

PARKING & TRAFFIC IMPACT ASSESSMENT

PROPOSED MIXED USE DEVELOPMENT 1 BILAMBEE AVENUE BILGOLA PLATEAU, NSW

PREPARED FOR DREAM BUILD OUR REF: 20-072-3



JULY 2023

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- 1. Architectural Plans
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1. INTRODUCTION

1.1 Scope of Assessment

Stanbury Traffic Planning has been commissioned by Dream Build to prepare a Parking & Traffic Impact Assessment to accompany a Section 4.55 Application to be lodged with Northern Beaches Council. The Application seeks consent for the minor modification to the approved mixed-use development situated at 1 Bilambee Avenue, Bilgola Plateau (DA2020/1351).

The proposed modifications primarily include the reduction of the proposed retail floor area and the removal of one basement parking level. The modified mixed-use development is proposed to contain two retail tenancies at ground floor level below two storeys of residential apartments containing seven dwellings. The development is to be serviced by one level of basement car parking containing 17 parking spaces. Vehicular connectivity to the on-site basement parking area is proposed via the approved access driveway connecting with Bilambee Lane in the northern corner of the site.

The aim of this assessment is to investigate and report upon the potential parking and traffic consequences of the Application and to recommend appropriate ameliorative measures where required. This report provides the following scope of assessment:

- Section 1 provides a summary of the site location, details, existing and surrounding land-uses;
- Section 2 describes the proposed development compared to that approved;
- Section 3 assesses the adequacy of the proposed site access arrangements, parking provision, internal circulation and servicing arrangements with reference to relevant Council, Transport for New South Wales (TfNSW) and Australian Standard specifications; and
- Section 4 assesses the approved and proposed projected traffic generating ability of the development and assesses the ability or otherwise of the surrounding road network to be capable of accommodating the altered demand in a safe and efficient manner.

The report has been prepared pursuant to State Environmental Planning Policy (Transport & Infrastructure) 2021. The application is not of sufficient scale to be referred to TfNSW under this Instrument.

1.2 Background

Development consent was recently granted by the Land and Environment Court on 10 November 2021 for the demolition of existing site structures and the construction of a shop-top housing development at 1 Bilambee Avenue, Bilgola Plateau (DA2020/1351).

The development was approved to comprise two retail tenancies providing a collective floor area in the order of 440m² below seven residential apartments. The development was approved to be serviced by two basement levels of parking containing 30 car spaces in conjunction with ancillary bicycle and motorcycle parking. Vehicular access to the development was approved via a single driveway connection with Bilambee Lane. A further seven indented parking spaces within Bilambee Avenue were approved to be specifically allocated to the development.

The approved development is now proposed to be modified in order to incorporate the following:

- A reduction in the retail floor space from approximately 440m² to 180m²; and
- The removal of the second basement parking level, resulting in a reduction in the on-site parking provision from 30 to 17 spaces.

1.3 Reference Documents

Reference is made to the following documents throughout this report:

- TfNSW's Guide to Traffic Generating Developments;
- Australian Standard for Parking Facilities Part 1: Off-Street Car Parking (AS2890.1:2004);
- Australian Standard for Parking Facilities Part 3: Bicycle Parking Facilities (AS2890.3:2015); and
- Northern Beaches Council's Pittwater 21 Development Control Plan (PDCP).

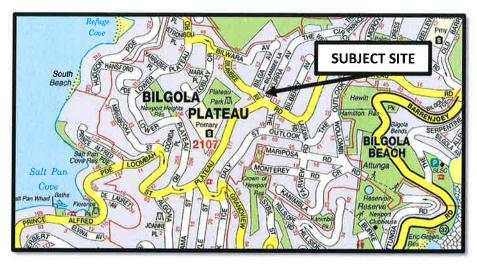
Architectural plans have been prepared by Artiva Architects and should be read in conjunction with this report, reduced copies of a selection of which are included as Appendix 1 for reference.

1.4 Site Details

1.4.1 Site Location

The subject site is situated on the northern corner of the Plateau Road junctions with Bilkurra Avenue and Bilambee Avenue, also providing a frontage to Bilambee Lane, Bilgola Plateau. The site location is illustrated overleaf within a local and aerial context by Figure 1 and Figure 2, respectively.

FIGURE 1 SITE LOCATION WITHIN A LOCAL CONTEXT



Source: UBD's Australian City Streets - Version 8

FIGURE 2 **SITE LOCATION WITHIN AN AERIAL CONTEXT**



Source: Nearmap (image date 26/06/23)

Site Description

The subject site provides a real property description of Lot 5 within DP 229309 and a street address of 1 Bilambee Avenue, Bilgola Plateau. The site forms an irregularly shaped parcel of land, providing approximate frontages if 35m to Bilkurra Avenue, 30m to Bilambee Avenue 20m to Bilambee Lane of 20m. The total site area is approximately 930m².

1.4.3 Existing Site

The subject site currently accommodates a disused auto mechanical centre, which is understood to previously have operated as a service station.

The subject site is serviced by four driveways as follows:

- A 9m wide driveway connecting with Bilambee Lane in the northern portion of the site;
- Two 9m wide driveways connecting with Bilkurra Avenue along the eastern boundary of the site; and
- A 5m wide driveway providing access to Bilambee Avenue in the southern portion of the site.

1.4.4 Approved Site

The subject site is approved to accommodate a three-storey shop top housing development comprising the following:

- Two ground floor retail tenancies providing an approximate collective floor area of 440m²;
- A total of seven residential apartments above the ground floor retail tenancies comprising:
 - o 3 x two-bedroom apartments; and
 - 4 x three-bedroom apartments;

The development was approved to be serviced two levels of basement parking containing a total of 30 passenger vehicle parking spaces, four motorcycle parking spaces and 12 bicycle parking spaces, six on-street parking spaces and one dedicated on-street loading bay situated along the northern kerb alignment of Bilambee Avenue.

Vehicular access to the development was approved to be provided via a combined ingress / egress driveway connecting with Bilambee Lane in the northern portion of the site.

1.4.5 Surrounding Land-Uses

The subject site is surrounded by:

A series of commercial and shop top housing buildings are situated to the north-west, being bound by Bilambee Avenue to the south-west, Bilga Avenue to west and Bilambee Lane to the north, primarily containing five retail tenancies fronting Bilambee Avenue;

- Detached residential dwellings occupy land to the north, east, south and west fronting and being serviced by Bilkurra Avenue, Plateau Road and Bilambee Avenue;
- Plateau Park situated approximately 170m west of the site; and
- Bilgola Plateau Public School is situated approximately 300m to the southwest of the site.

2. PROPOSED DEVELOPMENT

2.1 Built Form

The primary proposed changes from the approved development include the reduction of the ground floor retail floor area and the removal of the second basement parking level, resulting in a reduction of the on-site parking provision.

A comparison between the approved and proposed development yield is shown **Table 1** below.

TABLE 1 APPROVED VS PROPOSED DEVELOPMENT SUMMARY			
Land-Use	Measure / Type	Approved Yield	Proposed Yield
	One bedroom	0	0
Residential	Two bedroom	4	4
Residential	Three bedroom	3	3
	Total	7 units	7 units
Retail	GFA	436.9m ²	179.1m ² (-257.8m ²)
	Resident	16	14
	Residential Visitor	3	3
Car parking provision	Retail	6 (on-street) + 11 (on-site)	6 (on-street)
	Loading Bay	1	1
	Total	37	24 (-13)
	On-site	12	6
Bicycle parking provision	Within public domain	12	12
	Total	24	18 (-6)
Motorcycle Parking Provision	Total	4	2 (-2)

Table 1 indicates that the proposed development results in a reduction of retail floor area by 257.8m², car parking provision by 13 spaces, bicycle parking provision by six spaces and motorcycle parking provision by two spaces.

No alterations are proposed to the approved vehicular access arrangements connecting with Bilambee Lane, public domain works or the site servicing arrangements.

3. SITE ACCESS, PARKING & INTERNAL CIRCULATION

3.1 Access Arrangements

3.1.1 Vehicular Access

Vehicular access between the development site and Bilambee Lane is approved to be provided via a 6.5m wide combined ingress / egress driveway situated in the northern portion of the site.

The approved vehicular access arrangements are not proposed to be altered to any measurable extent.

As the functional order of the driveway is not proposed to be intensified, whereby the largest vehicle to access the basement parking area is to continue to be a passenger vehicle, and the parking provision serviced by the driveway is to be less than that approved. It is therefore envisaged that the approved access arrangements will continue to be satisfactory to service the proposed development.

