any distance in reverse all vehicular movements must be in a forward-moving direction.

The temporary bin holding area is to be within 15 metres from the property boundary allowing direct waste collection by Council officers or contractors to enable the movement of bins and bulky waste.

Responsibility for regular transfer of bins and bulky waste from storage areas to/from collection areas or around a site, rests with the Owners/Strata/managing body or delegated person.

All waste and recycling mobile garbage bins are to be maintained in serviceable condition and at the agreed bin numbers at all times. Bin cleaning and regular bin number audits must be conducted by the managing body and a site may be audited by Council.

A Council-approved digital pin code key system will be installed to the gate of the temporary bin holding area to allow a WOWB service to be provided. All costs for this system and physical access card or remote when required are to be borne by the property management.

In situations whereby a key or lock system is changed by the managing body, Council must be provided with 2 weeks' notice prior to the change to enable the continuation of collection services.

The waste collection point area is to be generally level. Bins will be returned to the garbage rooms as soon as practicable following servicing.

Occupational health and safety of bin transfers must be considered for the bins (e.g. ability to safely move a bin that may weigh more than the person trying to move it).

The owners corporation shall be responsible for the operation of any waste system, its ongoing maintenance and the presentation of the required bins for collection

7.9 BULKY WASTE

A dedicated bulky waste storage area will be located adjacent to the lifts in the basement allowing for residents to temporarily store unwanted bulky items until suitable disposal/transport options can be arranged.

The dedicated bulky waste room will be located adjacent to the loading area in the basement level allowing for ease of collection.

The waste caretaker will transport the bulky waste from the bulky waste room to the designated collection area to allow for collection.

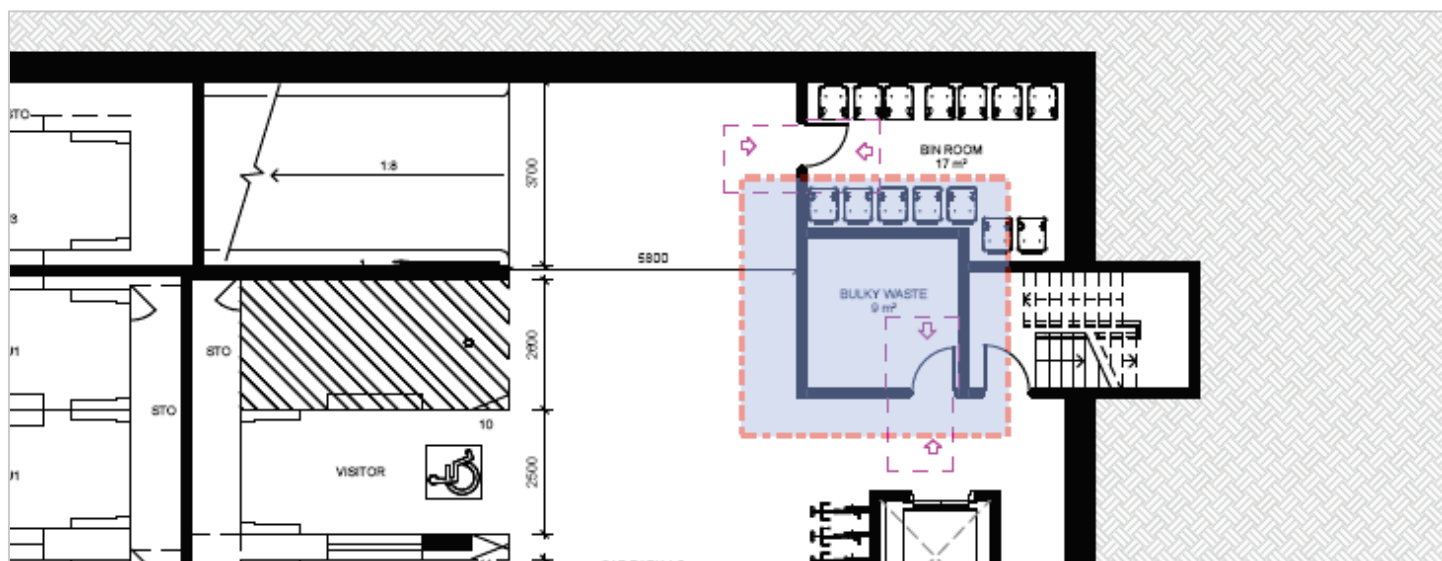


Figure 6 - Bulky waste Room Location

The bulky waste storage area must be secured, and only permitted to be used by the Body Corporate/Building Manager to prevent illegal dumping of waste. The management of access to the designated bulky waste storage area will be the responsibility of the Body Corporate/Building Manager.

Doors in waste and bin storage areas should always be able to be opened from the inside. It is preferable that doors open outwards. Doors should be able to be locked in an open position to facilitate the movement of bins and bulky waste. For handling bulky waste and bulk bins, it is recommended to fit doorways with galvanised iron to protect them from damage.

7.10 OCCUPATIONAL HEALTH AND SAFETY

Transferring refuse bins and using refuse management equipment are considered hazardous tasks. Therefore, building management must ensure that a full risk assessment of equipment, surfaces and related gradients is completed prior to occupation of the development.

Building Management must provide procedural documentation to appropriate personnel prior to delivery of equipment and occupancy of the development.

Building management is to ensure the provision of equipment manuals, training, health and safety procedures, risk assessments and personal protective equipment to staff / contractors in order to control hazards associated with all waste management activities.

Transferring and collection of bulky waste is to be completed in accordance with OH and S requirements, a risk assessment of the individual bulky waste item and the overall circumstances. Where possible bulky waste should only be transferred via mechanical or mechanised equipment.

Where possible, with larger items, bulky waste should be dis-assembled or broken down in to smaller components to allow for easier transport to the relevant collection point.

Manual handling is to be limited wherever feasible.

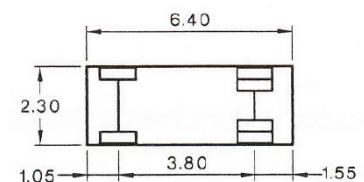
7.11 TRANSPORT VEHICLES

All vehicles approaching the subject site will adhere to the road rules and observe any signage in place. At all times access to bike and footpaths will remain unobstructed and consultation with local residents will be ongoing.

7.11.1 CLASSES OF VEHICLE DESIGN

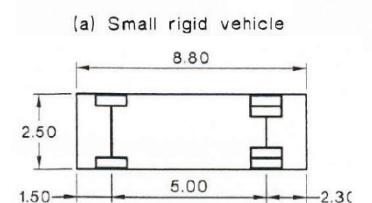
SMALL RIGID VEHICLE (SRV)

The SRV represents light trucks to a maximum load capacity of 4.0 tonnes and typically having a single rear axle and either single or dual tyres. Typically used in services areas where small commercial vehicles are preferred.



MEDIUM RIGID VEHICLE (MRV)

The MRV represents the common service truck having a load capacity of 8.0 tonnes and typically having a single rear axle and dual tyres. They are usually used where there is significant movement of goods but where the provision of goods by HRV or AV is not necessary.