3.1.2 Pedestrian Access

Pedestrian connectivity is proposed to be provided via adjoining footpaths along the site frontages to Bilkurra Avenue and Bilambee Avenue, connecting with doors which link directly to the retail tenancies in conjunction with a separate residential access lobby situated in the north-eastern corner of the site.

3.2 Parking Provision

3.2.1 Passenger Vehicular Parking

The development is proposed to be serviced by a total of 17 on-site passenger vehicle parking spaces, provided within one basement parking level, as follows:

- 14 resident parking spaces; and
- Three residential visitor parking spaces.

The subject site has also been approved to benefit of a total of six indented 90-greee angled parking spaces along the north-eastern kerb alignment of Bilambee Avenue directly adjacent to the subject site, for use by the retail component of the development. It is proposed that the retail component of the development will continue to utilise these six approved on-street parking spaces.

3.2.1.1 Residential Parking Provision

Northern Beaches Council relies on locally sensitive controls for off-street vehicle parking requirements. According to Section B6 schedule 6 of PDCP, the following off-street parking rates are provided for flat residential buildings:

2 resident parking spaces for each dwelling with two or more bedrooms, and 1 visitor parking space per three dwellings, rounded up.

Application of the abovementioned parking rates to the proposed development comprising seven residential dwellings of two or more bedrooms results in a minimum requirement of 14 resident passenger vehicle parking spaces and three visitor parking spaces.

The proposed provision of 14 residential and three visitor parking spaces therefore complies with the PDCP and is accordingly satisfactory.

3.2.1.2 Retail Parking Provision

The development was approved to provide six 90-degree angled indented parking spaces along the northern kerb alignment of Bilambee Avenue to service the retail component of the development.

According to PDCP, the off-street parking rates for commercial premises are:

1 parking space for every 30m² of gross floor area.

Application of the abovementioned vehicle off-street parking rates to the proposed 179.1m² of total retail space results in a requirement of 5.97 (adopt 6) retail parking spaces.

Therefore, the provision of six retail parking spaces complies with the minimum requirement of the PDCP and is accordingly considered satisfactory.

3.2.2 Bicycle Parking

The proposed development provides 12 at-grade bicycle parking spaces within the Bilambee Avenue public domain and six parking spaces within the basement, resulting in a total bicycle parking provision of 18 spaces.

The PDCP provides the following bicycle parking requirements relevant to the residential component of the subject proposal:

For a residential development, secure bicycle storage facilities must be provided within the building at the rate of 1 bicycle rack per 3 dwellings.

Based on these requirements, the proposed seven residential dwellings require a total bicycle parking provision of three bicycle spaces. The provision of six secure bicycle parking spaces within the basement therefore exceeds the minimum requirement of PDCP and is accordingly considered to be satisfactory.

The PDCP provides the following bicycle parking requirements relevant to the retail component of the subject proposal:

For Business/Industrial development or additions, comprising of 200m² GFA or more, secure enclosed bicycle storage facilities must be provided within the

building at the rate of 1 bicycle rack per 1000m² GFA, or a minimum of 4 bicycle racks, whichever is the greater.

Based on these requirements, the proposed retail space generates a total required provision of four bicycle spaces. The provision of 12 at-grade bicycle parking spaces exceeds the minimum requirement of PDCP and is accordingly considered to be satisfactory.

3.2.3 Motorcycle Parking

The proposed development provides a total of two motorcycle parking spaces provided within the basement.

The PDCP provides the following motorcycle parking requirements relevant to the subject proposal:

For Business/Industrial development or additions, comprising of 200m² GFA or more, provision is to be made for motorcycle parking at a rate of 1 motorcycle parking space per 100 motor vehicle spaces.

A single motorcycle parking space is accordingly required to be provided on the basis of less than 100 motor vehicle spaces being provided.

The proposed motorcycle parking provision of two spaces therefore exceeds the minimum specification of PDCP and is accordingly considered satisfactory.

3.2.4 Service Vehicle Parking

The limited scale of the development and size of the retail tenancies is such that servicing requirements are expected to be minimal, and capable of being undertaken by passenger vehicles such as vans and the like. Such servicing activities are to be accommodated within the approved at-grade time-limited loading bay within the northern kerb alignment of Bilambee Avenue adjacent to the development and in close proximity to the proposed retail tenancies.

Refuse collection activities associated with the development are to be undertaken via kerb-side collection whereby waste bins are to be wheeled to the road frontage for collection.

3.3 Internal Circulation and Manoeuvrability

3.3.1 Internal Access Ramp Management

Upon entry to the site via Bilambee Lane, vehicles are to proceed in a forward direction to access the basement via a ramp running along the north-western boundary. This ramp is proposed to provide a two-way traffic function, connecting directly with a parking circulation aisle within the basement. Notwithstanding this, it is acknowledged that the turning movements between the internal ramp and the basement parking circulation aisle are not capable of being accommodated simultaneously. Therefore, a TB line is proposed within the basement parking aisle on approach to the ramp, in combination with a convex

mirror, in order to assign priority to entering visitors and appropriately govern the turning movements between the ramp and the parking aisle.

The arrangement described above is however generally considered acceptable in a low traffic environment, where the two directional traffic volume is less than 30 movements per hour.

Section 5.1.2 of this report presents that the proposed development is expected to generate up to four peak hour vehicle movements to and from the basement parking area based on a residential development yield of seven dwellings. Such a traffic generating ability is significantly less than the abovementioned maximum of 30 movements, necessitating two-way traffic flow to be accommodated simultaneously.

Additionally, as the proposed basement parking area accommodates residents and their visitors only, it is considered that the motorists will primarily be everyday users aware of the manoeuvring requirements of the development.

The indicative location of the TB line and convex mirror is provided on the architectural plans.

3.3.2 Basement Access Ramp Grade

The internal ramp has been designed to provide the following grade characteristics in accordance with the relevant requirements of AS2890.1:2004:

- Maximum ramp grade = 19.6%;
- Maximum change in grade = 10%; and
- Minimum length of transitional grade = 2m.

3.3.3 Basement Parking Design

The basement parking area is proposed to comprise 90-degree angled parking spaces, being serviced by an adjoining circulation aisle. The parking areas have been designed with the following minimum dimensions in accordance with AS2890.1:2004:

- 90-degree resident and residential visitor parking space width = 2.4m;
- Parallel residential visitor parking space width = 2.1m;
- Additional vehicular space width where parking spaces adjoins an obstruction = 0.3m;
- 90-degree parking space length = 5.4m;
- Parallel parking space length = 6.2m;

Minimum clearance throughout off-street parking area and access thereto =
 2 2m

Safe and efficient internal manoeuvring and parking space accessibility is anticipated to result, taking into consideration the above compliance with the relevant AS2890.1:2004 specifications.

In order to demonstrate the internal passenger vehicle manoeuvrability within the basement parking areas, this Practice has prepared a number of swept path plans which are included as **Appendix 2**. The swept path plans illustrate that passenger vehicles can manoeuvre to / from all passenger vehicle parking spaces with a reasonable level of safety and efficiency.

Whilst it is acknowledged that the basement parking area forms a dead-end aisle without the provision of a dedicated turning bay, all visitor parking spaces have been positioned immediately adjacent to an internal junction of north-south and east-west aligned parking aisles. Swept path plans, provided in **Appendix 2**, demonstrate that vehicular turnaround can be accommodated within this internal junction of the parking aisles, thereby negating the requirement for a formalised turning bay. If considered absolutely necessary, the provided arrangement could be supplemented with ceiling-hung signage to the north of the abovementioned internal junction to indicate that there is no visitor parking beyond that point. The provision for such signage could reasonably by imposed by Council as a condition of consent.

Further to the above passenger vehicle manoeuvring, four motorcycle parking spaces are proposed, providing the following dimensions in accordance with AS2890.1:2004:

- Motorcycle parking space width = 1.2m; and
- Motorcycle parking space length = 2.5m.

In addition, a combination of vertically staggered wall hung and doubled sided horizontal bicycle racks are proposed to provide the following minimum design specifications: in accordance with AS2890.3:2015:

- Storage rack width = 0.5m;
- Depth of vertical rack envelope = 1.2m;
- Horizontal storage rack depth / length = 1.8m;
- Aisle and access path width servicing the spaces = 5.6m.

4. EXTERNAL CONSIDERATIONS

4.1 Traffic Generation

Traffic generation rates for various land-uses have been established through extensive surveys undertaken throughout NSW and published within TfNSW's Guide to Traffic Generating Developments and Technical Direction TDT 2013/04a. The following sub-sections provide a summary of the traffic generating potential of the previous, existing and proposed site uses with respect to those rates established by TfNSW.

TfNSW's Guide to Traffic Generating Developments specifies the following weekday peak hour traffic generation rates for retail floor space and medium density residential dwellings:

Retail Floor Space 4.6 peak hour trips per 100m² GFA

Residential Apartments
0.5 trips per small dwelling (up to two bedrooms)
0.65 trips per large dwelling (three bedrooms and over)

The following subsections investigates and compares the traffic generating potential of the approved and proposed developments.

4.1.1 Approved Development

On the basis of the approved development providing $436.8m^2$ retail floor space and a total of seven dwellings, comprising 4 x two-bedroom dwellings and 3 x three-bedroom dwellings, the following calculations are provided:

```
4.6 \times (436.8 / 100) = 20 \text{ retail trips}
(4 \times 0.5) + (3 \times 0.65) = 4 \text{ residential trips}
```

According to the above, the approved development is capable of generating a total of 24 peak hour vehicle movements.

4.1.2 Proposed Development

On the basis of the proposed development providing 179.1m^2 retail floor space a total of seven dwellings, comprising 4 x two-bedroom dwellings and 3 x three-bedroom dwellings, the following calculations are provided:

```
4.6 \times (179.1 / 100) = 8.2 \text{ (adopt 9) retail trips}
(4 \times 0.5) + (3 \times 0.65) = 4 \text{ residential trips}
```

According to the above, the proposed development is capable of generating a total of 13 peak hour vehicle movements, being 11 less peak hour vehicle movements than that of the approved development.

4.2 Traffic Impacts

The above sections of this report present that the proposed development is capable of generating 13 peak hour vehicle movements, being 11 less peak hour vehicle movements than that of the approved development.

As the proposed site access / egress arrangements are not proposed to be altered from that which was approved, the proposed development is not envisaged to result in any impacts on the safety and efficiency of the surrounding public road network over and above that previously assessed and approved.

4.3 Pedestrian Circulation and Safety

Section 3.1 of this report presents that the development provides appropriate internal pedestrian infrastructure, facilitating the safe and efficient movement of pedestrians between the development, the frontage roads and the on-site parking areas.

The reduced development yield is expected to result in fewer potential pedestrian movements being generated in comparison to that previously assessed and approved. Accordingly, no impacts on surrounding pedestrian access and mobility considerations are envisaged.

4.4 Transport Impacts

The subject site is located within easy walking distance of bus services along Bilambee Avenue and Plateau Road. It is accordingly expected that a portion of the future site occupants / users of the development will utilise the surrounding public transport infrastructure to access destinations throughout the greater Sydney metropolitan area. The capacity of the existing public transport system is however not envisaged to be measurably affected by any additional demand associated with the proposed building, given its limited scale.

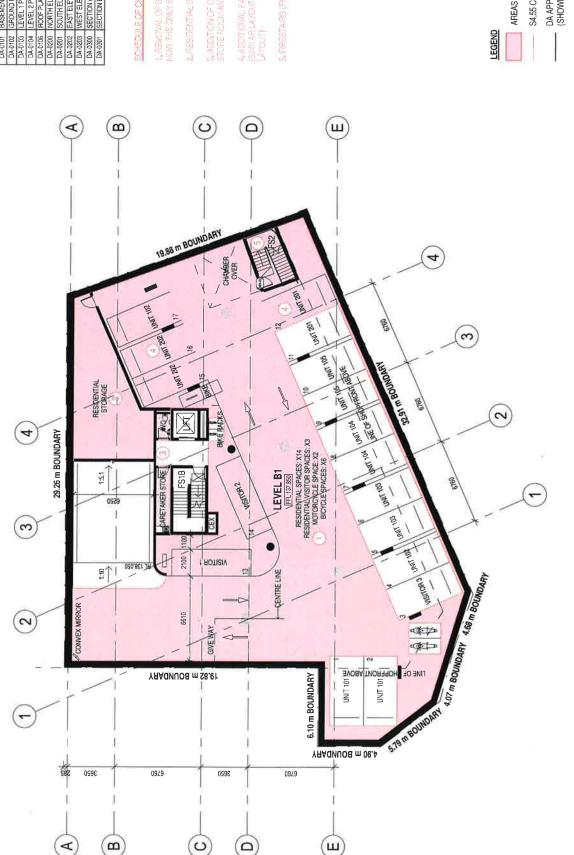
5. CONCLUSION

This report assesses the potential parking and traffic implications associated with an Application to modify an approved mixed-use development containing two retail tenancies and seven residential apartments at 1 Bilambee Avenue, Bilgola Plateau. Based on this assessment, the following conclusions are now made:

- The proposed development includes minor alterations to the approved development primarily involving the reduction in retail floor area and the onsite parking provision;
- The proposed retention of the approved site access arrangements are projected to continue to result in motorists being capable of entering and exiting the subject site in a safe and efficient manner;
- The proposed modified off-street residential vehicular parking provision complies with the relevant requirements of PDCP;
- The proposed retail vehicular parking provision retains the approved reliance on the adjacent on-street indented parking spaces, which provides for a compliant parking provision in accordance with the relevant requirements of PDCP;
- The proposed motorcycle and bicycle parking provision complies or exceeds the minimum provisions required by PDCP;
- The internal passenger vehicle circulation arrangements are capable of providing for safe and efficient internal manoeuvring;
- The subject development has been projected to generate 13 peak hour vehicle movements, being notably less than that capable of being generated by the approved development; and
- It is accordingly not envisaged that the subject modified development will result in any unreasonable impacts on the surrounding road network over and above that previously assessed and approved.

It is considered, based on the contents of this report and the conclusions contained herein, there are no parking or traffic related issues that should prevent approval of the subject Application. This action is therefore recommended to Council.

APPENDIX 1



REV SHEET LIST - S4.55 ROOF PLAN
NORTH ELEVATION
SOUTH ELEVATION
FAST ELEVATION
WEST ELEVATION
SECTION AA DWG NQ. DWA-DA-0101 BASEMENT 1 PLA DA-0102 GROUND FLOOR DA-0103 LEVEL 1 PLAN DA-0104 LEVEL 2 PLAN SECTION BB

AREAS OF CHANGE FOR S4,55

S4,55 CHANGES

DA APPROVED DESIGN TO BE LEFT AS IS (SHOWN AS BLACK AND WHITE)

SECTION 4.55 MODIFICATION

SHOPTOP HOUSING | Drawing Title

Scale 1:200@A3 **BASEMENT 1 PLAN** 1 BILAMBEE AVE, Drawn by: NW/RK BILGOLA PLATEAU Check by: WC

Drawing No

DA-0101

Client DREAM BUILD

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Date 18.07.23

Description

Issue A FOR SECTION 4.55

BENSON MCCORMACK
ARCHITECTURE

Original Design & DA prepared by:

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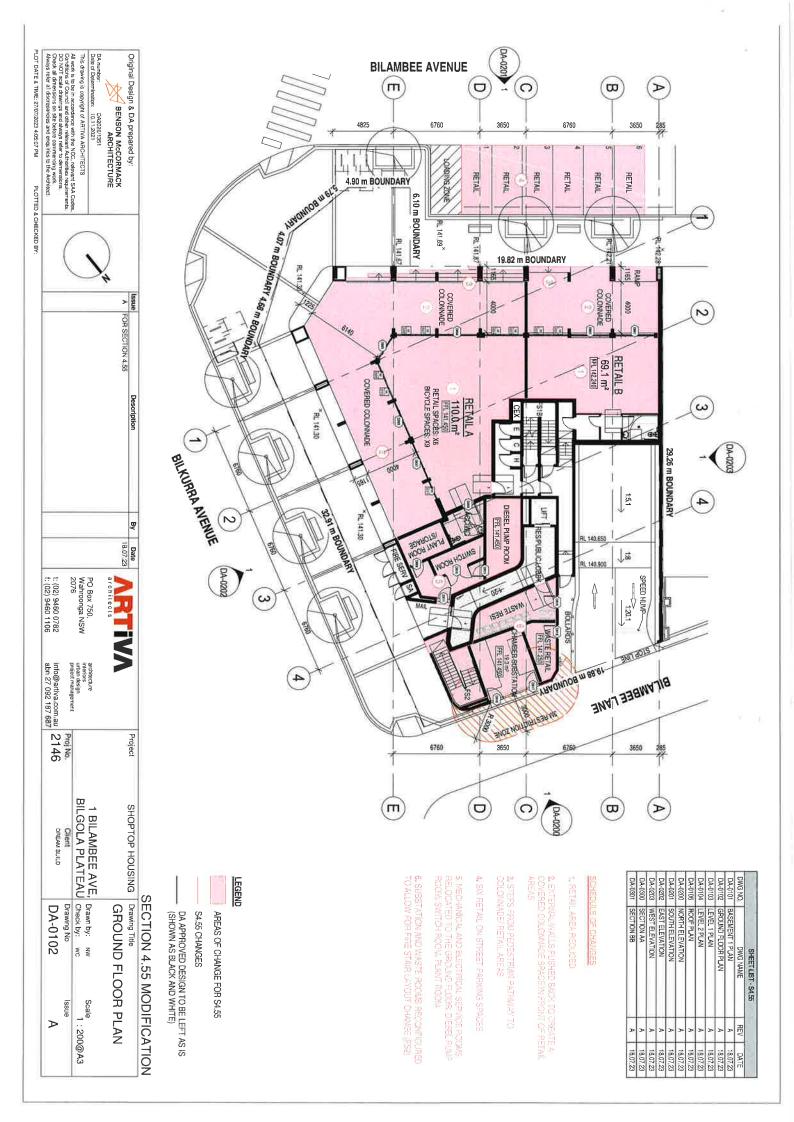
DA number: DA2020/1351
Date of Determination: 10.11,2021