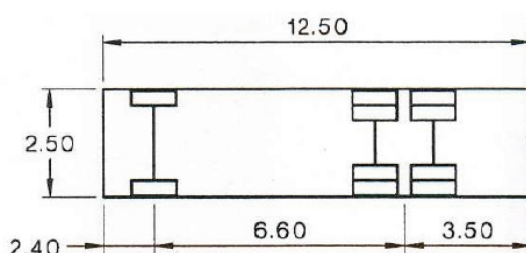


HEAVY RIGID VEHICLE (HRV)

The HRV represents the maximum dimensions of a single unit truck; specialist vehicles excepted, and typically has a load capacity of 12 tonnes. The class also includes 4-axle twin steer vehicles with a typical load capacity of 16 tonnes. Typically this design would normally be provided for in major suburban delivery areas.

(b) Medium rigid vehicle
Clearance height 4.50
Design turning radius 10.0

7.12 STAKEHOLDER ROLES AND RESPONSIBILITIES



(c) Heavy rigid vehicle
Clearance height 4.50
Design turning radius 12.5

Roles and responsibilities of stakeholders within the proposed development are outlined in table 7.

Table 5 - Stakeholder responsibilities

Stakeholder Role	Outline of Responsibilities
Strata management	- Ensuring that all waste service providers submit monthly reports on all equipment movements and waste quantities/weights; - Organising internal waste audits/visual assessments on a regular basis - Purchasing any on-going waste management equipment or maintenance of equipment once building is operational; and - Managing any non-compliances/complaints reported through waste audits.
Building Manager or Waste Caretaker	- Maintaining and cleaning chute doors on each level; - Coordinating general waste and recycling collections; - Cleaning and transporting bins as required; - Organising replacement or maintenance requirements for bins; - Organising, maintaining and cleaning the waste holding area; - Organising bulky goods collection when required - Investigating and ensuring prompt clean-up of illegally dumped waste materials. - Preventing storm water pollution by taking necessary precautions (securing bin rooms, preventing overfilling of bins) - Abiding by all relevant WH&S legislation, regulations, and guidelines; - Providing staff/contractors with equipment manuals, training, health and safety procedures, risk assessments, and PPE to control hazards associated with all waste management; - Assessing any manual handling risks and preparing a manual handling control plan for waste and bin transfers; - Ensuring site safety for residents, children, visitors, staff and contractors; and - Ensuring effective signage, communication and education is provided to occupants, tenants, maintenance staff, and cleaning contractors. - Purchasing all equipment required to implement this Waste Management Plan prior to the occupation of the building to be provided to the strata.
Council/Waste Collection Contractor	- Provide a reliable and appropriate waste collection service; - Provide feedback to building managers/residents regarding contamination of recyclables; and - Work with building managers to customise waste systems where possible.
Gardening / Landscaping Contractor	Removal of all garden organic waste generated during gardening maintenance activities for recycling at an offsite location.
Residents	- Dispose of all general waste and recycling in the allocated MGBs provided; - Ensure adequate separation of general waste and recycling; and - Compliance with the provisions of Council and the Waste Management Plan.



Appendix A

Signage for Garbage Areas



**Drink Bottles,
Cans and Cartons**



Garbage



Compostables



Food Waste Only



Paper & Cardboard



Appendix B

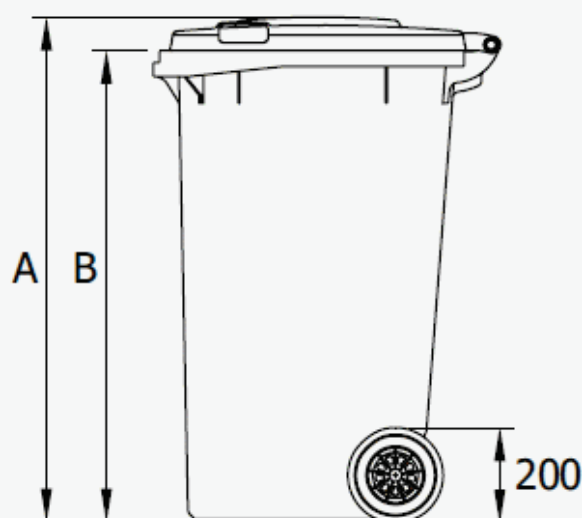
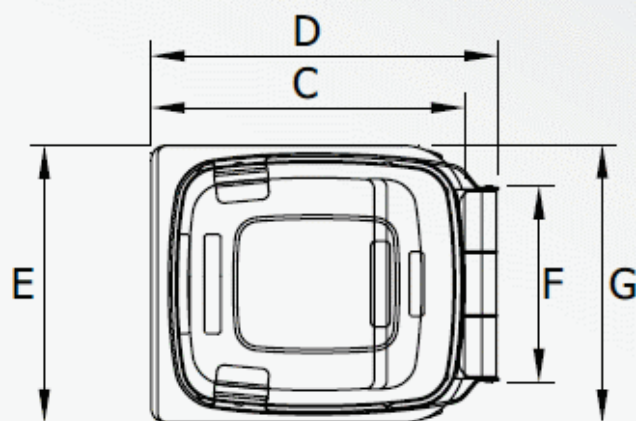
Waste Management Equipment

Dimensions - Weights - Standards

■ Nominal volume:	240 litres
■ Net weight:	approx 13 kg
■ Max load:	96 kg
■ Permitted total weight:	110 kg