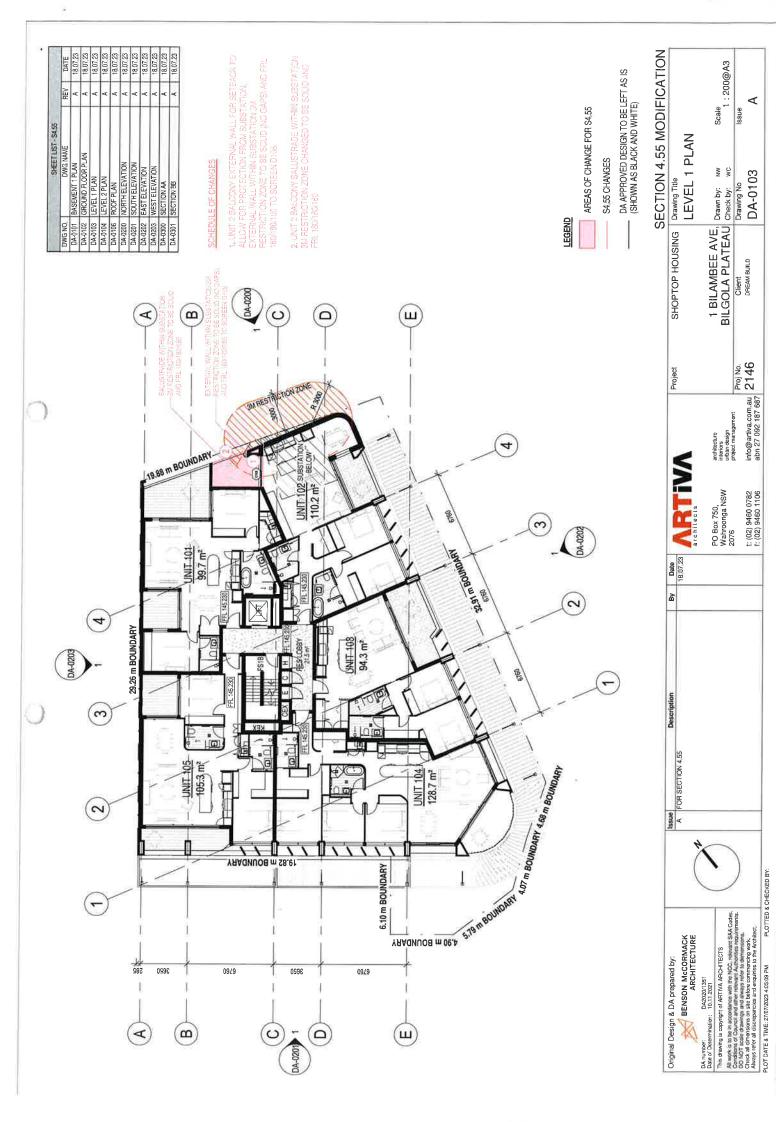
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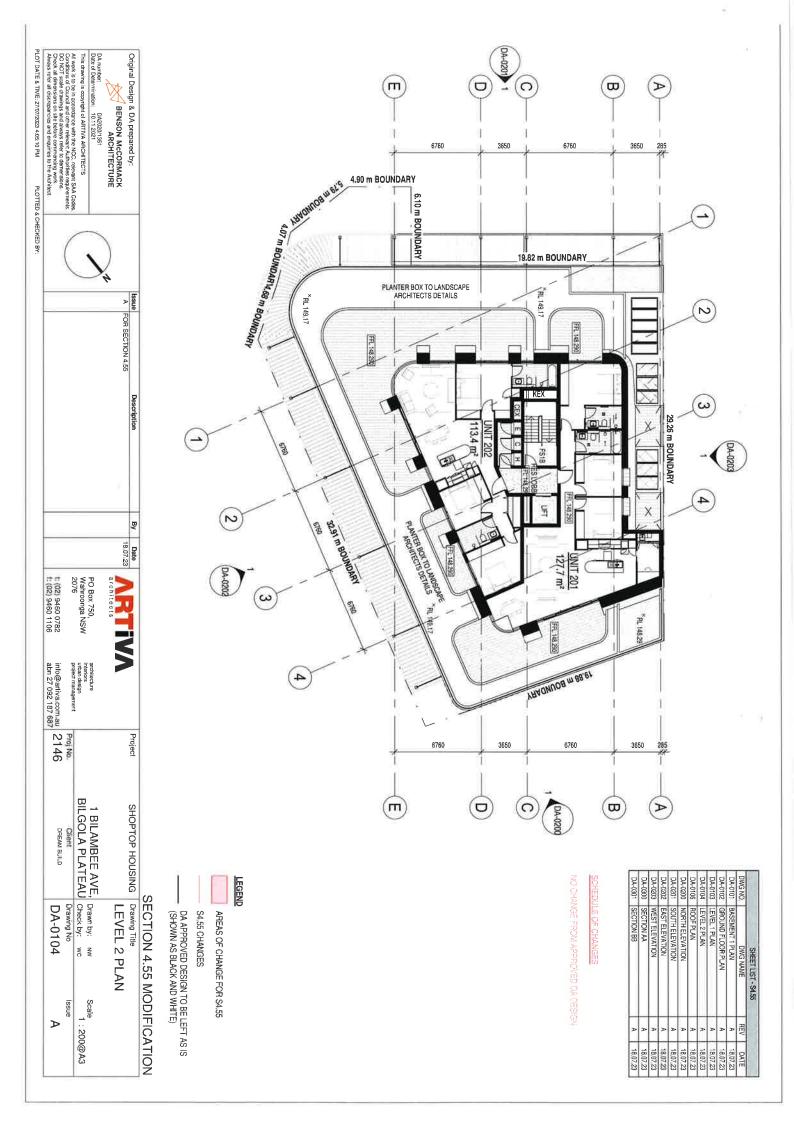
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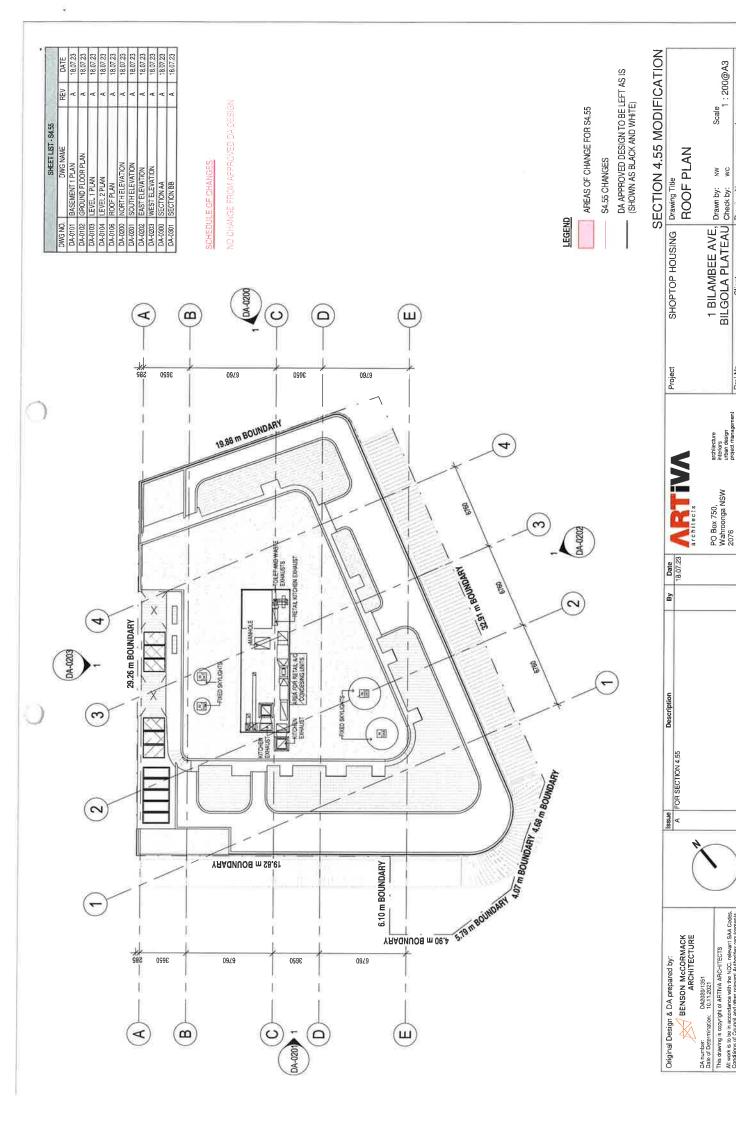