■ A	1060 mm	■ D	730 mm	■ G	550 mm
■ B	990mm	■ E	585 mm		
■ C	660 mm	■ F	400 mm		

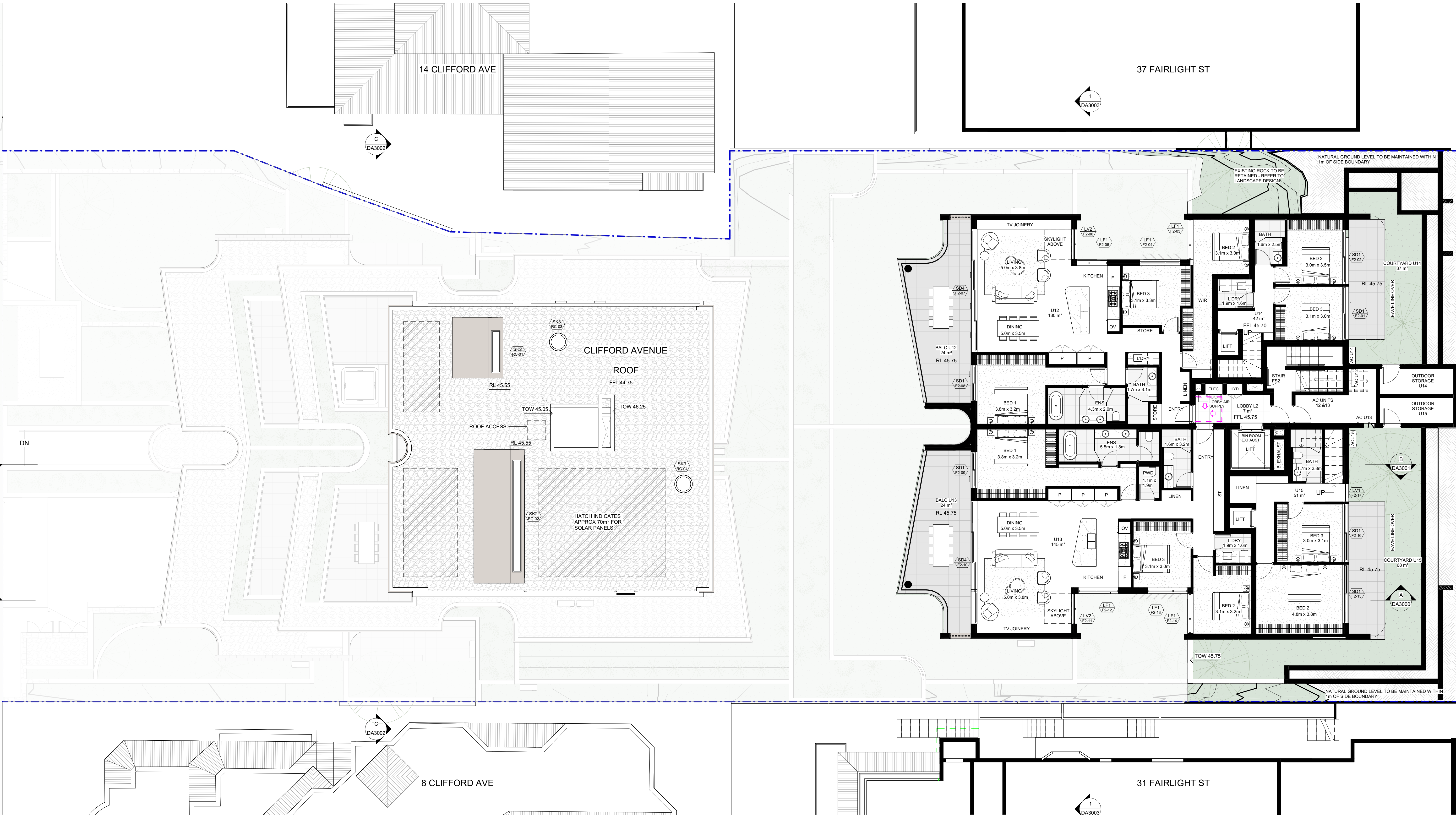
Measurements to be used as a guide only – variations will occur





Appendix C

Architectural Plans



1 ROOF PLAN CLIFFORD AVE + LEVEL 2 FAIRLIGHT ST
1 : 100

FOR DEVELOPMENT APPLICATION

IMPORTANT NOTES:
DO NOT SCALE FROM DRAWINGS. USE FIGURED DIMENSIONS ONLY. ENSURE THAT THE DRAWINGS USED CARRY THE LATEST REVISION NO. READ IN CONJUNCTION WITH CONSULTANT ENGINEERS DRAWINGS - REFER CONTRACT DRAWING LIST.
- ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK.
- ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
- LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PRECEDENCE.
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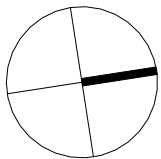
REVISION	DATE	DESCRIPTION	BY
P1	04/09/2024	ISSUE TO CONSULTANTS	RB
P2	15/10/2024	ISSUE TO CONSULTANTS	RB
P3	01/11/2024	ISSUE TO CONSULTANTS	JS
P4	06/11/2024	ISSUE TO CONSULTANTS	JS
P5	02/12/2024	ISSUE TO CONSULTANTS	JS
A	05/12/2024	FOR DEVELOPMENT APPLICATION	JS

REVISION NOTES



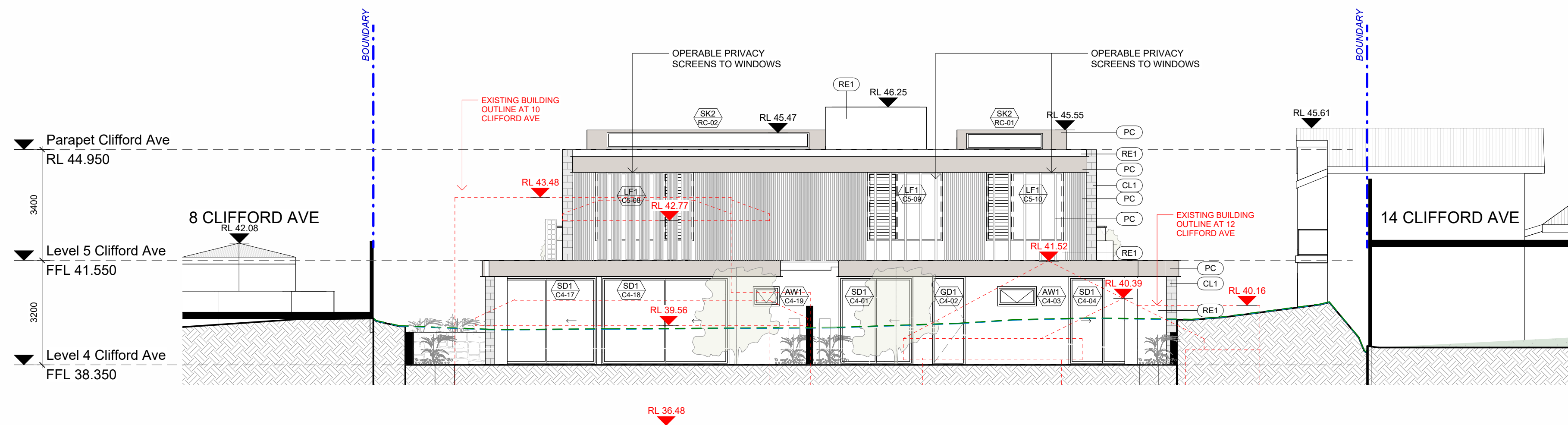
2/40 East Esplanade
Manly, NSW 2095 Australia
Phone: 02 8385 9759
Nominated Architect:
Bridie Gough 8280

MULTI-RESIDENTIAL DEVELOPMENT
33-35 Fairlight Street
10-12 Clifford Ave
Fairlight NSW 2094
ALLEN GROUP DEVELOPMENTS

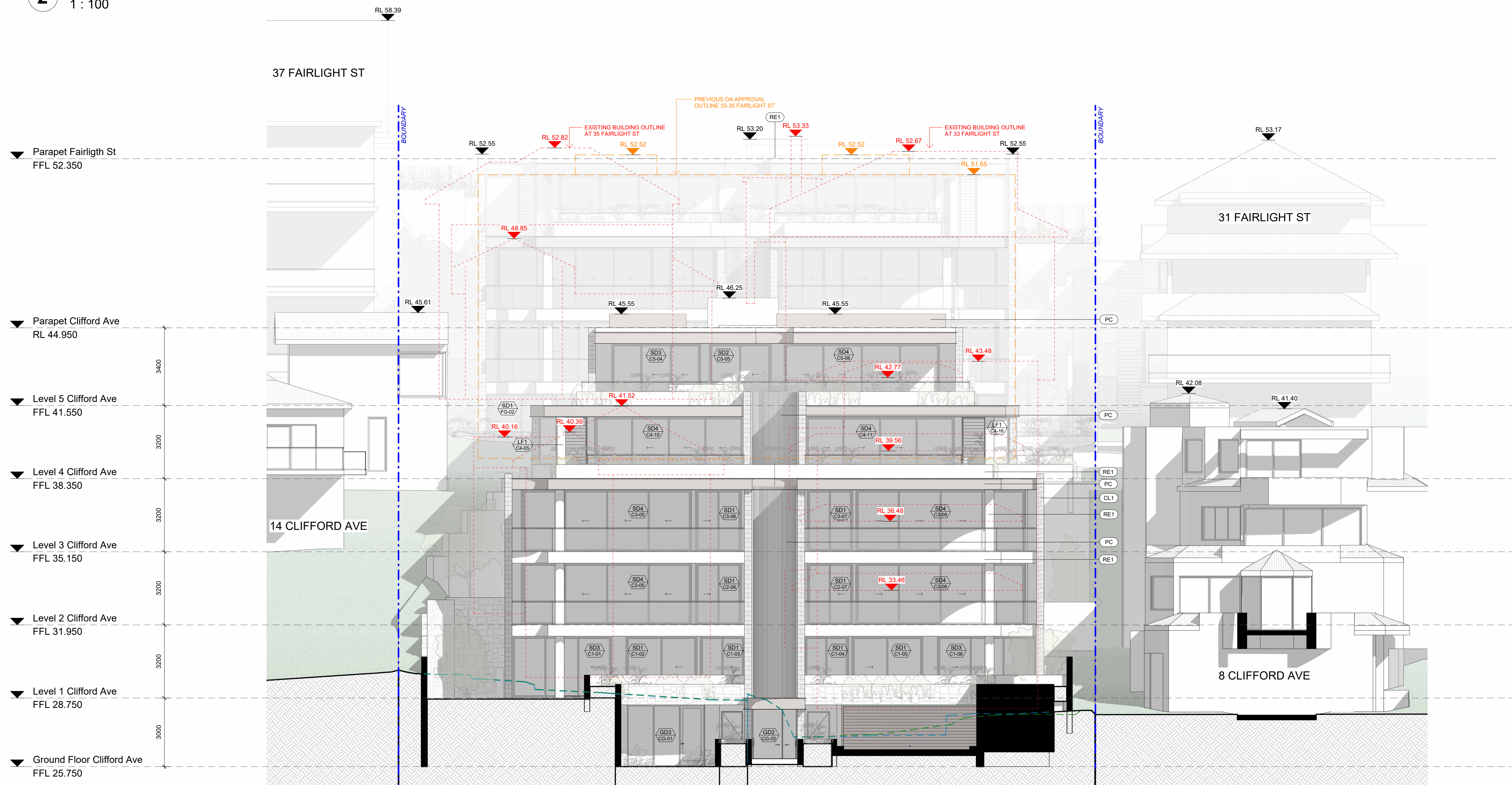


DRAWING TITLE		PROJECT	
Roof Plan Clifford Ave + Level 2 Fairlight St		FSF2	
SCALE	STATUS	NUMBER	REVISION
1 : 100	PRELIMINARY	DA1006	A





2 NORTH ELEVATION CLIFFORD AVE
1 : 100



1 SOUTH ELEVATION CLIFFORD AVE PAVILION
1 : 100

FOR DEVELOPMENT
APPLICATION

IMPORTANT NOTES:
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DRAWINGS USED CARRY THE LATEST REVISION NO. READ IN CONJUNCTION WITH
CONSULTANT ENGINEERS DRAWINGS - REFER CONTRACT DRAWING LIST.

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REVISION	DATE	DESCRIPTION	BY
P1	02/12/2024	ISSUE TO CONSULTANTS	JS
A	05/12/2024	FOR DEVELOPMENT APPLICATION	JS

REVISION NOTES



2/40 East Esplanade
Manly, NSW 2095 Australia
Phone: 02 8385 9759

Nominated Architect:
Bridie Gough 8280

MULTI-RESIDENTIAL DEVELOPMENT
33-35 Fairlight Street
10-12 Clifford Ave
Fairlight NSW 2094
ALLEN GROUP DEVELOPMENTS