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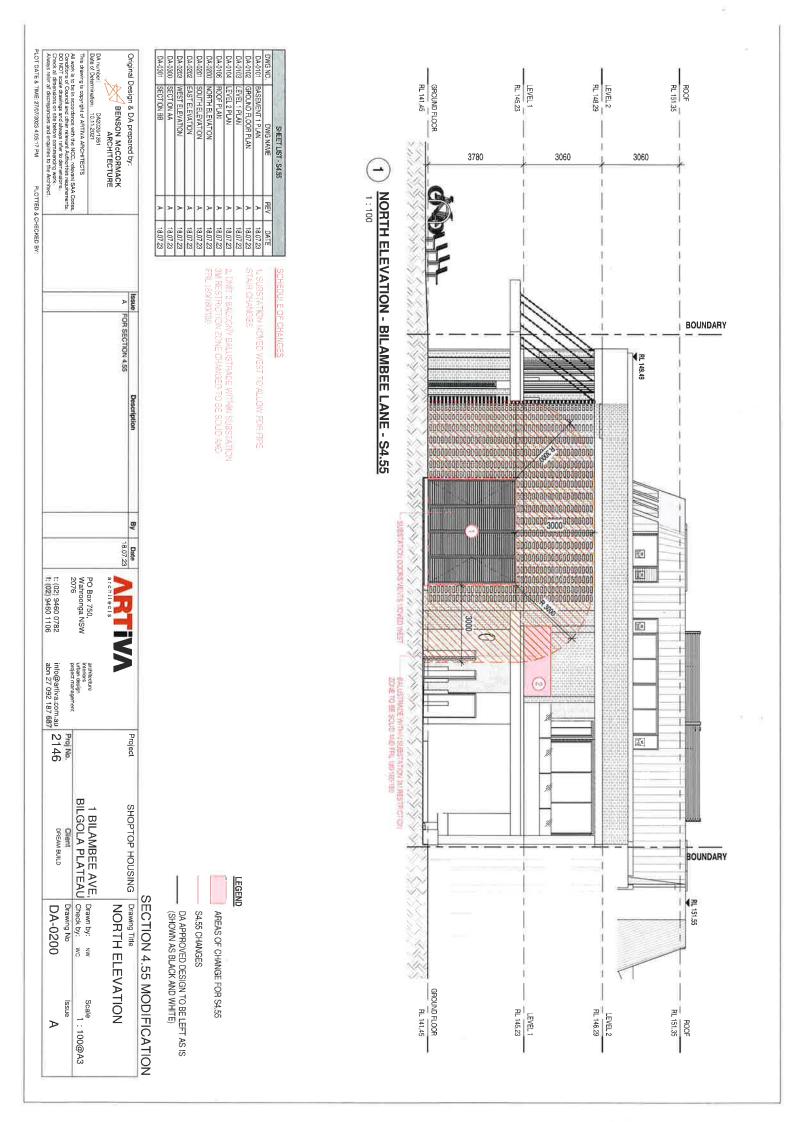
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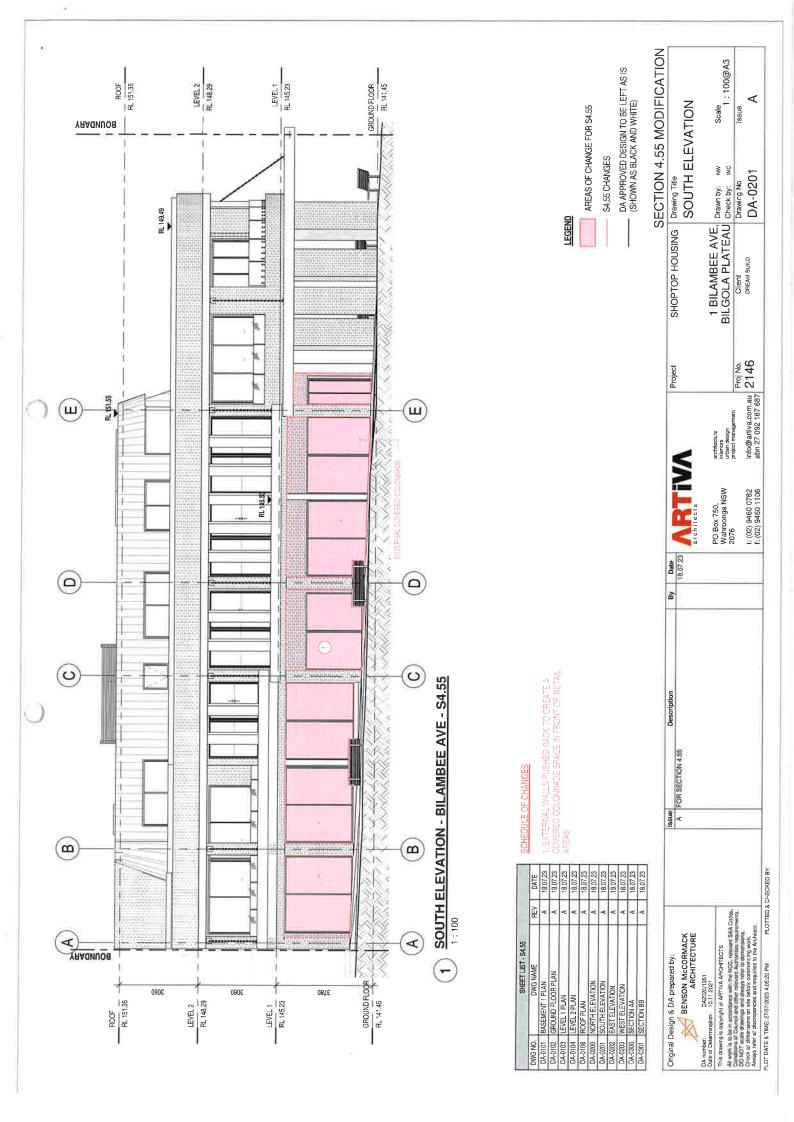
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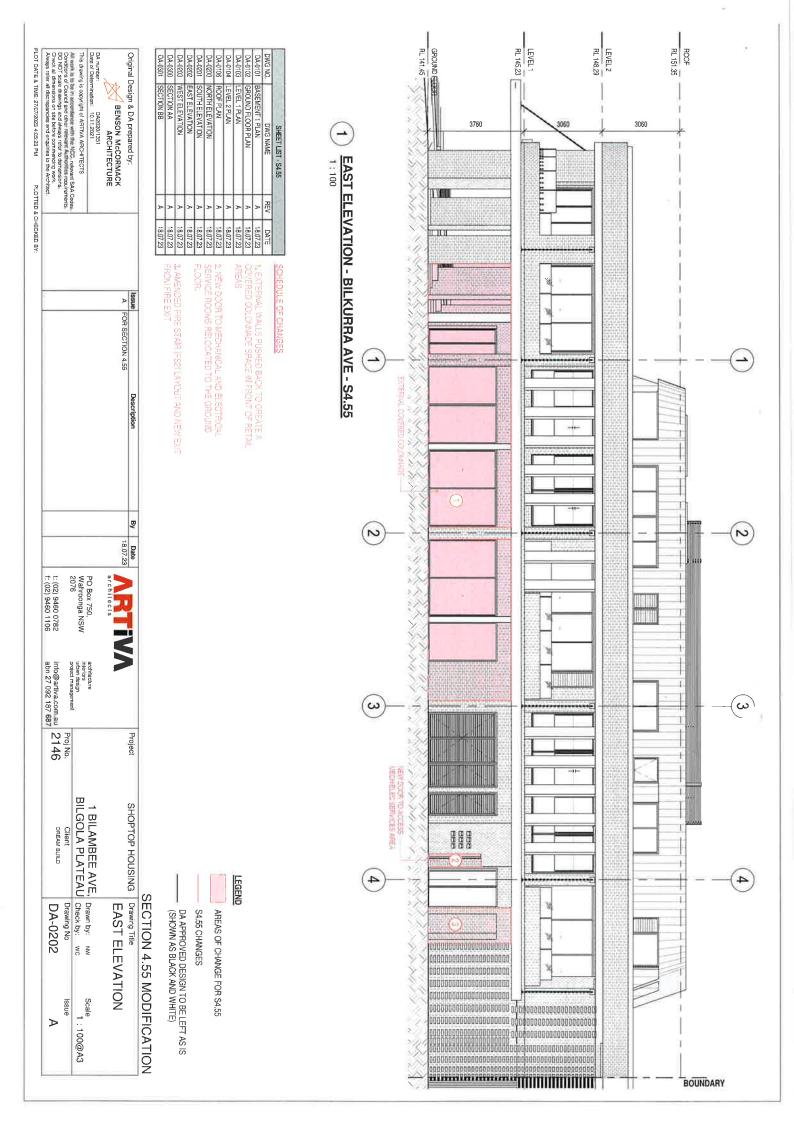