DRAWING TITLE
North and South Elevations -
Clifford Ave Pavilion

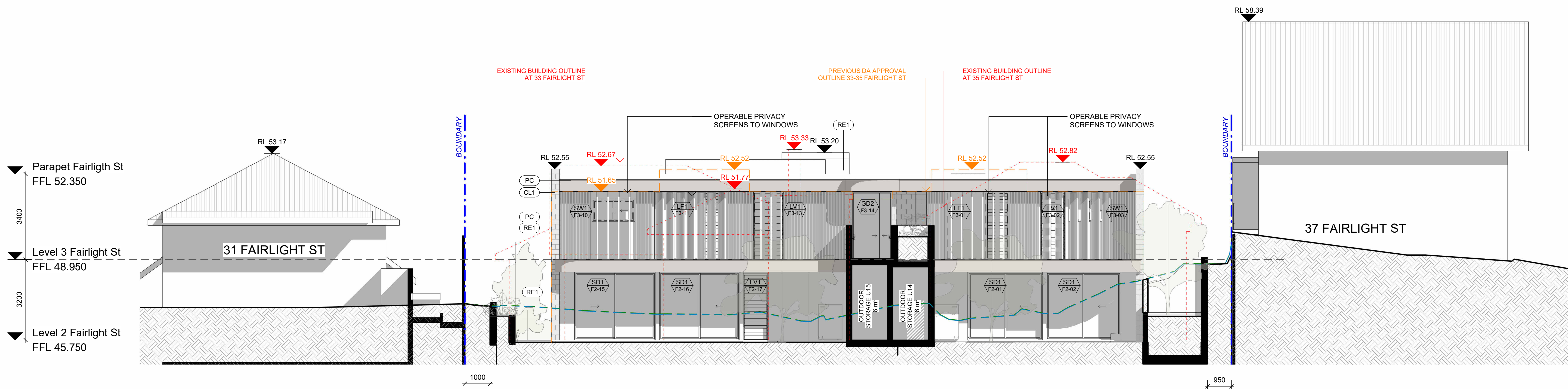
PROJECT
FSF2

SCALE
1 : 100

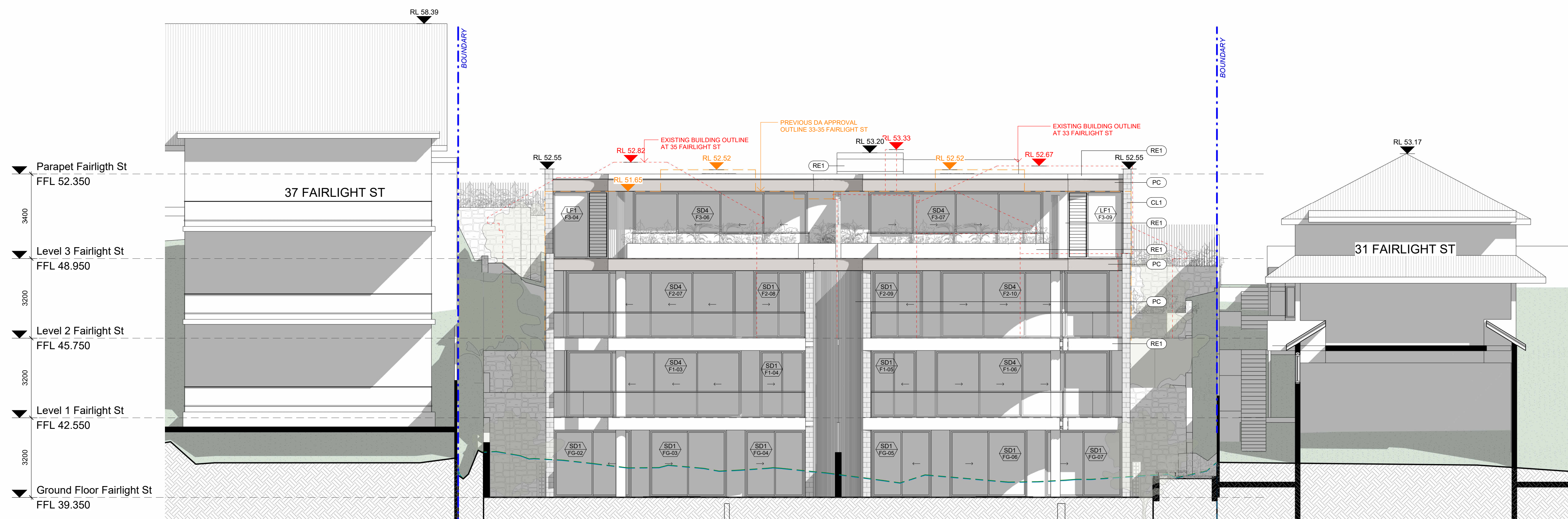
STATUS
PRELIMINARY

NUMBER
DA2001

REVISION
A



2 NORTH ELEVATION FAIRLIGHT STREET PAVILION
1 : 100



1 SOUTH ELEVATION FAIRLIGHT STREET PAVILLION
1 : 100

LEGEND - ELEVATIONS

- EXISTING BUILDINGS TO BE DEMOLISHED
- APPROVED BUILDING ENVELOPE - 33-35 FAIRLIGHT ST
- NEIGHBOURING BUILDINGS
- MERMAN GROUND LEVEL

FOR DEVELOPMENT
APPLICATION

IMPORTANT NOTES:
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P4	02/12/2024	ISSUE TO CONSULTANTS	JS
A	05/12/2024	FOR DEVELOPMENT APPLICATION	JS

REVISION NOTES



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Manly, NSW 2095 Australia
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Nominated Architect:
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MULTI-RESIDENTIAL DEVELOPMENT
33-35 Fairlight Street
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Fairlight NSW 2094
ALLEN GROUP DEVELOPMENTS

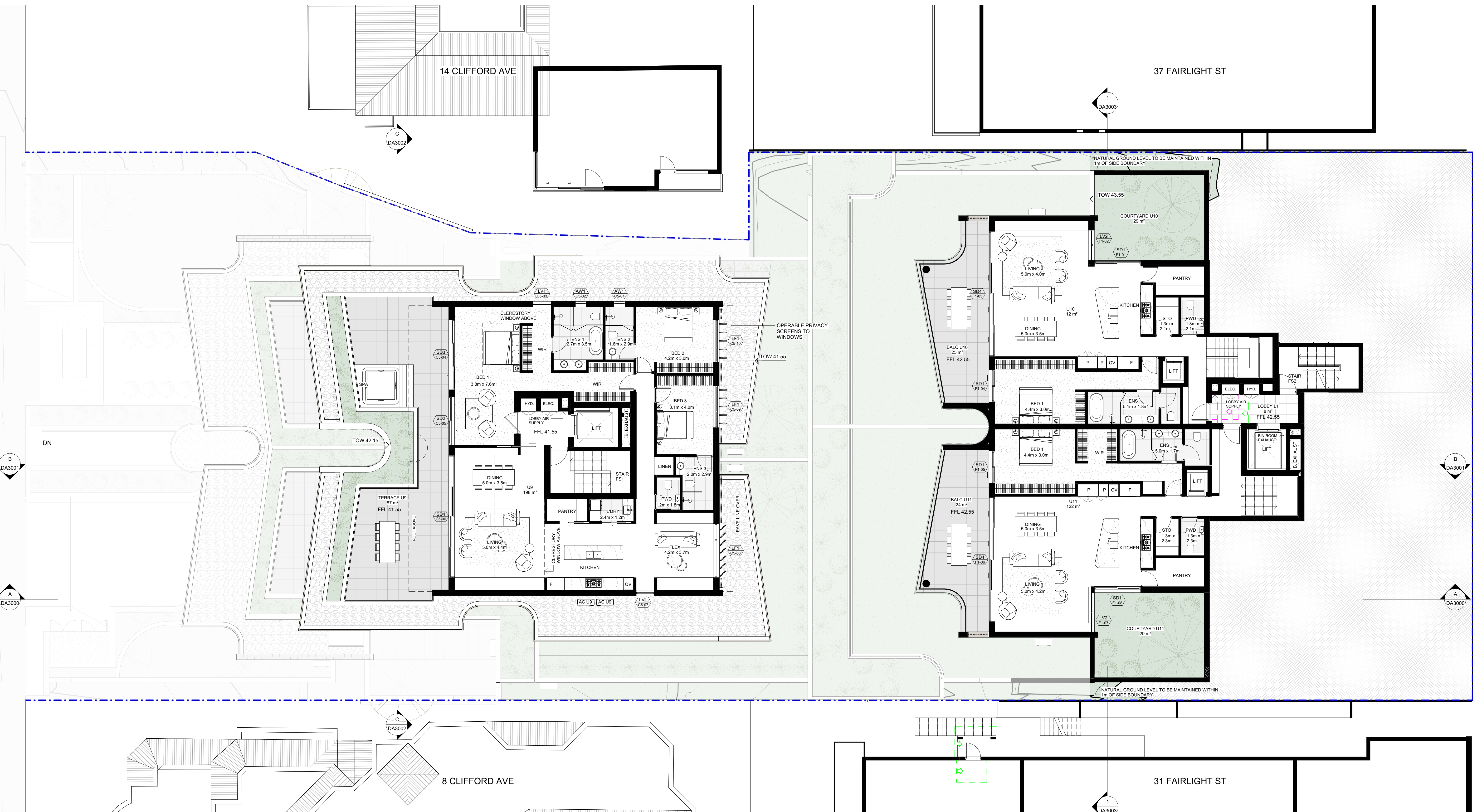
DRAWING TITLE
North and South Elevations -
Fairlight St Pavilion

SCALE
1 : 100

STATUS
PRELIMINARY

NUMBER
DA2000

PROJECT
FSF2
REVISION
A



1 LEVEL 5 CLIFFORD AVE + LEVEL 1 FAIRLIGHT ST
1 : 100

FOR DEVELOPMENT APPLICATION

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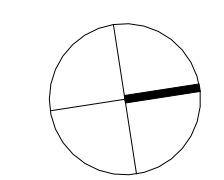
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A	05/12/2024	FOR DEVELOPMENT APPLICATION	JS

REVISION NOTES

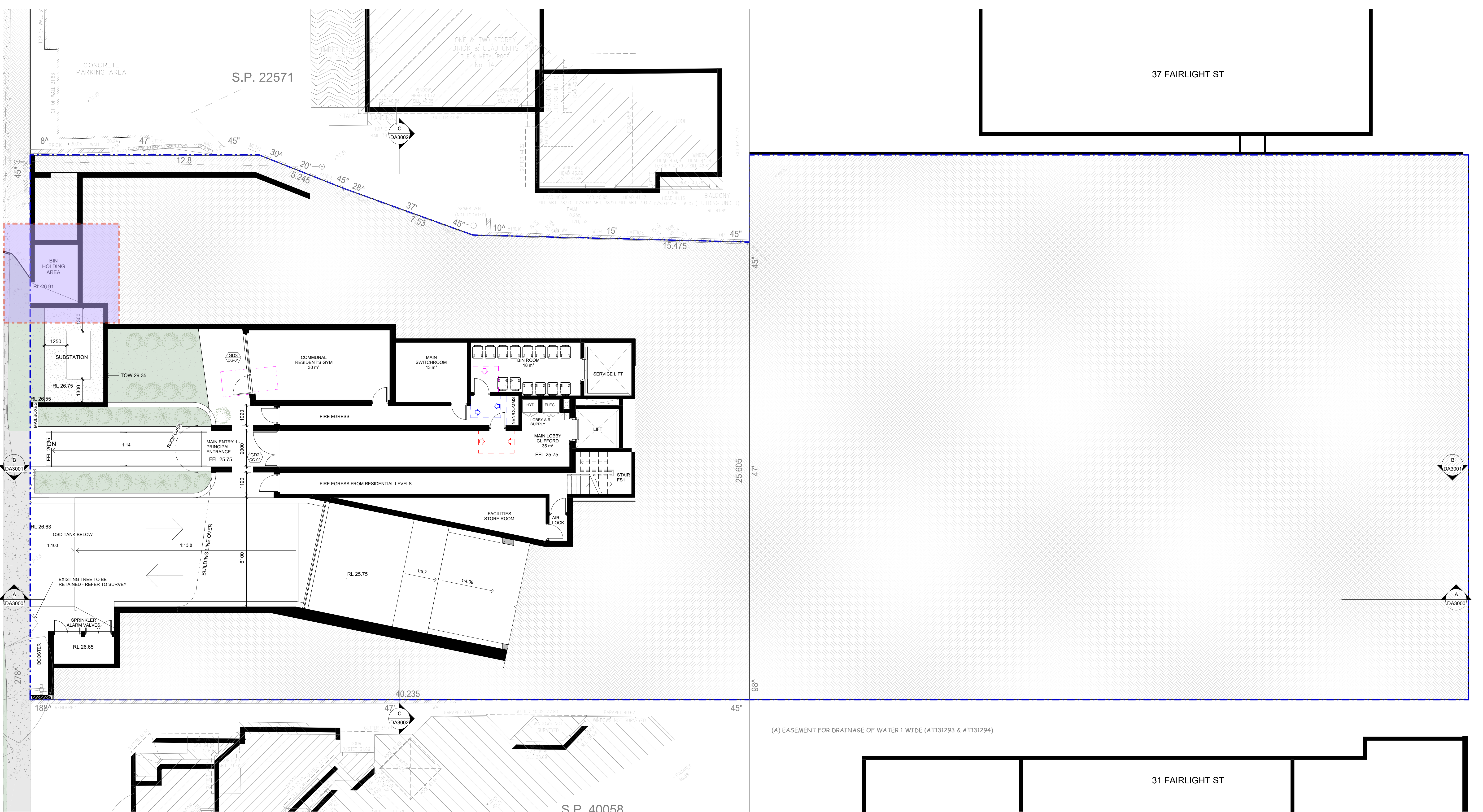


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MULTI-RESIDENTIAL DEVELOPMENT
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Fairlight NSW 2094
ALLEN GROUP DEVELOPMENTS



DRAWING TITLE			PROJECT
Level 5 Clifford Ave + Level 1 Fairlight St			FSF2
SCALE	STATUS	NUMBER	REVISION
1 : 100	PRELIMINARY	DA1005	A



1 GROUND FLOOR CLIFFORD AVE
1 : 100

**FOR DEVELOPMENT
APPLICATION**

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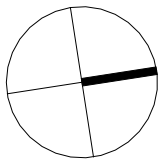
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A	03/12/2024	FOR DEVELOPMENT APPLICATION	JS

REVISION NOTES

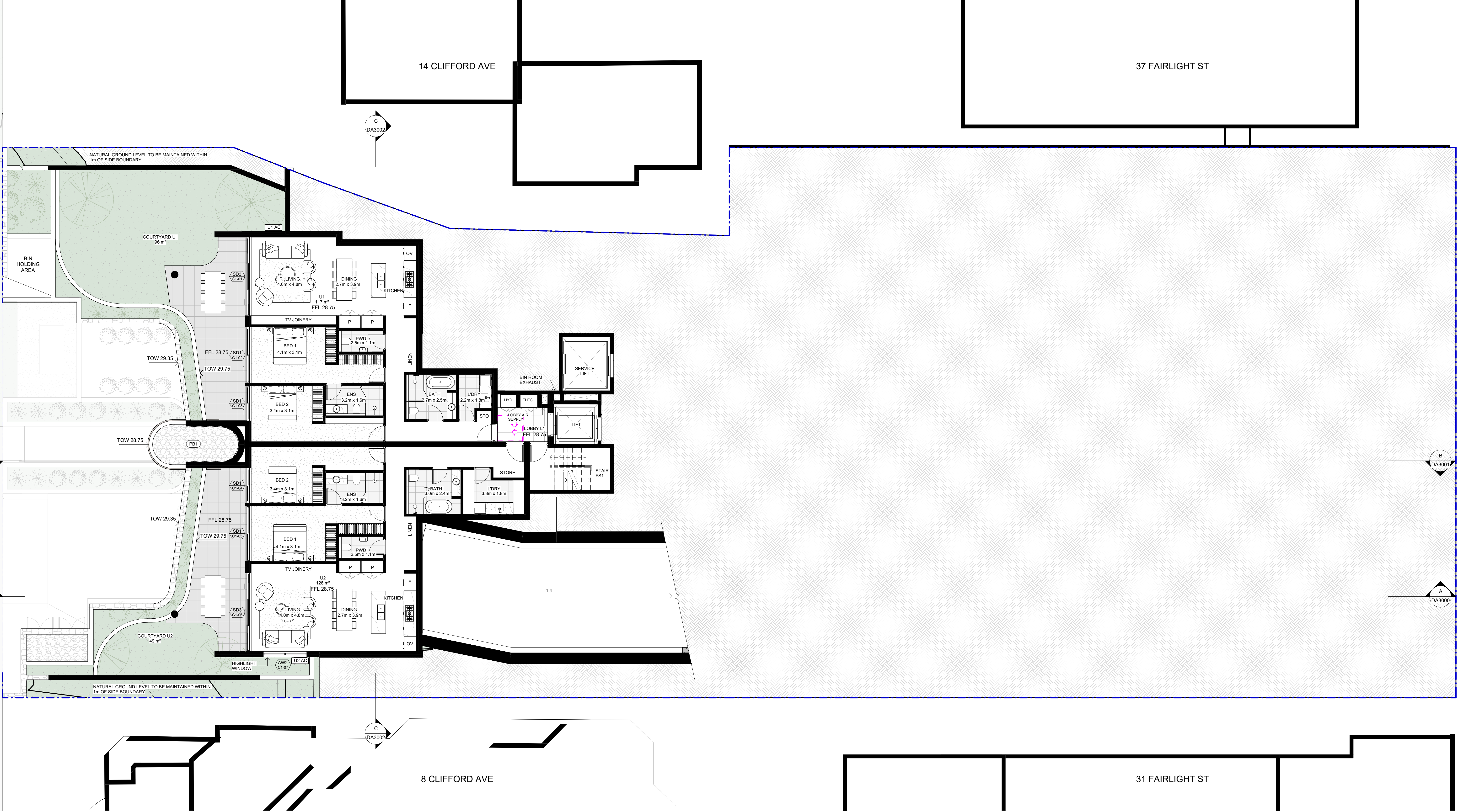


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MULTI-RESIDENTIAL DEVELOPMENT
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Fairlight NSW 2094
ALLEN GROUP DEVELOPMENTS