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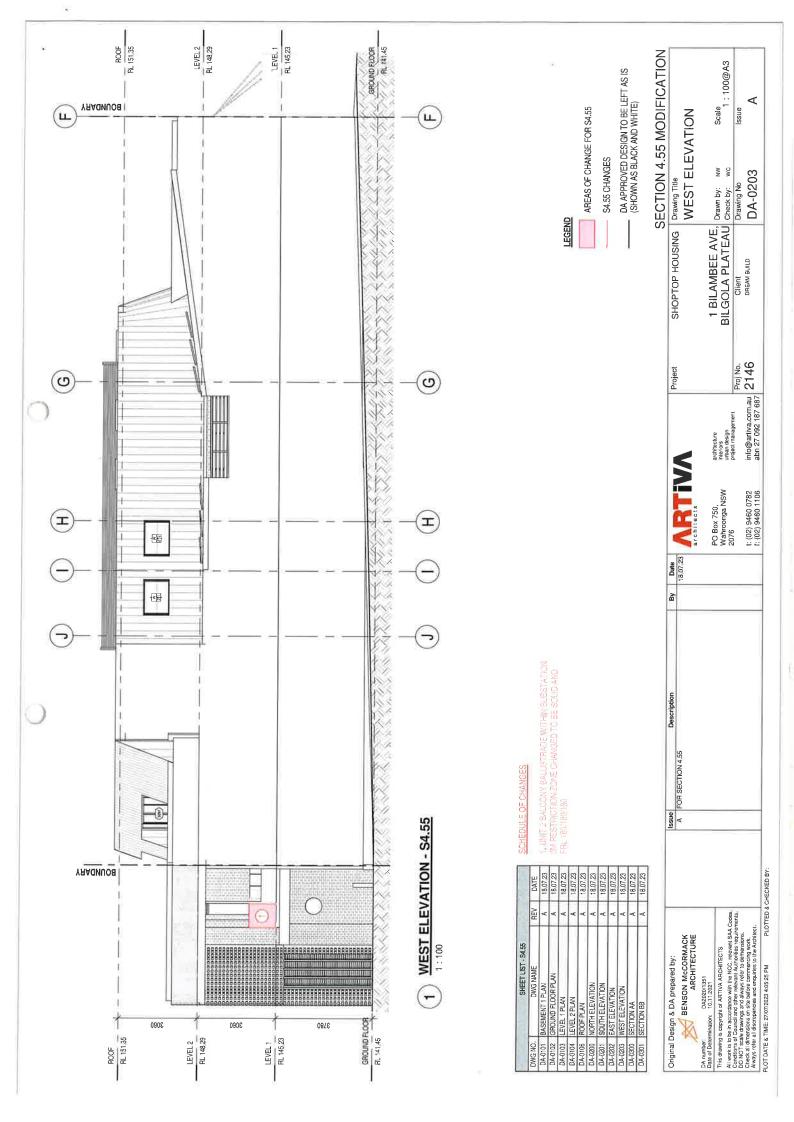
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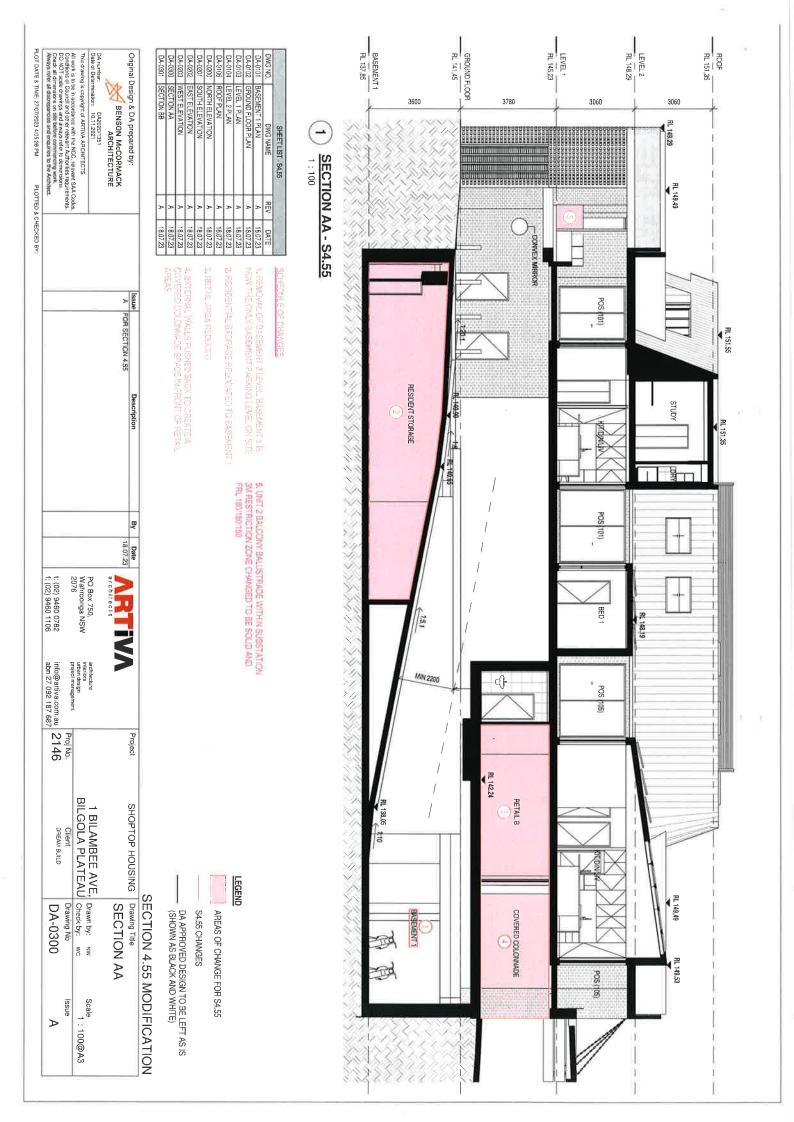
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1 SECTION BB - S4.55