DRAWING TITLE		PROJECT	
Ground Floor Clifford Ave		FSF2	
SCALE	STATUS	NUMBER	REVISION
1 : 100	PRELIMINARY	DA1000	A



1 LEVEL 1 CLIFFORD AVE
1 : 100

FOR DEVELOPMENT
APPLICATION

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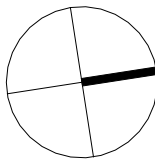
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A	05/12/2024	FOR DEVELOPMENT APPLICATION	JS

REVISION NOTES



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MULTI-RESIDENTIAL DEVELOPMENT
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Fairlight NSW 2094
ALLEN GROUP DEVELOPMENTS



DRAWING TITLE
Level 1 Clifford Ave

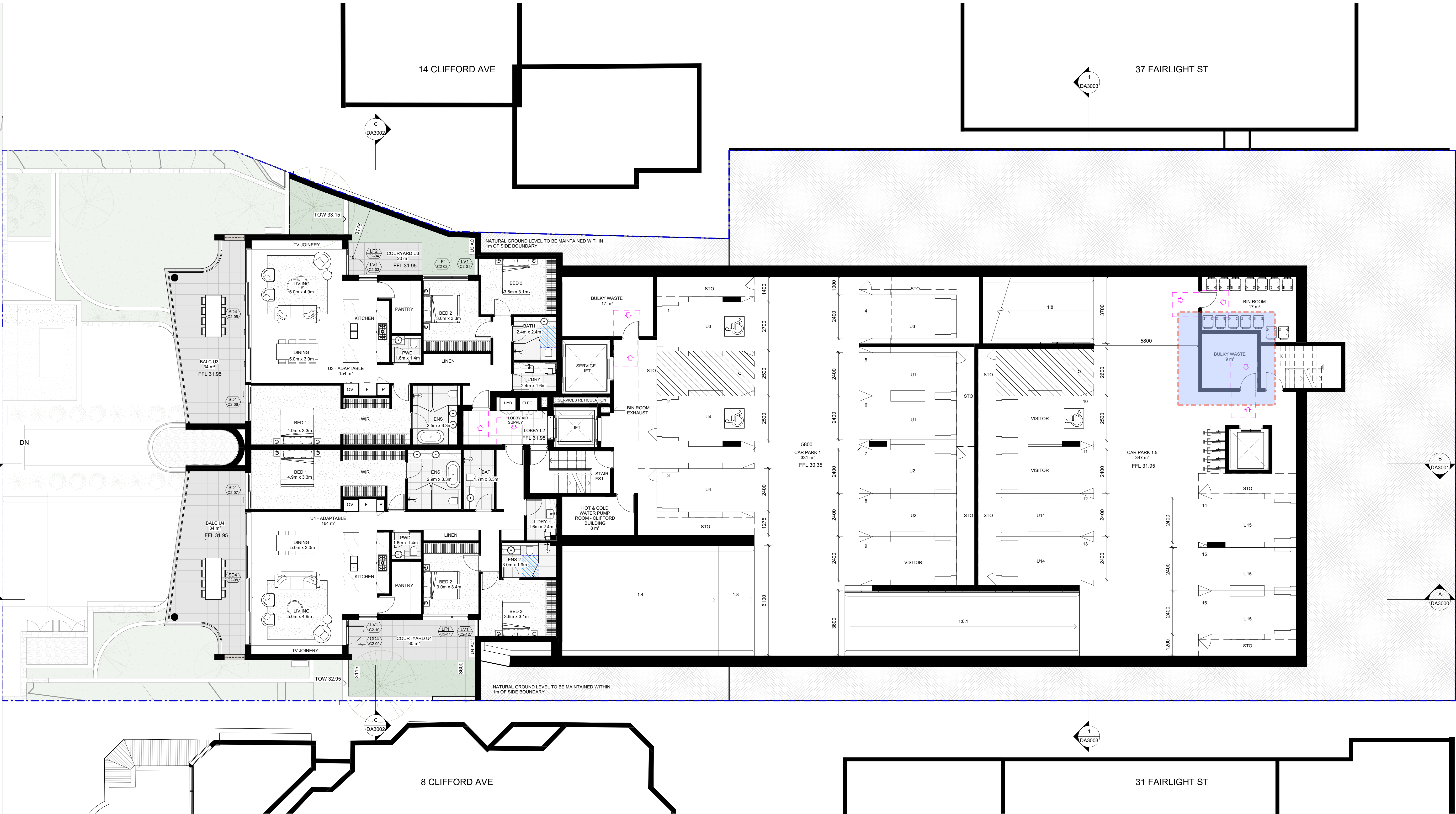
PROJECT
FSF2

SCALE
1 : 100

STATUS
PRELIMINARY

NUMBER
DA1001

REVISION
A



1 LEVEL 2 CLIFFORD AVE
1 : 100

FOR DEVELOPMENT
APPLICATION

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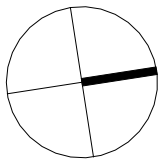
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REVISION NOTES



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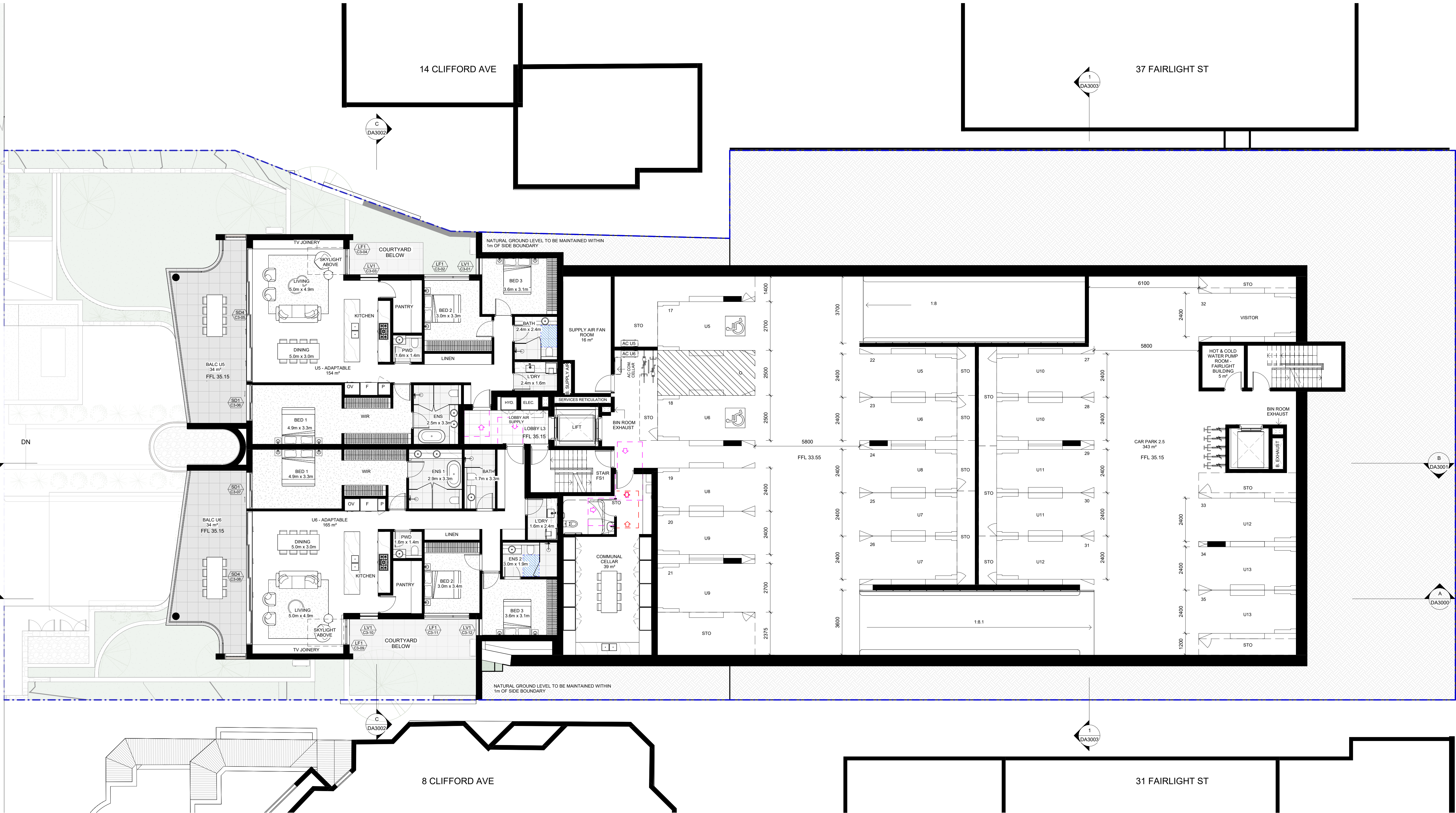
DRAWING TITLE
Level 2 Clifford Ave

SCALE
1 : 100

STATUS
PRELIMINARY

NUMBER
DA1002

PROJECT
FSF2
REVISION
A



1 LEVEL 3 CLIFFORD AVE
1 : 100

**FOR DEVELOPMENT
APPLICATION**

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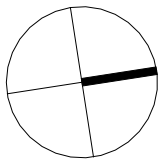
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A	05/12/2024	FOR DEVELOPMENT APPLICATION	JS

REVISION NOTES



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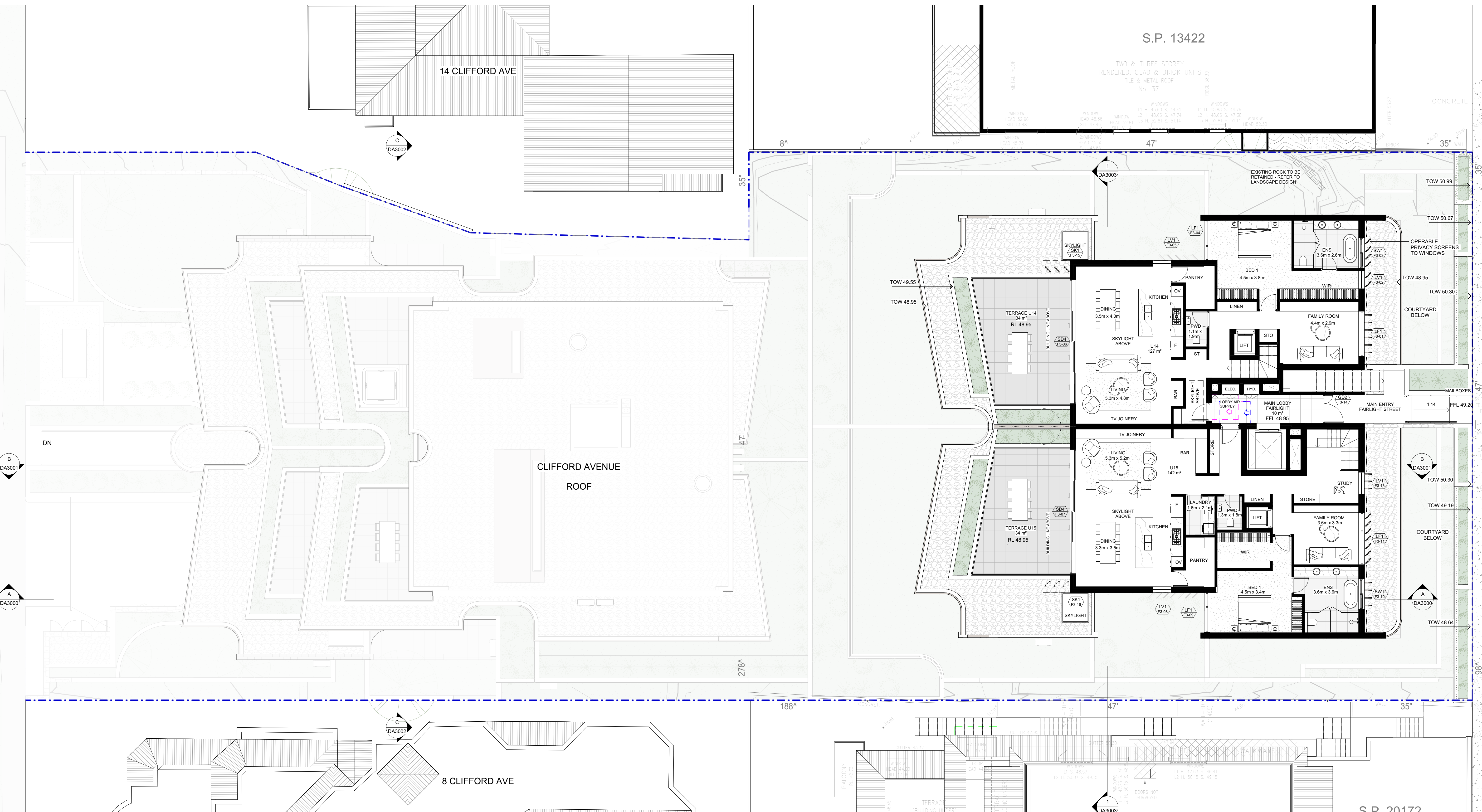
DRAWING TITLE
Level 3 Clifford Ave

SCALE
1 : 100

STATUS
PRELIMINARY

NUMBER
DA1003

PROJECT
FSF2
REVISION
A



1 LEVEL 3 FAIRLIGHT ST
1 : 100

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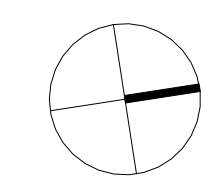
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REVISION NOTES



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DRAWING TITLE		PROJECT	
Level 3 Fairlight St		FSF2	
SCALE	STATUS	NUMBER	REVISION
1 : 100	PRELIMINARY	DA1007	A