	SHEET LIST - S4.55		
OWG NO.] DWG NAME	REV	DATE
DA-0101	BASEMENT 1 PLAN	ď	18 07 23
DA-0102	GROUND FLOOR PLAN	∢	18 07 23
DA-0103	LEVEL 1 PLAN	4	18 07 23
DA-0104	LEVEL 2 PLAN	A	18.07.23
DA-0106	ROOF PLAN	V	18 07 23
DA-0200	NORTH ELEVATION	A	18 07 23
DA-0201	SOUTH ELEVATION	A	18 07 23
DA-0202	EAST ELEVATION	V	18.07.23
DA-0203	WEST ELEVATION	A	18 07 23
DA-0300	SECTION AA	A	18 07 23
DA-0301	SECTION BB	∢	18.07.23

HEDULE OF CHANGES

REMOVAL OF BASEMENT 2 LEVEL, BASEMENT 1 IS NOW THE ONLY BASEMENT PARKING LEVEL ON SITE

DENTIAL STORAGE RELOCATED TO BASEMENT 1

3. RETA L AREA REDUCE

4. EXTERNAL WALLS PUSHED BACK TO CREATE A COVERED COLONNADE SPACE IN FRONT OF RETAIL AREAS

LEGEND

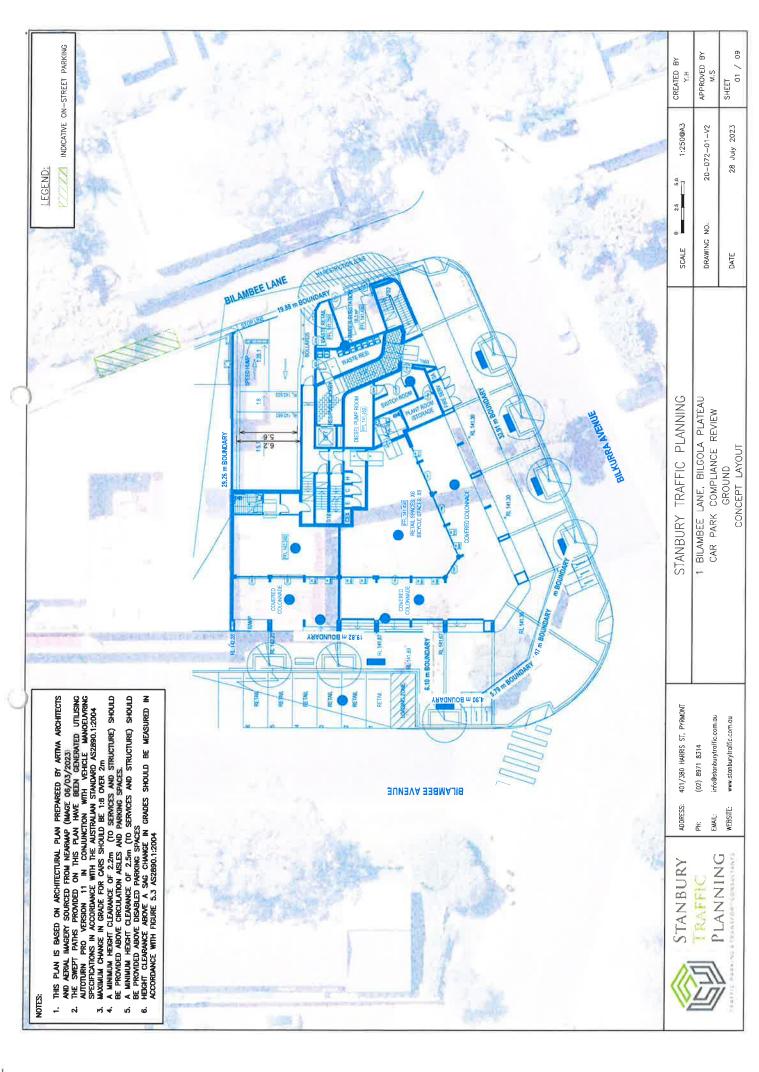
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Original Design & DA prepared by:	enss	Description	à	Date		Project	All Division Tills	Drawing Tille
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APPENDIX 2

90

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NOTES

1. THIS PLAN IS BASED ON ARCHITECTURAL PLAN PREPAREED BY ARTINA ARCHITECTS AND AERAL IMAGERY SOURCED FROM NEWBARAY (IMAGE 06/03/2023)

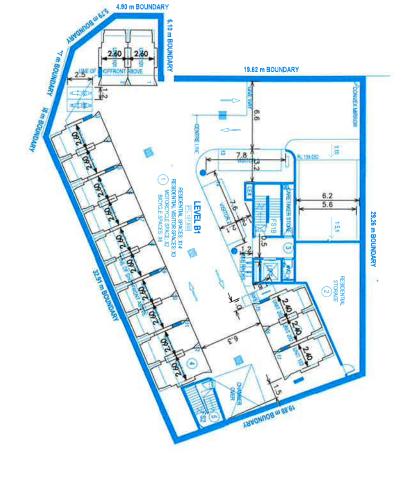
2. THE SMEPT PATHS PROVINED ON THIS PLAN HAVE BEEN GENERATED UTILISING AUTOTURN PRO VERSION 11 IN CONJUNCTION WITH VEHICLE MANGELYRING SPECIFICATIONS IN ACCORDANCE WITH THE AUSTRALIAN STANDARD ASZB80.1:2004

3. MANIMUM CHANGE IN GRADE FOR CARS SHOULD BE 1:8 OVER 2m

4. A MINIMUM HEIGHT CLEARANCE OF 2.2m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE CIRCULATION ASSES AND PARKING SPACES.

5. A MINIMUM HEIGHT CLEARANCE OF 2.5m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE DISABLED PARKING SPACES.

6. HEIGHT CLEARANCE ABOVE A SAG CHANGE IN GRADES SHOULD BE MEASURED IN ACCORDANCE WITH FIGURE 5.3 ASZB80.1:2004





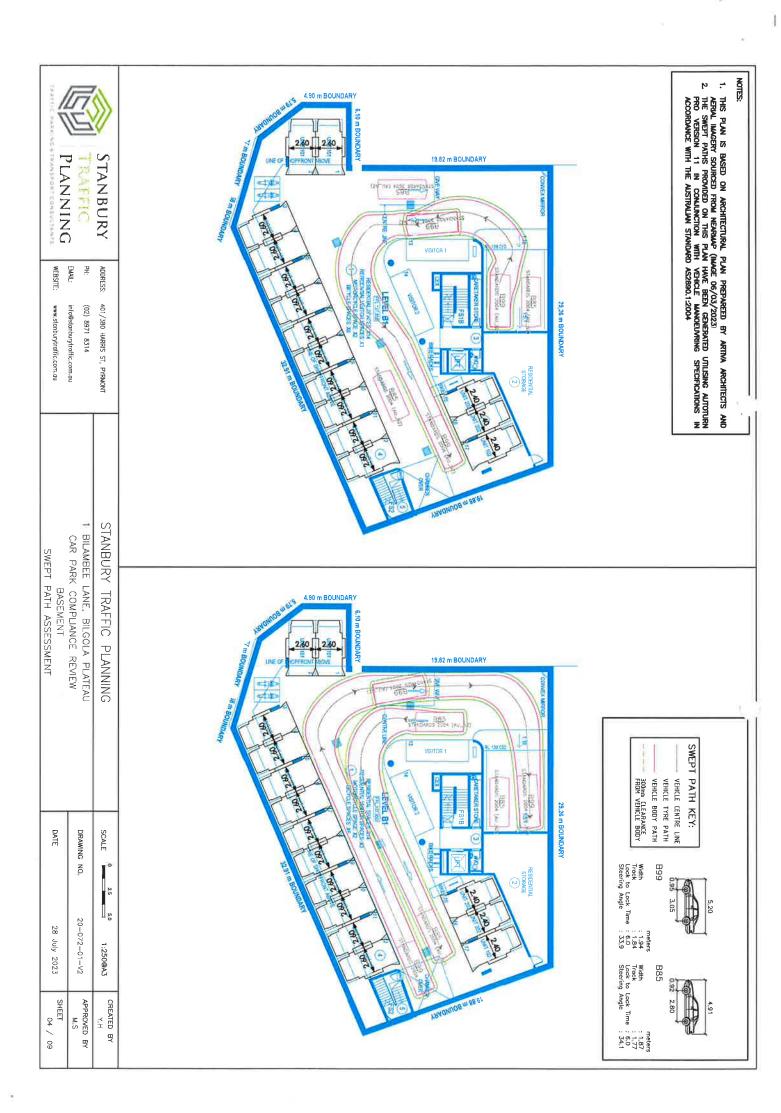
	CONCEPT LAYOUT		
DATE	BASEMENT	www.stanburytraffic.com.au	WEBSITE:
	CAR PARK COMPLIANCE REVIEW	info@stanburytraffic.com.au	EMAIL:
DRAWING NO 20	BILAMBEE LANE, BILGOLA PLATEAU	(02) 8971 8314	뫞
SCALE 0 25 50	STANBURY TRAFFIC PLANNING	401/380 HARRIS ST, PYRMONT	ADDRESS:

20-072-01-V2 28 July 2023

SHEET 02 / 09 APPROVED BY M.S CREATED BY

1:250@A3



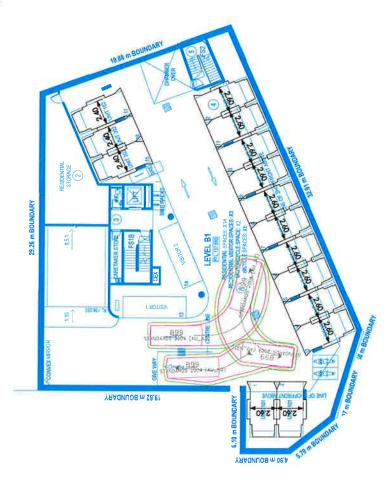


meters
Width
Track : 1.94
Lock to Lock Time : 6.0
Steering Angle : 33.9 5.20 - VEHICLE CENTRE LINE VEHICLE TYRE PATH - VEHICLE BODY PATH 300mm CLEARANCE FROM VEHICLE BODY SWEPT PATH KEY:

1. THIS PLAN IS BASED ON ARCHITECTURAL PLAN PREPAREED BY ARTINA ARCHITECTS AND AFRAL IMAGERY SOURCED FROM NEARAMP (MAGE 06/03/2023)

2. THE SWEPT PARTHES PROVIDED ON THIS PLAN HAVE BEEN GENERATED UTILISING AUTOUTINE PRO VERSION 11 IN COALUNCTION WITH VEHICLE MANOEUNRING SPECIFICATIONS IN ACCORDANCE WITH THE AUSTRALIAM STANDARD AS2890.1:2004

NOTES



STANBURY	PLANNING

401/380 HARRIS ST, PYRMONT (02) 8971 8314 ADDRESS: EMAIL: 표

info@stanburytraffic.com.au www.stanburytraffic.com.au WEBSITE:

0 25 50 1:250@A3	20-072-01-v2	28 July 2023
SCALE "	DRAWING NO.	DATE
STANBURY TRAFFIC PLANNING	1 BILAMBEE LANE, BILGOLA PLATEAU CAR PARK COMPLIANCE REVIEW	BASEMENT SWEPT PATH ASSESSMENT

05 / 09

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N S SHEET

SWEPT PATH

KEY:

VEHICLE CENTRE LINE

300mm CLEARANCE FROM VEHICLE BODY VEHICLE BODY PATH VEHICLE TYRE PATH

Width Track Lock to Steering

meters : 1.87 : 1.77 k Time 5.0 yle 34.1

Angle

B85



ADDRESS: 뫋

(02) 8971 8314

401/380 HARRIS ST, PYRMONT

STANBURY TRAFFIC PLANNING BILAMBEE LANE, BILGOLA PLATEAU CAR PARK COMPLIANCE REVIEW SWEPT PATH ASSESSMENT BASEMENT

SCALE

25 50

1:250@A3

CREATED BY

DRAWING NO.

20-072-01-v2

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DATE

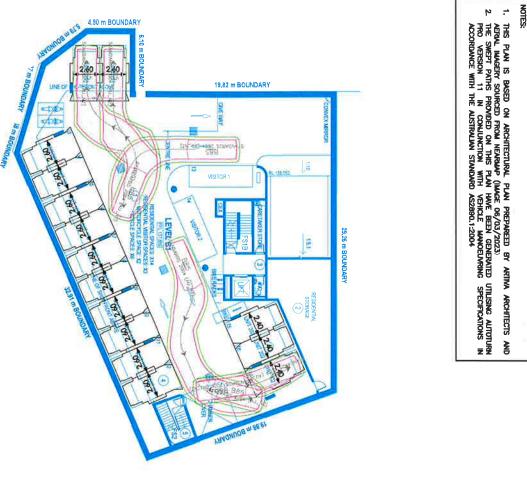
July 2023

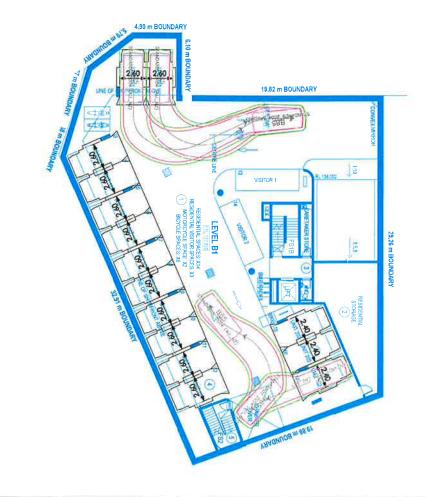
SHEET

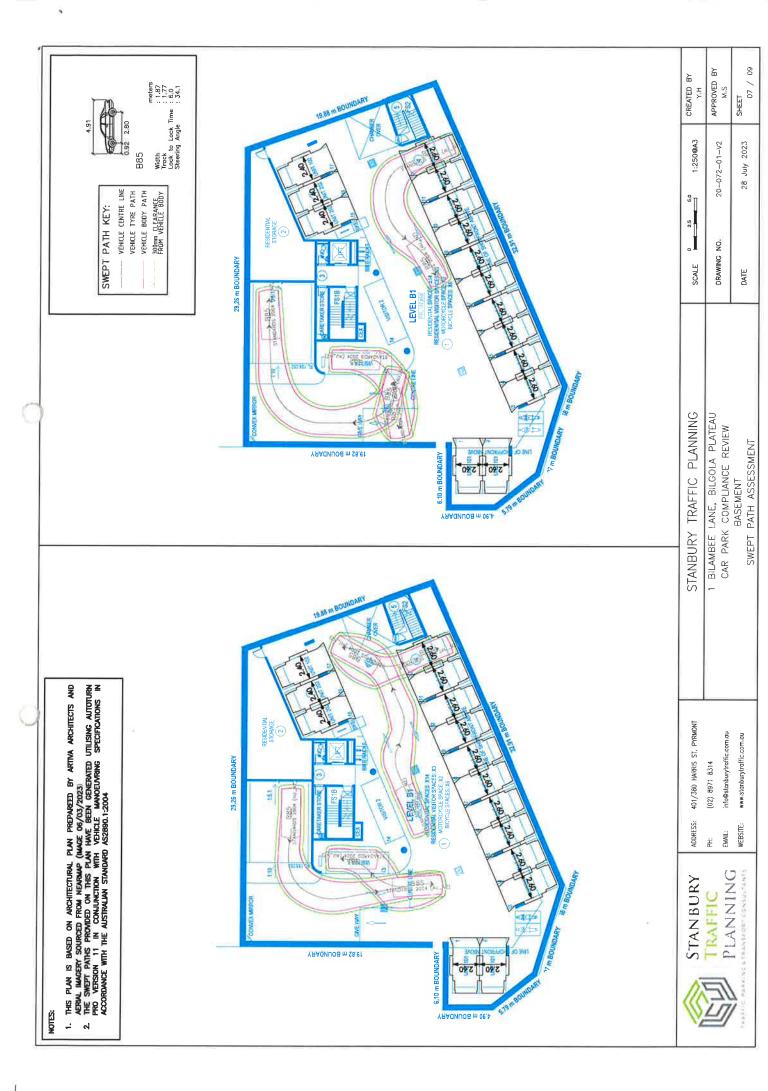
06 / 09

www.stanburytraffic.com.au info@stanburytraffic.com.au

WEBSITE: EMAIL:







NOTES: THIS PLAN IS BASED ON ARCHITECTURAL PLAN PREPAREED BY ARTINA ARCHITECTS AND AERAL, IMAGERY SOURCED FROM NEURANAP (IMAGE 08/03/2023)
THE SMEPT PATHS PROVIDED ON THIS PLAN HAVE BEEN GENERATED UTILISING AUTOTURN PRO VERSION 11 IN CONLINCTION WITH VEHICLE MANOEUVRING SPECIFICATIONS IN ACCORDANCE WITH THE AUSTRALIAN STANDARD ASSESSO.1:2004 STANBURY 19,82 m BOUNDARY PLANNING RAFFIC 喜 WEBSITE: ENAL: ADDRESS: 丑 www.stanburytraffic.com.au info@stanburytraffic.com.au (02) 8971 8314 401/380 HARRIS ST, PYRMONT jn STANBURY TRAFFIC PLANNING BILAMBEE LANE, BILGOLA PLATEAU CAR PARK COMPLIANCE REVIEW SWEPT PATH ASSESSMENT BASEMENT 1:10 Di. SWEPT PATH KEY: DATE SCALE DRAWING NO. VEHICLE TYRE PATH VEHICLE BODY PATH FROM VEHICLE BODY VEHICLE CENTRE LINE RESIDENTIAL STORAGE 25 50 20-072-01-V2 28 July 2023 Width Track Lock to Lock Time Steering Angle 1:250@A3 885 08 / 09 CREATED BY APPROVED BY meters: 1.87: 1.77: 6.0: 34.1 N N

